

LUCKY PEOPLE FORECAST¹ – A SYSTEMIC FUTURES PERSPECTIVE ON FASHION AND SUSTAINABILITY

MATHILDA THAM

Thesis submitted for the award of Doctor of Philosophy, Design Department, Goldsmiths,
University of London, 2008.

¹ Lucky People are people in touch, well connected, tuned in, excellent at going with the flow, manoeuvring through time and space. Lucky People combine experience and rational thinking with intuition and emotional skills. Fashion designers are Lucky People in many senses. We are in tune and able to use this in-tuneness to create concepts, images and products that move other people. We are lucky because we have a highly stimulating and rewarding profession that gives us the opportunity to travel around the world, meet interesting people and get paid for it. We are lucky because we have had the financial and social opportunity to choose and train for this profession. And we are extremely lucky because we have, from within the context of fashion, the power to make important changes that can reach far beyond a season's collection or the life time of a magazine, into a time where other designers carry on with our work and enjoy a more sustainable life. Trend-forecasters share all these opportunities. Lucky People Forecast is the story about trend-forecasters' and fashion designers' journey towards more sustainable futures.

I hereby declare that the work submitted in this thesis is my own.

Mathilda Tham,
12 December, 2008, London

ABSTRACT

The detrimental environmental effects associated with fashion production and consumption are increasingly recognised, and strategies in place. However, these are production-focused, top-down strategies, which do not reach where the impact is highest - the user phase, or where the scope for improvement is utmost - the design phase. A growing body of academic research, and a niche representation of practitioners have responded by developing lifecycle and whole systems approaches. This PhD thesis seeks to expand on and bring this knowledge to the unexplored domain of the highest impact – the fashion industry’s mass-market segment.

Trend-forecasting is integral to the fashion design process, and supports the organisation’s commercial endeavours. This thesis explores the potential of trend-forecasting as a positive agent of change for environmental improvement at systemic level in the fashion industry’s mass-market segment.

The first empirical study, Stage 1, is diagnostic and exploratory, mapping the interactions that currently exist between trend-forecasting, fashion design and environmental work. The findings and emergent theories formed the basis for a novel methodology compatible with trend-forecasting methods, processes in fashion design, and the inclusive and transformative processes implicit in sustainability.

Stage 2 applies this methodology in an experimental study - a series of creative workshops with mixed fashion industry stakeholder groups in the UK and Sweden. Set in 2026, the workshops explore how the underlying proposition “*what if fashion and sustainability were compatible or even synergistic?*” could affect attitudinal change, and what its generative potential could be.

The study shows that a richer knowledge ecology can foster proactive discussions in the realm of sustainability and fashion. It also reveals how a futures perspective and creative approach can unleash the application of fashion professionals’ skills at strategic and systemic levels. The research resulted in recommendations for the application of the new trend-forecasting methodology on a larger scale.

ACKNOWLEDGEMENTS

THANK YOU:

All participants - for your generosity, wisdom, time and patience.

Beckmans College of Design and 115 Bartholomew Road - for use of beautiful and creative spaces.

My supervisors:

Professor Richard Kimbell – for constantly encouraging me to ‘press on’ and endless structural wisdoms.

Dr Kate Fletcher – who has provided me and many other researchers with a firm holistic fashion-environmental ground.

Professor John Wood – for giving me, and other MA Design Futures students “a license to dream.”

The M21 team - Anette Lundebye, Hannah Jones, John Backwell, Julia Lockheart and Jonny Bradley for enlightening moments of synergy, and Ann Schlachter – for keeping all of us on the road and in good humour.

Toni Spencer – for introducing me to her “politics of wonder.”

Duncan Kramer – for letting the woods grow, incessant support and healthy resistance to models.

Jan Haug – for, with his wry sense of humour, reminding me that a hat is just a hat.

This is for my mothers:

Grandmother Pums for encouraging me to create my own fashion and for her uniquely creative attitude; grandmother Lullu for her firm belief that all things go to victory, and for many driving lessons on her old Elna sewing machine; and my mother Carola, for her always-inspiring courage and positive outlook.

CONTENTS

I. INTRODUCTION – How can trend-forecasters be helpful friends to fashion designers on their shared journey towards sustainability?	22
1.1 Introduction – an imaginary journey	22
1.1.1 Sustainability	22
1.1.2 Fashion	23
1.1.3 Trend-forecasting	24
1.2 Context and relevance statements	25
1.2.1 Relevance outwards – the sustainability imperative	25
1.2.1.2 The design imperative	27
1.2.1.4 Fashion and the environment	28
1.2.2 Relevance inwards - the researcher's background and stance	30
1.3 Scope and focus of the research	31
1.4 Research aims and objectives	33
1.5 Overview of thesis	33
2. FRAMEWORKS FOR FASHION: SUSTAINABILITY	36
2.1 A brief history of sustainable fashion	36
2.1.1 Early social concerns in dress	36
2.1.2 Eco-style	37
2.1.3 The new wave	38
2.2 Fashion's socio-environmental effects	39
2.2.1 Environmental issues associated with fashion	39
2.2.1.1 The complexity of fashion production, and appropriateness of strategies' target	40
2.2.1.2 The speed and scale of the fashion industry	41
2.2.1.3 The difference between fashion and clothing	42
2.2.1.4 Lifetimes project	43
2.2.1.5 Systemic approaches to environmental improvement	44
2.2.2 Social issues associated with fashion	45
2.2.3 The triple bottom line – trade offs in the fashion system	46
2.3 Strategies for environmental improvement in the fashion industry	47
2.3.1 Product level strategies – reduce, reuse, recycle	48
2.3.2 Systems level strategies – reframe	49
2.4 Drivers for more sustainable fashion	52
2.4.1 Organisation of environmental and social concerns in the fashion industry	52
2.4.1.1 Code of Conduct	53
2.4.1.2 Eco-labelling	54
2.4.2 Hard and soft drivers for more sustainable fashion	55

3. FRAMEWORKS FOR FASHION: UNSUSTAINABILITY	60
3.1 An ecological perspective on unsustainability	60
3.1.1 Natural science	60
3.1.2 Human-nature engagement	61
3.1.3 Nature and time	62
3.2 A user perspective on unsustainability	63
3.2.1 Mechanisms behind consumption	63
3.2.2 Fashion consumption	63
3.2.3 A philosophy of object-user relations	64
3.3 A producer perspective on unsustainability	66
3.3.1 Speed and scale	66
3.3.2 Designed obsolescence	68
3.3.3 A surrogate society	69
3.4 An economic perspective on unsustainability	69
3.4.1 A symbolic economy	69
3.4.2 Growth	70
3.4.3 Prosperity and well-being	71
3.4.4 The rich poor divide	71
3.5 Value systems and unsustainability	72
3.5.1 An ethical imperative	72
3.5.2 Ethics of 'don'ts' and 'dos'	73
3.5.3 Value systems for design and sustainability	74
3.6 Alienation	75
3.7 Two frameworks for fashion: sustainability and unsustainability	77
3.7.1 Problem formulation and target area	77
3.7.2 Implications of fashion's journey from unsustainability to sustainability	79
3.7.3 Towards a soft driver for sustainable fashion	81
4. MAPPING FASHION, TREND-FORECASTING AND SUSTAINABILITY –	84
What is the scope for trend-forecasting as a driver for environmental improvement in the fashion industry?	
4.1 Introduction	84
4.1.2 The scope of the study	84
4.1.3 Research aims and questions	85
4.2 Methodological concerns	86
4.2.1 Study format	86
4.2.2 The case study as a research methodology	86
4.2.3 The profile of this case study	87
4.2.4 Interviews as a research methodology	88
4.2.5 Types of interviews	88
4.2.6 The interview format and procedure of this study	89

4.2.7 Sensitive information	90
4.2.8 Personal value position	90
4.2.9 The focus of the case study and the interviews	91
4.3 Sample	91
4.3.1 Profile of H&M case study	92
4.3.2 Pilot case study with IKEA	92
4.3.3 Interviews with designers about commercially available trend-forecasting services	93
4.3.4 Trend-forecasting methodology and attitudes to environmental issues	93
4.3.5 Ethical considerations	93
4.3.6 Changes in the study	94
4.4. Conducting the study - some practical considerations	94
4.4.1 Time and access	94
4.4.2 Notes on transcripts and translation	94
4.4.3 Analysis of the study and organisation of data	95
4.5 Presenting the data	96
4.5.1 Vignette	96
4.5.2 Understanding the background	97
4.5.2.1 What are the characteristics in terms of educational background and career of individuals working in the fashion industry	97
4.5.2.2 What is the make-up of a high street fashion company, in terms of organisation, company profile and culture?	98
4.5.3 Understanding the process	99
4.5.3.1 What does the process look like in a fashion company with a high street audience?	99
4.5.3.1.1 The design process at H&M	99
4.5.3.1.2 The design process across the sample of designers and organisations	103
4.5.3.2 How is trend-forecasting situated in the design process of a fashion company at high street, mass-market level?	104
4.5.3.3 How is environmental work conducted in a fashion company with a high street, mass-market profile?	110
4.5.3.3.1 Environmental work at H&M – an overview	110
4.5.3.3.2 Environmental work across the sample of designers and organisations	112
4.5.4 Understanding the relationships	115
4.5.4.1 What drives design work in the fashion industry's mass-market segment?	115
4.5.4.2 To what extent is trend-forecasting a driver of high street, mass-market fashion?	116

4.5.4.3 What is the experience of trend research in the fashion industry's mass-market segment?	116
4.5.4.4 What drives environmental work in the fashion industry's mass-market segment?	117
4.5.5 Understanding the rationales	119
4.5.5.1 What motivates designers operating in the fashion industry's mass-market segment?	119
4.5.5.2 What are the reasons why fashion designers do not engage more in environmental improvement?	121
4.5.5.3 How do background factors such as individuals' education and role, and a company's organisation, profile and culture influence its readiness to adopt environmental practices?	123
4.6 Conclusions and discussion	126
4.6.1 Emergent themes	126
4.6.1.1 Negative emergent themes	127
4.6.1.1.1 Alienation	127
4.6.1.1.2 Constraint culture	128
4.6.1.1.3 Stereotypes	130
4.6.1.1.4 Cynicism	131
4.6.1.1.5 Lack of knowledge	132
4.6.1.2 Positive emergent themes	133
4.6.1.2.1 Interdisciplinary teamwork	133
4.6.1.2.2 Creativity	134
4.6.1.2.3 The big picture	134
4.6.1.2.4 The Wild West	136
4.6.1.3 Neutral emergent themes	137
4.6.1.3.1 Intervention points	137
4.6.1.3.2 Language	138
4.6.1.3.3 Gender	140
4.6.2 Conclusion	140
4.6.3 Recommendations	142
4.6.4 Reflections on the research process	143
5. CHANGE AND ADAPTATION	147
5.1 Introduction	147
5.1.1 Informing a new driver of change	147
5.1.2 A reading of the dynamics of change and adaptation	148
5.1.3 Stance - specialist generalism and the design approach to information	149
5.1.4 Overview of chapter	150
5.2 Change in natural systems	150
5.2.1 Nature and evolution	150

5.2.2 The regulation of systems – feedback	151
5.2.3 Cybernetics	151
5.2.4 Gaia theory - Earth as an immense self-regulating system	152
5.2.5 Complexity theory	153
5.2.6 Complexity and organisational change	154
5.3 Towards designing with natural systems and complexity	156
5.3.1 Synergetics	156
5.3.2 Autopoeisis and Linguaging	157
5.3.3 Biomimicry	158
5.3.4 Memes	158
5.3.5 Branding, marketing and communication - The Tipping Point	159
5.3.6 Diffusion of innovations theory	159
5.3.7 Open source	159
5.3.8 Prosumers and collaborative design processes	160
5.3.9 Metadesign	161
5.4 Change, complexity and challenges for design and research	162
5.4.1 Action research – an extended epistemology	163
5.4.2 Activism and design	164
5.4.2.1 Brief fashion political history	165
5.4.2.2 Ism-looks	166
5.4.2.3 Craftivism	167
5.4.2.4 Design research as activism	167
5.4.3 Intervening in systems	168
5.5 Designing change – design as intention	168
5.5.1 Paradigms	169
5.5.2 The basis of visions	170
5.5.3 Imagery and narratives that guide us	171
5.6 Futures Studies and trend-forecasting	172
5.6.1 Futures studies	172
5.6.2 Brief history of futures studies	173
5.6.3 The focus of futures studies	174
5.6.4 Methods and processes in Futures Studies	175
5.6.5 Futures studies and epistemology	178
5.6.6 Images of the future	179
5.6.7 Trend-forecasting – fore cast, pre dict, pre scribe = shaping the future	179
5.6.8 Futures Studies in areas of lifestyle	180
5.7 Futures Studies in fashion	181
5.7.1 A brief history of fashion forecasting	182
5.7.2 The scope of fashion forecasting	182
5.7.3 Methodology in fashion forecasting	183

5.7.4 The role of forecasting in fashion	184
5.7.5 Trend and fashion forecasting, and notions of creativity and newness	184
5.7.6 Powerful propositions of fashion	186
5.8 Fashion and change – a reading of fashion as change	188
5.8.1 The scope of the fashion discourse	188
5.8.2 Fashion and clothes	189
5.8.3 Drivers of fashion	190
5.8.4 Fashion as change	191
5.8.5 Fashion as practical Futures Studies	191
5.8.6 The fashion smirk	192
5.8.7 A case for fashion	197
5.9 Discussion	197
5.9.1 A fashion organism	198
5.9.2 Legends in the context of fashion and sustainability	199
5.9.3 Envisioning – the core of Futures Studies	200
5.9.3.1 Cultural probes	202
5.9.3.2 Story-telling	202
5.9.3.3 Play	203
5.9.3.4 Vacuum design	204
5.9.3.5 Serendipity and luck	205
5.9.4 Summary	206
6. LUCKY PEOPLE FORECAST – what if fashion and sustainability were compatible or even synergistic?	208
6.1 Introduction	208
6.1.1 Brief recapitulation of previous research	208
6.1.2 Hypothesis/proposition and research question	212
6.1.3 From theory to practice – towards a methodology for the 2 nd empirical research study	213
6.2 Methodology – designing a shared learning experience	215
6.2.1 A research conundrum	215
6.2.2 An epistemological leap – from ‘ <i>what is?</i> ’ to ‘ <i>what if?</i> ’	216
6.2.3 Epistemology in this inquiry - defining quality criteria	216
6.2.4 Towards a research design	218
6.2.4.1 Deciding on an intervention point	219
6.2.4.2 The potentials of a workshop format	219
6.2.4.3 Experimental workshops as intervention and research	219
6.2.4.4 Parameters in this experimental inquiry	220
6.2.4.5 Stimuli in this inquiry – a proposition	220
6.2.4.6 What was compared with what – data concerning attitudinal change	221
6.2.4.7 Follow-up interviews	222

6.2.4.8 Experimental workshops inspired by action research	223
6.2.5 Designing a shared learning experience	224
6.2.6 The workshop design	224
6.2.7 Sample	226
6.2.7.1 Sample boundaries	226
6.2.7.2 Recruiting strategies	228
6.2.7.3 Final sample of the Stage 2 study	229
6.3 Research process - 20 litres of strawberries, 50 fine cakes, 70 cups of coffee, 200 emails, 2 trips to Sweden, and 35 hours of recorded data	230
6.3.1 Pilots, and changes in the study format	231
6.3.2 Access and travel	231
6.3.3 Notes on transcripts, translation and organisation	232
6.3.4 Facilitation	232
6.3.5 Analysis of the study	233
6.3.5.1 Scope of transformation	233
6.3.5.2 Scope of analysis	234
6.3.5.3 Analysis process	234
6.3.6 Organisation of data	235
6.4 Data presentation and analysis	237
6.4.1 Presenting the workshop data – part 1	237
6.4.1.1 Mapping fashion individually and as a group	237
6.4.1.2 Mapping sustainability individually and as a group	241
6.4.1.3 Mapping fashion and sustainability – discussion	243
6.4.1.4 Re-design of fashion object from a sustainability perspective	244
6.4.1.5 Re-design of fashion object from a sustainability perspective – discussion	246
6.4.2 Presenting the workshop data – part 2	247
6.4.2.1 Vision consensus – generating core values	247
6.4.2.2 SWOT	248
6.4.2.3 The completed scenarios for fashion 2026	250
6.4.2.4 The scenarios presented through the four analysis criteria	254
6.4.2.5 Discussion	257
6.4.3 Presenting the data from the follow-up interviews	259
6.4.5 Presenting the data on attitudinal change and the meaning that the participants drew from the workshops	260
6.4.5.1 Qualifying attitudinal change - emerging themes of the participants’ experience of the workshop	263
6.4.5.2 Quantifying attitudinal change	274
6.4.5.2.1 Attitudinal change across the whole sample	275
6.4.5.2.2 The relative representation of the evaluation criteria before and	278

after the intervention	
6.4.5.2.3 Attitudinal change and demographics	279
6.4.5.2.4 Attitudinal change and the relative configuration of values_	285
6.4.5.3 Evaluating methodological approaches	288
6.4.5.4 Evaluating quality criteria in this inquiry	297
6.5 Conclusion and discussion	300
6.5.1 Answers to the research proposition and question	300
6.5.2 Sustainable communication	302
6.5.3 Sustainable professionals	309
6.5.4 A shared learning experience	310
7. CONCLUSIONS – How can trend-forecasters be helpful friends to fashion designers on their shared journey towards sustainability?	312
7.1 Introduction	312
7.2 The current situation and the relevance of this research	312
7.3 Synthesis of the research findings	314
7.3.1 Summary of the exploratory research – literature review and first empirical study	314
7.3.2 Summary of the exploration of change and methodological approaches	316
7.3.3 Designing creative workshops as a shared learning experience – Welcome to three hours in 2026	317
7.3.4 Summary of the experimental Stage 1 Study	318
7.4 New knowledge generated through this inquiry	319
7.4.1 Knowledge	319
7.4.2 Strategies	319
7.4.3 Research	320
7.4.4 Vision	320
7.5 Summary of the knowledge contribution	321
7.6 Reflection on the research process	321
7.7 Recommendations for further research	322
BIBLIOGRAPHY	324
APPENDIX A Documents supporting the first empirical study	342
A.1 Interview questions	343
A.1.1 Questions for designers/buyers	343
A.1.2 Questions for CSR staff	345
A.1.3 Questions for trend-forecasters	348
A.2 Sample transcript	350
A.3 Data charts – see CD	
A.3.1 Background data	

A.3.2 Process at H&M	
A.3.3 Environmental process and experience	
A.3.4 Formal trend-sources	
A.3.5 Informal trend-sources	
A.3.6 Practical use of trend-sources	
A.3.7 Designers' experience of trend-forecasting sources	
A.4 Emergent themes and methodological approaches	356
APPENDIX B Documents supporting the second empirical study	363
B.1 Quality criteria	364
B.1.1 Reflexivity	364
B.1.2 Credibility	364
B.1.3 Democracy	365
B.1.4 Relevance	366
B.1.5 Translatability	366
B.1.6 Creativity and vision	367
B.1.7 Authenticity	367
B.2 Workshop design	369
B.2.1 Invitation	369
B.2.2 Homework task	369
B.2.3 Facilitation in this inquiry	370
B.2.4 Presentation techniques used in the workshop	373
B.2.5 Workshop – introduction	374
B.2.6 Workshop - part 1	375
B.2.7 Workshop – part 2	377
B.2.8 Workshop – reflection and conclusion	383
B.3 Coding templates	384
B.3.1 Brand/perception	384
B.3.2 Knowledge and awareness	385
B.3.3 Relationships	385
B.3.4 Action and activism	386
B.4 Follow-up interview questions	387
B.5 Sample transcript	388
B.6 Scenarios	396
B.6.1 Company A	396
B.6.2 Company B	397
B.6.3 Mixed A	399
B.6.4 Company C	402
B.6.5 Trade	403
B.6.6 Mixed B	406
B.6.7 Students	409

B.6.8 Mixed C – sample coding	412
B.7 Data charts – workshop process data - see CD	
B.7.1 Coding of objects and descriptors, re-design, and scenario vision consensus	
B.7.2 Workshop themes - Brand/perception	
B.7.3 Workshop themes - Knowledge and awareness	
B.7.4 Workshop themes – Relationships	
B.7.5 Workshop themes - Action and activism	
B.8 Data treatment – workshop process themes	415
B.8.1 Fashion objects	415
B.8.2 Fashion - individual descriptors	416
B.8.3 Fashion - group descriptors	418
B.8.4 Sustainability objects	420
B.8.5 Sustainability - individual descriptors	421
B.8.6 Sustainability - group descriptors	423
B.8.7 Scenario descriptors	425
B.9 Data charts - quantifying attitudinal change - see CD	
B.9.1 Before workshop	
B.9.2 After workshop - Brand/perception	
B.9.3 After workshop - Knowledge and awareness	
B.9.4 After workshop - Relationships	
B.9.5 After workshop - Action and activism	
B.9.6 Calculations step 1	
B.9.7 Calculations Mode 1	
B.9.8 Calculations Mode 2	
B.9.9 Groups and roles	
B.9.10 Highest and lowest scorers	
B.9.11 Representation of criteria	
B.10 Coding by external researcher and comparison – see CD	
B.11 Data charts – methodology – see CD	
B.11.1 Methodology – approaches A	
B.11.2 Methodology – approaches B	
B.11.3 Methodology – workshop elements	
B.11.4 Methodology – presentation contents	
B.12 Quality criteria – see CD	

APPENDIX C List of published work

434

LIST OF FIGURES

CHAPTER 1

Figure 1.1 An imaginary journey	22
Figure 1.2 Area of study	25
Figure 1.3 Prioritised research areas of main body of research, emerging research and this research	30
Figure 1.4 Prioritised research foci, activities and contribution of main body of research, emerging research and this research	32
Figure 1.5 Fashion and sustainability forecast	33
Figure 1.6 Structure of thesis	34

CHAPTER 2

Figure 2.1 Fashion lifecycle stages and environmental impact	40
Figure 2.2 Energy lifecycle profile for standard T-shirt and blouse (Data from Allwood, Laursen, <i>et al.</i> , 2006: 27-28)	41
Figure 2.3 Fashion and clothing (Fjällräven outdoors jacket, and top from Kate Moss, Top Shop)	42
Figure 2.4 A slow-fast fashion continuum (Fletcher and Tham, 2004)	44
Figure 2.5 Fashion lifecycle stages, environmental impact, scope for improvement, and drivers	58

CHAPTER 3

Figure 3.1 The order of civilization (Brand, 1999: 36-37)	62
Figure 3.2 Mechanism behind consumption (Shove and Warde, 2002: 230-251)	63
Figure 3.3 Users' interest in fashion and associated environmental impact (Fletcher and Tham, 2004)	64
Figure 3.4 Harmful-helpful continuum	78
Figure 3.5 Two frameworks for fashion	79
Figure 3.6 The role of the designer/buyer. The old model. (Breds, 2002: 28)	80
Figure 3.7 The role of the designer/buyer. The new model. (Breds, 2002: 29)	80
Figure 3.8 Two contexts for environmental and social improvement in fashion	81

CHAPTER 4

Figure 4.1 The area of study	84
Figure 4.2 Four levels of research questions	86
Figure 4.3 Profile of study object	91
Figure 4.4 Study object's position on harmful-helpful continuum	92
Figure 4.5 Background themes	99
Figure 4.6 H&M's categorisation of products, implications for time schedule and production	100
Figure 4.7a H&M design process and information flow	101
Figure 4.7b H&M design process and information flow	102
Figure 4.8 Process themes	114

Figure 4.9 Relationships themes	119
Figure 4.10 Rationales themes	126
Figure 4.11 Emergent themes	127
Figure 4.12 The trend process	412
Figure 4.13 Imaginary journey and alternative fashion cycle	141
Figure 4.14 Emergent themes and recommendations	143
CHAPTER 5	
Figure 5.1 The conceptual journey between two frameworks	147
Figure 5.2 Conventional and additional priorities for the fashion industry and trend-forecasting	148
Figure 5.3 The embedded attributes of the methods in “Futures Research Methodology – V 2.0” (Aaltonen and Barth, 2004)	176
Figure 5.4 Common methods in Futures Studies	177
Figure 5.5 Scenario typology (List, 2005: 29) following Van Notten <i>et al.</i> , 2003)	178
Figure 5.6 Futures Studies links an organisation with zeitgeist	181
CHAPTER 6	
Figure 6.1 The research process from initial idea to Stage 2 study	211
Figure 6.2 Linear and sprawling models of change	212
Figure 6.3 The proposition’s four statements	213
Figure 6.4 The proposition’s four sprawling areas	213
Figure 6.5 From theory to practice: how the literature and the 1 st empirical study informed the 2 nd study	214
Figure 6.6 How the three strands informed the methodological approaches for the stage 2 study	215
Figure 6.7 The values implicit in unsustainability and sustainability respectively, and two research paradigms	217
Figure 6.8 Quality criteria for this research	218
Figure 6.9 Workshop parameters and strategies to ‘control’ them	220
Figure 6.10 Propositions translated into workshop approaches and activities	224
Figure 6.11 Research design	226
Figure 6.12 Fashion organism stakeholders, and stakeholders represented in sample	227
Figure 6.13 Linear and sprawling models of change – stakeholder temperature and climate	234
Figure 6.14 The analysis process	235
Figure 6.15 Data ports and the purpose of data generation	236
Figure 6.16 Fashion and sustainability individual descriptors, distr. across categories	244
Figure 6.17 Fashion and sustainability group descriptors, distribution across categories	244
Figure 6.18 Re-design group descriptors, distribution over all categories	246
Figure 6.19 Vision consensus, distribution over categories	248
Figure 6.20 Predictions of threats and opportunities to scenarios	250

Figure 6.21 Lucky People Forecast no. 1	252
Figure 6.22 Lucky People Forecast no. 4	253
Figure 6.23 Scenario, distribution across all categories	254
Figure 6.24 All categories, distribution across the workshop	258
Figure 6.25 Analysis criteria and scales	261
Figure 6.26 Type examples of organisations' sustainability profiles	261
Figure 6.27 Example of Modes 1 and 2 (Designer E, after workshop intervention)	262
Figure 6.28 Comparison between external researcher and researcher's coding	263
Figure 6.29 Average scores of all individuals across analysis categories	275
Figure 6.30 Individuals – scores before and after workshop intervention, change scores	276
Figure 6.31 Breadth and depth of engagement/attitude	277
Figure 6.32 Analysis categories – values before and after workshop intervention	278
Figure 6.33 Analysis subcategories – values before and after workshop intervention	279
Figure 6.34 Demographic parameters and values	280
Figure 6.35 Roles – scores before and after workshop intervention, and change scores	282
Figure 6.36 Roles – spread of scores before and after workshop intervention	283
Figure 6.37 Groups – spread of scores before and after workshop intervention	284
Figure 6.38 Groups – scores and demographics	284
Figure 6.39 Profiles of highest and lowest scoring participants according to Mode 1	286
Figure 6.40 Profiles of highest and lowest scoring participants according to Mode 2	288
Figure 6.41 A quadruple bottom line: Priorities for the fashion industry and trend-forecasting (Adapted from Lundebye, 2003)	307
CHAPTER 7	
Figure 7.1 Contributions	320
APPENDIX B	
Figure B.2.1 Invitation to workshop	369
Figure B.2.2 SWOT matrix	383
Figure B.8.1 Fashion objects and their respective frequency across the groups	415
Figure B.8.2 Fashion - individual descriptors, <i>Brand/perception</i>	416
Figure B.8.3 Fashion - individual descriptors, <i>Knowledge and awareness</i>	416
Figure B.8.4 Fashion - individual descriptors, <i>Relationships</i>	417
Figure B.8.5 Fashion - individual descriptors, <i>Action and activism</i>	417
Figure B.8.6 Fashion - group descriptors, <i>Brand/perception</i>	418
Figure B.8.7 Fashion - group descriptors, <i>Knowledge and awareness</i>	418
Figure B.8.8 Fashion - group descriptors, <i>Relationships</i>	419
Figure B.8.9 Fashion - group descriptors, <i>Action and activism</i>	419
Figure B.8.10 Sustainability objects and their respective frequency across the groups	420
Figure B.8.11 Sustainability individual descriptors, <i>Brand/perception</i>	421

Figure B.8.12 Sustainability individual descriptors, <i>Knowledge and awareness</i>	422
Figure B.8.13 Sustainability individual descriptors, <i>Relationships</i>	422
Figure B.8.14 Sustainability individual descriptors, <i>Action and activism</i>	423
Figure B.8.15 Sustainability group descriptors, <i>Brand/perception</i>	423
Figure B.8.16 Sustainability group descriptors, <i>Knowledge and awareness</i>	424
Figure B.8.17 Sustainability group descriptors, <i>Relationships</i>	424
Figure B.8.18 Sustainability group descriptors, <i>Action and activism</i>	425
Figure B.8.19 Scenario, <i>Brand/perception: Values and attributes</i>	425
Figure B.8.20 Scenario, <i>Brand/perception: Functionality, time and accessibility</i>	426
Figure B.8.21 Scenario, <i>Brand/perception: Concept features</i>	426
Figure B.8.22 Scenario, <i>Knowledge and awareness: generic and particular issues</i>	427
Figure B.8.23 Scenario, <i>Knowledge and awareness: lifecycle stages - design</i>	427
Figure B.8.24 Scenario, <i>Knowledge and awareness: lifecycle stages – sourcing and production</i>	428
Figure B.8.25 Scenario, <i>Knowledge and awareness: lifecycle stages – transport, retail, use and maintenance, after use</i>	429
Figure B.8.26 Scenario, <i>Knowledge and awareness: concept features</i>	429
Figure B.8.27 Scenario, <i>Relationships: generic, and particular relationships</i>	430
Figure B.8.28 Scenario, <i>Relationships: locating self, spiritual/emotional connection, cause and effect</i>	431
Figure B.8.29 Scenario, <i>Relationships: stakeholders, and drivers</i>	431
Figure B.8.30 Scenario, <i>Relationships: concept features</i>	432
Figure B.8.31 Scenario, <i>Action and activism: locating self, a force, concept features</i>	433

LIST OF TABLES

CHAPTER 2

Table 2.1 Social issues arising from textile production (Allwood, Laursen, <i>et al.</i> , 2006: 14)	45
Table 2.2 Design principles for environmental improvement - product level approaches and their reach	48
Table 2.3 Distinctions between environmentally responsible design definitions (Fletcher, 1999: 78)	49
Table 2.4 Design principles for environmental improvement – systems level approaches and their reach	51
Table 2.5 Consumer steps towards sustainability (Welford, 1995: 195)	52
Table 2.6 Formal/hard drivers of socio/environmental improvement in the fashion industry (See e.g. Young and Charter, 2001; H&M, 2005, 2008)	56
Table 2.7 Informal/soft drivers of socio/environmental improvement in the fashion industry. (See e.g. Young and Charter, 2001; H&M, 2005, 2008)	56

CHAPTER 3

Table 3.1 Major green philosophies (Birkeland, 1993, in Birkeland, 2002: 21)	75
--	----

CHAPTER 4

Table 4.1 Overview of sample	91
Table 4.2 The organisation of data	95
Table 4.3 Formal trend sources, frequency of use and perceived value	109
Table 4.4 Informal trend sources, frequency of use and perceived value	110
Table 4.5 Distinctions between environmentally responsible design definitions (Fletcher, 1999: 78) and sample's current position	141
Table 4.6 Steps towards a paradigm of sustainability and sample's current position.	141

CHAPTER 5

Table 5.1 Fashion and sustainability dichotomy – operation, culture and values	200
--	-----

CHAPTER 6

Table 6.1 The quality criteria informing the study	218
Table 6.2 Workshop characteristics and their potential for this inquiry	219
Table 6.3 Overview of sample composition	230
Table 6.4 Study parameters and their analysis frameworks	233
Table 6.5 Methodological approaches in the inquiry	289
Table 6.6 The elements of the workshop	292
Table 6.7 Tools used in the inquiry	293
Table 6.8 The contents of the presentation delivered in the workshop	294

APPENDIX A

Table A.4.1 Negative emergent themes, scenarios and recommendations	356
Table A.4.2 Positive emergent themes, scenarios and recommendations	359
Table A.4.3 Neutral emergent themes, scenarios and recommendations	361

APPENDIX B

Table B.1.1 Criteria for evaluating responsible research (McClintock, Ison <i>et al.</i> , 2003: 722)	365
Table B.2.1 Introductory part of workshop	375
Table B.2.2 The presentation elements and their respective purposes	379
Table B.2.3 Scenario checklist	382
Table B.3.1 Brand/perception – analysis criteria and scale	384
Table B.3.2 Knowledge and awareness – analysis criteria and scale	385
Table B.3.3 Relationships – analysis criteria and scale	385
Table B.3.4 Action and activism – analysis criteria and scale	386

LIST OF IMAGES**CHAPTER 4**

Image 4.1 Formal trend-sources. A) City report, Amsterdam, autumn 05; B) Catwalk report winter 05/06; C) Silhouettes, winter 06/07; D) Colour theme, winter 06/07;	105
--	-----

E) Lifestyle. (All Textile View Magazine, 2005: 42, 72, 153, 197. Courtesy of Metropolitan Publishing, 2008)	
Image 4.2 Informal trend-sources A) City research, Tokyo, autumn/winter 2009;	106
B) Mood board, autumn/winter 2009 (Both courtesy of Malin Dyer, 2008);	
C) Research, autumn/winter 2008 (Courtesy of Ann-Sofie Back, 2008)	
CHAPTER 5	
Image 5.1 The fashion moment. A) Bianca experiments (Courtesy of Stefan Ljungberg, 2008); B) Rosie and Zelda at Newington Green (author's photograph); C) Line-up, spring/summer 2007; D) Backstage, autumn/winter 2007; E) Catwalk, autumn/winter 2008 (Courtesy of Ann-Sofie Back, 2008, photography by Tim Griffith)	196
CHAPTER 6	
Image 6.1 Mapping fashion, designer H, Mixed A	238
Image 6.2 Mapping fashion, designer A, Mixed C	238
Image 6.3 Mapping fashion, student A, Students	238
Image 6.4 Mapping fashion in groups, Company A	239
Image 6.5 Mapping sustainability, Buyer B, Mixed A	241
Image 6.6 Mapping sustainability, Designer I, Company C	241
Image 6.7 Mapping sustainability, User A, Mixed B	241
Image 6.8 Mapping sustainability in groups, group 3	242
Image 6.9 Re-design. Company A, team 1	245
Image 6.10 Re-design. Trade, team 2	245
Image 6.11 Vision consensus. Mixed A	247
Image 6.12 SWOT. Company A	248
Image 6.13 Scenario map. Trade. Concept name: "Fashion Society"	251

CHAPTER 1. INTRODUCTION - How can trend-forecasters be helpful friends to fashion designers on their shared journey towards sustainability?

1. INTRODUCTION - How can trend-forecasters be helpful friends to fashion designers on their shared journey towards sustainability?

Imagine a fashion forecast set far into the future. What do we see? Is the fashion offer more homogenous than ever, or have even small regions their particular fashion stance and identity? Do people wear disposable fashions that come off a roll? Are clothes biodegradable, simply vanishing after a suitable period of time, or can we grow them ourselves? Has wearable technology become standard, enabling us to communicate through fashion in yet more sophisticated ways? Do people wear vintage from the 1950s or 2050s? Are we, forced by global warming or lack of material resources naked? What role do fashion and fashion designers play? Does fashion still exist?

1.1 Introduction – an imaginary journey

This study explores an imaginary journey, where fashion travels from a current framework of un-sustainability to a future paradigm of sustainability. The first framework represents a collection of observations on socio-cultural, technological and economic phenomena, deemed incompatible with sustainability. The second framework constitutes observations on qualities, drivers and working methods that might support a sound interdependence between humans and the natural world. The journey should be understood as conceptual rather than chronological, as sustainability exists in pockets of our understanding and practices already.

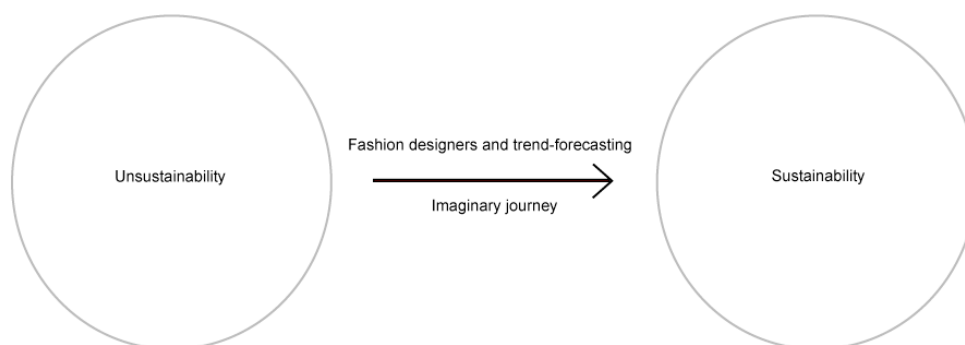


Figure 1.1 An imaginary journey

On this fictional journey, trend-forecasting occupies the role of a friend or co-traveller, who can help fashion ‘refind’ and redefine itself within its new surroundings, and support its adoption of new knowledge, tools, methods of working, and, not least, motivations. The research therefore spans over three key areas: trend-forecasting, fashion design and sustainability, each introduced below.

1.1.1 Sustainability

“From a cultural perspective time is asymmetrical. We can see the past but we can’t influence it. We can influence the future but not see it. The Maori of New Zealand describe this by saying that the past is in front of them so that they walk backwards into the future.” (Thorpe, 2004: 220-221)

To *sustain* means, "to support the weight of something" and sustainability therefore implies a system that can support the weight of itself, or "be maintained at a fixed level without exhausting natural resources or damaging the environment".¹

However, sustainability is not about status quo; it implies the healthy interdependence of humans, other species and nature in order to continue existing and evolving. In this thesis sustainability is foremost about living with empathy: for ourselves, for other people - near and far in time and space, and for the natural world. Sustainability is inherently about the future, about expanding our mindsets from the short, to the long-term, yet engaging and acting now. (See e.g. WCED, 1987) Sustainability, as applied in the context of fashion, and beyond, comprises concerns about the environment's health, about social and cultural wellbeing, and about financial viability.

The emerging body of literature about sustainability in general, and the environment in particular can be divided into two main themes (with many overlaps): a) that which speaks in quantitative terms (for example material intensity per product unit), and emphasises the need for reduction in impact; and b) that which emphasises the positive qualities of an ecological or sustainable paradigm, such as closer connections with nature and other people. In this inquiry, the importance of quantifying targets for reductions in environmental impact is recognised, but one of the central tenets is the conviction of the need and benefits of framing sustainability as experientially rich, and as a creative opportunity for designers, and society in general.

1.1.2 Fashion

While fashion often coincides with clothing, they are not identical. For the purposes of this investigation, fashion represents such clothing that is produced, purchased, used and disposed of mainly on the basis of symbolic (as opposed to material) reasons.

Fashion exists at many levels of the apparel market, and indeed beyond it as well, as the mechanisms of fashion enter a range of design disciplines and product categories. I will argue that the *fashion moment*, although often associated with a catwalk in Paris, New York or London is as valid when it takes place as an individual finds herself 'just right' in her clothing, in tune with the particular context. Fashion clothing is offered by outlets as diverse as luxury brand Prada, supermarket Tesco and, increasingly, charity shops. This inquiry focuses on fashion at mass-market level, offered in the shape of clothing.

The reasons for this focus are fivefold:

- The scale and speed of this sector is large with well recorded socio-environmental effects;
- Fashion at mass-market level represents the highest material through-put;

¹ The New Penguin English Dictionary, 2001: 1419.

- Although environmental work is increasingly implemented at this level, the focus is still on the process and production stages, in compliance with regulation, and not on the conceptualisation and design stages;
- The relatively highest impact associated with fashion consumption can be attributed to the mass-market audience;
- To date, most fashion designers working in the area of sustainability do this at niche level, and while it is hoped that such practices will filter through to the mainstream, it is considered advisable that the mass-market level be targeted specifically.

(See e.g. Heeley, 1997; Fletcher and Tham, 2004; Fletcher, 2008; Black, 2008. These points are unpicked and further supported by relevant literature in Chapter 2.)

Fashion has been argued to constitute the fastest layer of civilization (Brand, 1999), which should single it out as an area of priority in the light of the sustainability imperative. Because of the speed and intrinsically symbolic nature of fashion, it presents at least on a superficial level a paradox to sustainability. Therefore juxtapositioning the two promises to offer valuable lessons for other design industries and societal change at large. Fashion thus arguably represents an excellent 'case' for the study of integration of industrial activity – defined by speed and scale and symbolically driven consumption, with the sustainability imperative. The reasons to target fashion itself in a study on sustainability (beyond the fact that it is within the remit of the researcher's expertise) is further based on four main pillars, which will be further unpicked in subsequent chapters:

- The textile industry has a significant impact on the environment, and has been compared to the chemical industry as regards adverse environmental impact (Cooper, 1995);
- Fashion lags behind in innovative, creative approaches in an environmental context in comparison with, for example, architecture;
- The fashion industry is increasingly influencing other design disciplines with its approach to delivery in collections, use of colour themes, and approach to trend research.²
- As a result of its strong influence on culture and general zeitgeist, fashion has the potential to positively influence popular motivations.

1.1.3 Trend-forecasting

Trend-forecasting can be explained as a branch of, or a tool in, Futures Studies. In fashion the most commonly used term for foresight work is fashion prediction. The use of fashion prediction is an inherent part of the fashion design process, particularly at mass-market level. There exists a vast array of commercially available trend-sources, but fashion

² See e.g. the role of style in the battle between mobile phone companies Nokia and Ericsson. (Brunnström, 2006)

designers also conduct primary trend research to inspire and inform the mood, styles, colours and materials of the collections, and to ascertain their timeliness. For the purposes of this inquiry the broader term *trend-forecasting* is used to imply relatively longer term predictions and forecasts that may encompass both immediate term concrete fashion styles, and more ephemeral habits and lifestyles, and even the design of future concepts and systems.

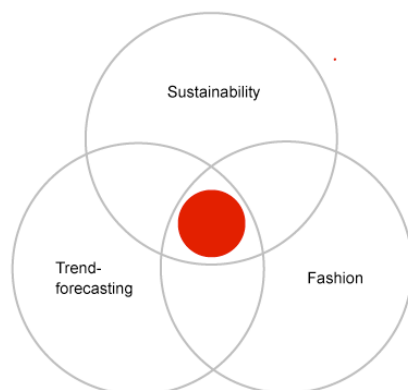


Figure 1.2 Area of study

1.2 Context and relevance statements

The following paragraphs present a brief context of this inquiry, and why this piece of research is relevant in forwarding the area. This section is divided into two parts: the first situating the research in the outside world, the second discussing the relevance of this particular researcher conducting the study.

1.2.1 Relevance outwards – the sustainability imperative

The focus of environmental concerns and their causes has shifted over the decades. At the time of writing, global warming, energy usage, water shortage and the rapid industrialisation of the, in economic terms, poorer parts of the world appear to be the main topics of discussion, while in the past agricultural chemicals and exponential population growth were some key areas of concern.³ (UNEP, 2007) In the earlier days of environmental concern, the issues appeared simpler than they do today: easily identified problems, such as air emissions from a factory, which could be rectified through cleaner processes. The Chernobyl accident was one of several major events that taught us that environmental problems are global, awareness of the fragility of the ozone layer and climate change highlighted the complexity of both problems and solutions, and therefore that a *systems level* approach to environmental improvement is needed. In particular the Earth Summit of 1987 where the definition of sustainable development was coined, brought home the need to address global

³ Such a shift is partly natural as some areas are targeted and cleaner processes implemented, however the shift in focus (such as the view of exponential population growth) also appears to reflect zeitgeist, economic and political agendas. For an overview of environmental concerns over time see Dewberry, 1996.

economical imbalance in the context of the ecological crisis.⁴ (WCED, 1987⁵) In the last decade global warming has dominated the environmental debate. The much debated Kyoto Protocol, first adopted in 1997 and now ratified by 182 countries, specifically targets the reduction in emissions of greenhouse gases.⁶ The Bali Road Map adopted at the UN Climate Change Conference in Bali, 2007 includes strategies to protect the rainforest, and to support poor regions' adoption of a 'green' economy. (UNFCCC, 2008) Yet another significant topic in the realm of environmental discourse in recent years concerns the rapid economic and industrial development of China (and of other quickly developing economies such as India, Russia and Brazil), and its present and future impacts and responsibilities within for example the Bali Road Map treaty. (Jovit, 2007)

The global commitments to environmental goals have been important in synthesising needs, stimulating collective visions, and drawing up agendas. However, most actual environmental work is conducted within national boundaries. It is estimated that industry and individuals in citizen and consumer capacities will be responsible for the operational realisation, and the cost of the work. For example, while the Swedish state allocates a yearly sum of SEK 8 billions to environmental work, meeting Sweden's stated environmental goals is estimated to cost SEK 20 billion per year. (Strömdahl, 2008) This further highlights the appropriateness of targeting motivational aspects of sustainability in a context such as fashion, which sits at the heart of production and consumption of fast moving goods. However, it should be noted that while environmental improvement requires considerable initial investments, in the long term it is argued to be viable even in direct economic terms. (See e.g. UNEP, 2007)

“Investing in environmental and social sustainability does not impair economic development. Scenarios, including increased investment in health, education, and environmentally benign technologies result in equally large and more equitably distributed economic growth on a per capita basis in most regions as those that do not. The levels of GDP per capita are particularly higher in *Sustainability First* and *Policy First* than *Markets First* and *Security First* [scenarios offered for 2050] in nearly all of the currently less developed regions.” (UNEP, 2007: 431)

Humans are currently using up 30% more resources per year than what Earth is capable of renewing. In the past four decades humans' environmental impact has increased by 300%, and the specific carbon footprint with 700%. (Wackernagel, 2007) The targets of reductions in resource use and of increase in resource productivity are commonly described in 'factors'.

⁴ The definition of sustainable development coined at this Summit was: “development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.” (WCED, 1987)

⁵ WCED stands for the UN World Commission on Environment and Development. The report resulting from the 1987 Summit Our Common Future is commonly known as the Brundtland Report after the then UN Secretary Gro Harlem Brundtland.

⁶ The critique raised in relation to the Kyoto Protocol includes its long implementation period, that it does not demand significant enough changes, and the failure of in particular the US to ratify it. (UNFCCC, 2008)

The more cautious *Factor Four* advocates a 400% increase in resource productivity, so that wealth can be doubled while resource use is halved. (von Weizsäcker, Lovins *et al.*, 1997) *Factor Ten* calls for a more dramatic process of dematerialisation; that OECD countries should reduce their material intensity per unit (MIP) by 90%. (Schmidt-Bleek, 1998) More recently, researchers have sought to quantify in economic terms the cost of environmental degradation, and in particular climate change. The message is clear: the longer we wait, the more expensive (if even possible) an environmental rescue operation will be. The concept of a carbon economy is one way of linking environmental concerns to the market economy. (See e.g. The Stern Review, 2006)

1.2.1.2 The design imperative

The particular role of design in environmental degradation, and in environmental improvement was famously raised by Victor Papanek in his seminal works *Design for the Real World* (1985), and *The Green Imperative* (1995). A wealth of writers has added to the literature on design and sustainability in general, and design and the environment in particular. (See e.g. Manzini, 1989; McKenzie, 1991; Van der Ryn, 1996; Birkeland, 2002; Thackara, 2005; Fuad-Luke, 2007.) The urgency of designers to engage in environmental improvement was emphasised already in *Our Common Future*. (WCED, 1987)

The obvious argument for design involvement is that preventative measures early in a product's lifecycle are more effective than remedial actions further down the line. (See e.g. Jackson, 1996) According to the Design Council, UK, 80% of a product's environmental (and financial) cost is determined at the design stage, before production even begins. (Design Council, 2002) Therefore design and designers yield a potentially tremendous power to affect positive change, a power to date largely unexploited.

For the purposes of this thesis, an important distinction needs to be made. Whilst designers' role in environmental improvement in terms of 'impact preventors' can be significant and in addition potentially empowering for designers, phrasing it as such again resorts to a language of constraints and reductions. This thesis instead focuses on the more positive arguments for design involvement in environmental improvement. Design has the potential to offer creative responses to and suggestions for change, and to create, bring to life and communicate sustainable visions to businesses, organisations and individuals.

Referring back to the stated targets in impact reduction, in order to tackle the vast environmental challenge that humanity is facing, measures at products level are not sufficient; work at systems level is necessary. (von Weizsäcker, Lovins *et al.*, 1997; Schmidt-Bleek, 1998) Design for sustainability therefore implies engaging with a high level of complexity, and intrinsically asks questions about the role, and the nature of the work of design and designers.

1.2.1.4 Fashion and the environment

While literature on design and the environment has historically focused on the built environment, a growing body of research addresses the environmental degradation associated with the textile and clothing industries. (See e.g. Franklin Associates, 1993; Cupit, 1996; Heeley, 1997; Larsen and Hansen *et al.*, 1997; Luiken, 1997 and more recently Breds, Hjort *et al.* 2002; Black, 2008; Fletcher, 2008).

However, an overview of the environmental fashion scene at the moment highlights something of a paradox. On the one hand a small but growing number of designer-makers and small companies are engaging with environmental improvement by design at product and approaching systems level. (See e.g. Black, 2008) On the other hand a huge and rapidly expanding field of mass-market, fast fashion is (at its best) engaging with environmental improvement in the production and processing stages, without direct design involvement.

Black uses the term the *fashion paradox* to describe the tension between the intrinsic transience of fashion and the need for sustainability. (Black, 2008) Other paradoxes include fashion's enactment of a poor (makers – 'there') and rich (consumers – 'here') divide; and that fashion, which thrives on innovation, simultaneously constitutes an establishment reluctant to embrace change. In its contradictory nature, fashion epitomises and mirrors mechanisms and phenomena in society at large: anorexic and bulimic consumption tendencies, an imbalanced distribution of wealth, the celebration of speed and scale at the cost of contemplation and sound practices. What is perhaps unique with fashion is that it communicates these paradoxes so 'well', and also appears to thrive upon them.

From an environmental perspective, fashion is the area that perhaps most clearly highlights the distinction but also the deep interconnections between fundamental human needs and more ephemeral motivations. (For a state of the art review on human needs see Max-Neef, 1992) The environmental literature and strategies that have emerged for fashion do not generally acknowledge this significant aspect of fashion's environmental impact; that fashion is mainly consumed and discarded for symbolic rather than material reasons. (For a reading of fashion's symbolic essence see e.g. Barthes, 1983; Blumer, 1969; Kawamura, 2005) Consequently, favoured environmental design strategies, such as material durability, are often not valid options. (Fletcher and Tham, 2004) Instead environmental improvement in the context of fashion necessitates a systemic, creative, design led approach.

"Fashion has rarely enjoyed a very good reputation. Despite its undeniable success as a social and commercial phenomenon, it remains the very exemplum of superficiality, frivolity and vanity... It is the very personification of the individual alienated in the rush of consumption, of the self lost in the brilliant world of commodities." (Vinken, 2005: 3)

Despite the respect or gravitas fashion may seem to lack, its kudos as a profitable industrial activity is undebatable. The World Trade Organisation estimates the value of the global clothing trade of 2004 to \$258 billion⁷. (WTO, 2005) The textiles and clothing industries also have an important role in (what is termed) developing countries' economies. Clothing constituted 75% of Bangladesh's and 50% of Sri Lanka's total export earnings in 2000. (Commission of the European Communities, 2003) Fashion's staying power cannot be disputed either, as fashion (in some shape or form) is as old as humankind. (See e.g. Broby-Johansen, 1968) Therefore, addressing fashion from a socio-environmental context is necessary. This thesis will argue that a general uneasy relationship with fashion is part of the reason why environmental improvement (by design and in general) in fashion has lagged behind that of other design disciplines.

This thesis is a celebration of fashion; it argues that fashion, at its best, actually shares important qualities with sustainability, such as connectedness, empowerment, creativity and experiential well-being. It is a call for environmental approaches that recognise and embrace the beauty of the fashion moment.

⁷ This represents 2.9% of world merchandise trade and 3.9% of world exports of manufactures. (WTO, 2005)

	Literature review		Empirical study	
	Main body of research	Emerging research	This research	
Causes	●			
Natural scientific perspective	●			
Economic perspective	●			
Socio-cultural perspective		●		●
Impact	●			
Environmental concerns	●	●	●	
Social concerns	●	●		
Drivers for change			●	●
Formal, top-down forces - constraints	●			
Informal, bottom-up forces - opportunities		●	●	●
Strategies for environmental improvement	●	●		
Product focus	●			
Systems focus	●	●	●	●
Target areas of environmental improvement	●	●		
In production and process stages	●			
In conceptualisation and design stages		●	●	●
Material dimension of fashion	●	●		
Symbolic dimension of fashion		●	●	●
Communication			●	●
Policy makers	●			
Industry	●			
Designers		●		
Consumer		●		
Multiple stakeholder dialogue			●	●

1.3 Prioritised research areas of main body of research, emerging research and this research

1.2.2 Relevance inwards - the researcher's background and stance

Some of the methodological choices of this inquiry, and indeed the perceived need to undertake the study, are informed by my personal and professional background. What follows is therefore a brief description of the researcher.

With a BA in fashion design (Beckman's College of Design, Stockholm), over the past fourteen years I have worked in several capacities in the fashion industry: as a designer, stylist and in fashion and design education. Right from the start fashion prediction and trend-forecasting, for fashion and other design companies, advertising and PR agencies and non-profit organisations, constituted the core of my work. This was an exciting time where consultancy was mixed with other activities; in New York I continued to study fashion at the Fashion Institute of Technology and Parson's School of Design, and enjoyed a placement with the Color Association of the United States (a colour prediction agency). In Tallin, Estonia I worked with fashion shows and a fashion company. However, in college, and

subsequently in my professional life, I lacked a substantial context for fashion; I experienced fashion disengaged from the rest of the world. I struggled to find a way of working that could bring together my passion for fashion and my growing awareness of the direct and indirect negative effects of the fashion industry; such as environmental degradation, unfair labour conditions and unsound body ideals. In 2001, I embarked on a MA in Design Futures, at Goldsmiths, University of London and subsequently this PhD project, in order to work proactively with this dilemma.

My experiences of several different roles in the fashion industry, and the associated networks, have informed and supported this project. This background afforded an access to the industry that may otherwise have been difficult to achieve. Informal contacts with fashion colleagues and friends have helped shape questions and ideas. In the beginning I saw problems, but also had glimpses of positive opportunities; not least in the excitement in creativity that fashion professionals share, and in the empowerment fashion can offer to individuals.

1.3 Scope and focus of the research

This inquiry appreciates and embraces that in the sustainability imperative environmental improvement can never be isolated from economic and ethical parameters. While the thesis speaks most explicitly about environmental improvement, in the overarching discussions of sustainability, social concerns, such as labour conditions, are always implied.

The researcher is situated in a Western context, and this is also the focus of this particular study of fashion and sustainability. It must therefore be acknowledged that the thesis has limitations as regards an optimal diversity of perspectives. However, the researcher has sought to bring in non-western reference points through the literature reviews. Within the defined scope of the study, and particularly through the empirical research, a variety of stakeholders' views were invited. The importance of finding useful methods for multiple stakeholder involvement, and the value of participatory processes in fostering shared ownership and motivation, has been stated by, for example, UNEP. (United Nations Environment Programme, 2007)

The aim of this PhD is not primarily to provide new knowledge on the material aspects of sustainability, such as the adverse effects of their processes. Instead the thesis focuses on how intelligence and strategies in the realm of sustainability can be *implemented* in the fashion organisation at mass-market level. The need for innovative and effective strategies of implementing sustainability literacy has been stressed by for example the WWF. (World Wildlife Fund for Nature, 2006)

The particular scope and strength of this research is that of *synthesising* knowledge of several fields, most notably sustainability literacy, fashion design and associated industry, theories of change, Futures Studies, and creatively applying it to the particular context of design led environmental improvement at systemic level in the fashion industry's mass-market segment.

Exactly through the thesis's wide scope of literature, and its use of creative scenario planning approaches in exploring sustainability and fashion, is it possible to cross-reference personal motivations, habits, professional value systems and practice with larger external drivers and conditions. By exploring sustainable fashion futures at micro and macro, and short and long term scales, the research therefore promotes an agility of moving between 'business as usual', or incremental measures, and a paradigm shift. This is deemed of high value to further a proactive and situated, yet visionary understanding of sustainability. The importance of generating visions from outside the paradigm that created the problems has been argued by, for example, Meadows. (Meadows, 1997)

Finally, in epistemological terms the research challenges a conventional research framework by situating the latter part of the inquiry itself within a paradigm of sustainability, and in the future. This approach led to the development of a series of methods, deeply rooted in the culture and practice of design. The evolving methodological approaches of this study are considered a strength of the research, and an outcome in themselves as well as a means of exploration.

	Main body of research	Emerging research	This research
Research focus			
Depth in scope - analysis	●	●	
Breadth in scope - synthesis			●
Research activity			
Evaluative, 'what is' approach	●		
Participatory, 'what if' approach		●	●
Research contribution			
Developing body of knowledge on materials, processes and strategies	●	●	
Creating knowledge on the implementation of sustainability literacy			●
Challenging conventional epistemological framework, developing new methodological approaches			●

1.4 Prioritised research foci, activities and contribution of main body of research, emerging research and this research

1.4 Research aims and objectives

The overarching research question of this thesis is: *How can trend-forecasters be helpful friends to fashion designers on their shared journey towards sustainability?* The aims of the research are to increase the understanding in the following areas:

- The barriers to and drivers for the adoption and development of more sustainable practices and strategies in the fashion industry's mass-market segment;
- Processes of change, in the context of fashion and the sustainability imperative;
- The dynamics, at operational and motivational levels, between fashion, trend-forecasting, and sustainability;
- The potentially synergistic dimension, and creative opportunity of bringing together fashion and sustainability.

The concrete research objective is to:

- Develop and evaluate approaches to implement environmental improvement by design at systemic level in the fashion industry's mass-market segment.

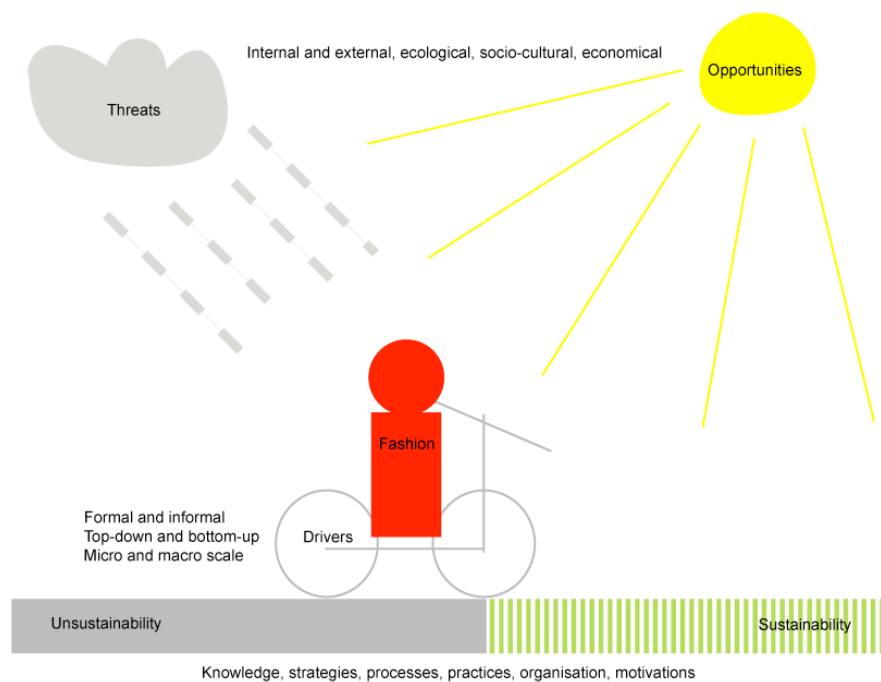


Figure 1.5 Fashion and sustainability forecast

1.5 Overview of thesis

- Chapter 2 introduces fashion's socio-environmental impact, principles for sustainable design, and drivers for environmental improvement in fashion;
- Chapter 3 provides a discussion on the reasons behind unsustainability from the perspectives of natural science, sociology and economy in the context of fashion, and qualifies the two frameworks of the imaginary journey;
- Chapter 4 presents the initial empirical study, which concerns the interrelations between fashion, trend-forecasting and sustainability, and the barriers to and

opportunities for environmental improvement in the fashion industry's mass-market segment;

- Chapter 5 explores processes of change from the perspective of natural and socio-cultural systems, with the aim of informing trend-forecasting as a new driver for environmental improvement in the fashion industry's mass-market segment, and draws up a tentative methodological framework for trend-forecasting in this context;
- Chapter 6 presents the second empirical study, the design and evaluation of the new driver through participatory and interdisciplinary creative workshops guided by the underlying proposition 'what if fashion and sustainability were compatible or even synergistic?';
- Chapter 7 synthesises the findings from the theoretical and empirical research, offers a reflection on the process, and provides recommendations for further study.

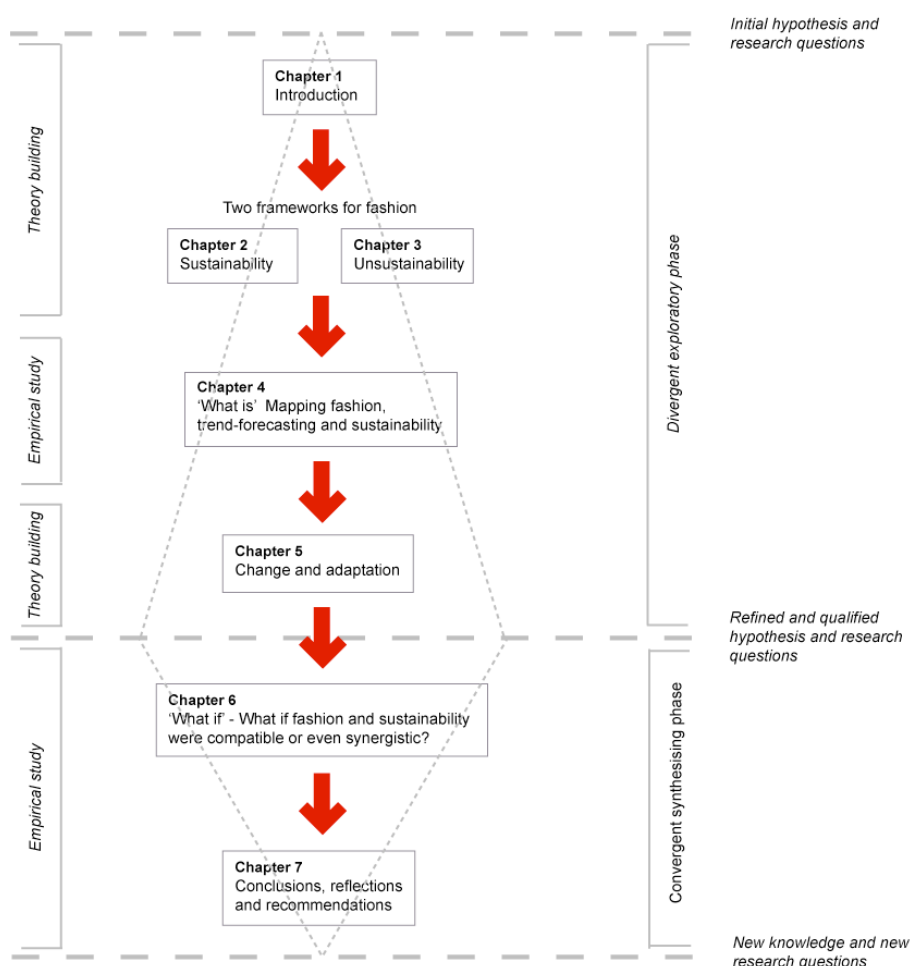


Figure 1.6 Structure of thesis

CHAPTER 2. FRAMEWORKS FOR FASHION - SUSTAINABILITY

2. FRAMEWORKS FOR FASHION: SUSTAINABILITY

When a fashion designer sends out a new collection on the catwalk, presenting it to media, buyers and the elite of 'fashionistas', six months of intensive work culminate in a spectacle loaded with symbols. At that same point in time a vast array of material resources – yarn, fabric, thread, buttons, interfacing - become elevated to a significant and meaningful unit, a series of garments that we can see, touch and evaluate from the perspectives of the specific time and place. In that moment it is evident that fashion is more than the sum of its material parts. The components of the garments, and their union, are made possible by a series of (to most people) invisible processes and flows – of water, energy, materials and chemicals. These flows in turn rely upon the infinitely sophisticated cycle of creation, biodegradation and regeneration, which characterises earth, and constitutes the very foundation for life. In the fashion moment, whether it takes place on a catwalk, in front of the mirror at home, or in a schoolyard, there is a magic connection with the present, the social context and the space. This moment is dependent on the complex resource flows, yet simultaneously free of a conscious engagement with them. It is however the material dimension of fashion that causes environmental and (less directly) social unsustainability.

The following two chapters introduce two frameworks for fashion: sustainability and unsustainability. The first chapter presents a brief history of the strive towards more sustainable fashion, the key target areas for environmental and social improvement in the fashion industry, and the principles and tools for environmental improvement by design currently at hand. It further discusses drivers of environmental improvement in a fashion context, and the fashion industry's present location on a continuum from unsustainability to sustainability.

The second chapter is concerned with the underlying reasons behind unsustainability in the fashion industry. The two chapters conclude with a discussion of characteristics of the two frameworks and their relationships, and key target areas for further study are drawn out.

2.1 A brief history of sustainable fashion

2.1.1 Early social concerns in dress

The strive for more ethically and environmentally sound fashion is not a new phenomenon. Already in the late nineteenth century "the ongoing effects of living in big cities and the relentless drive of consumerism instilled in certain groups of society a yearning for greater authenticity, for products and lifestyles that would unite man and nature, maker and consumer, clothing and body". (Arnold, 2001: 26-27) In London, the Rational Dress Society

and the Aesthetes¹ promoted a more hygienic and healthy approach to clothing and a celebration of natural beauty. (Arnold, 2001: 27)²

The rapidly growing industrialisation provoked strong reactions, such as the Luddite movement; British textile workers famously smashing machines in the early 19th century. (See e.g. Sale, 1995) Anxiety raised by industrialisation has ranged from concrete fears of work being taken over by machines to a more philosophical apprehension of loss of authenticity and emerging alienation processes, and direct and unspoken opposition to capitalism. The notion of man's alienation from nature, and loss of self, caused by an increasing dependency on technology is well documented³ and has a strong place in environmental philosophy. (See e.g. Naess, 1989)

“But this humanity, [is] striving for happiness, to the ruin of the inner world, the experience of meaninglessness, and to the ruin of the environment, the complete loss of all life's grounds and securities.” (Witzenmann, 1976, as cited in Arnold, 2001: 27)

2.1.2 Eco-style

Together the reactionary movements of the late 19th century and early 20th century - in fine arts, literature, arts and crafts, design and fashion - introduced a stylistic vocabulary that reacted against technology, that romanticised nature and that celebrated the vernacular. By the early 1960s the political connotations were a more pronounced feature, either adhering to the party political left or representing a general counter commercial stance. At this point the aesthetics also reflected the global solidarity emerging from the peace movement⁴ and spurred a general interest in folklore. In Sweden the clothing design collective Mah-Jong addressed a broad range of issues: gender equality, fair trade, the Vietnam War. (Hallström Bornold, 2003)

It is important to note how strongly embedded the style of opposition of the late 1960s and early 1970s was in the general zeitgeist. When the style of hippies reached an audience far wider than those early movements had managed, it mirrored a political tendency and was interdependent with movements within popular music and the art scene, not to mention the still emerging notion of a youth culture taking, and aesthetically expressing, a clear stance against the older generation. The hippies also had clear stylistic inspirations from the Folkies, which gave them “a vision of simple, pre-industrial, rural life – and a belief in

¹ A group composed of artists and bohemians, of which Oscar Wilde was a member.

² Simultaneously in Sweden, the artist Carl Larsson and his wife Karin were key propagandists of a wholesome lifestyle centred round simplicity and the conservation of traditional family values and the countryside.

³ See e.g. the theories of Marx as described in Avineri (1968), and Merchant's work on the history of ecology as seen through a feminist lens, Merchant (1982), introduced in more depth in Chapter 3, **3.1.2.**

⁴ In particular the movement against America's war against Vietnam.

committed activism”. (Polhemus, 1994: 64) The soil for the germination of such a fashion, or style, was therefore ripe or, in Gladwell’s term, there existed a ‘sticky context’. (Gladwell, 2000, see also Chapter 5, **5.3.5**)

Although the early movement’s focus was on the liberation of body and soul, it anticipated the later call for a more holistic fashion, and came to branch out to embrace environmental concerns. Environmental fashion reached its peak in the strong eco-looks of the late 1980s and early 1990s – and then largely went undercover. In many cases those eco-looks did not coincide with sound environmental strategies. In addition, labelling was inconsistent, further confusing the consumer. The particular aesthetics, described as “brown teeth look” (Hamnett, 2003) or “knit your own muesli” resulted in a strong backlash and created a stigma for environmental work in the fashion industry (and beyond). This wave, although cementing stereotypes to this day resident in the fashion mind, also fostered some important initiatives – research into new fibres, for example the recovery of PET bottles for fleece, and some fashion designers and brands have remained openly proactive since. (See e.g. Hamnett and Patagonia) In the mass-market domain however, eco-fashion was kept at arms length until very recently. (See e.g. Arnold, 2001; Black, 2008)

2.1.3 The new wave

During the past five to ten years, the territory of theoretical and practical research into environmental improvement by design in the realm of fashion has expanded rapidly. (See e.g. in the UK the work by Fletcher & Earley, 2003; Fletcher & Tham, 2004; Neuberger, 2006⁵.) In terms of the general (fashion interested) public, environmentally friendly fashion has also become increasingly more visible. In 2005 and 2006 (and since) fashion shows on the theme of sustainability took place in Paris⁶, London⁷ and New York⁸. In spring 2006 the Craft’s Council, London, put up the exhibition, *Well Fashioned: Eco Style in the UK*, curated by Earley. This exhibition showcased twenty-four designers working with an environmental agenda. These designers constitute but a small representation of the recent explosion of fashion design with environmental claims. In the main, these designers have a fairly small distribution, if indeed they do have one - some create one-offs to present their ideas. Examples of companies with a wider spread are Howies, Terra Plana (UK), Camilla Norrback and Dem Collective (Sweden). (For a discussion of fashion in the context of politics, see Chapter 5, **5.4.2.1**)

⁵ As seen in the Well-Fashioned exhibition at the Craft’s Council, London, 2006.

⁶ Ethical Fashion Show, organised by Universal Love Association.

⁷ RE: Fashion, organised by Anti-Apathy.

⁸ Future Fashion, organised by Verdopolis.

2.2 Fashion's socio-environmental effects

2.2.1 Environmental issues associated with fashion

The fashion product's lifecycle is complex. All its stages, from conceptualisation and design to final disposal (incineration or landfill – or in the best case reuse or recycle) have some effect on the environment. An in-depth account is outside the scope of this PhD, but can be found in e.g. Fletcher (1999, 2008); Laursen and Hansen *et al.* (1997, 2006); Miraftab and Horrocks (2007); and Uitdenbogerd, Brouwer, *et al.* (1998).

Those stages presently predominantly addressed (and targeted by legislation) are the process- and production stages. Particular concerns here are the vast amounts of water and chemicals used in for example the cultivation, and later processing of cotton, and subsequently in the treatment of fibres, materials, and finally garments. Stress on water resources causes soil erosion and salination, reducing soil fertility. To further complicate matters natural fibres (and regenerate fibres such as viscose) need fertile soil, which puts them in competition with food production. (Breds, Hjort *et al.* 2002) In the case of man-made fibres such as polyester, less water and chemicals are used, but instead they depend on non-renewable and very slowly biodegradable petrochemicals. In addition, only a limited amount of the resources used actually make up the end product, as much becomes waste during the production process. (Laursen and Hansen *et al.* 1997) The transport of garments also contributes to environmental degradation, again using up non-renewable resources, producing acknowledged greenhouse gases, and requiring extensive packaging. (Allwood, Laursen, *et al.*, 2006) The subsequent retail stage is both energy and material intensive: fashion shops are brightly lit, and the fashion product is presented to the end-user through a range of materials (hangtags, bags, brochures). Yet more astounding is the impact of the user phase, which can constitute up to 85% of a product's energy cost across its life cycle, because of frequent wash at high temperatures and tumble-dry. (Franklin Associates, 1993; Allwood, Laursen, *et al.*, 2006: 69) Finally, a garment's disposal affects the environment. Fashion products often comprise composite materials, making them difficult to recycle. In addition recycling requires energy usage, and up to date only polyester is industrially recycled. Transport of garments for reuse, predominantly in other countries, also uses energy and creates emissions. While incineration generates a small amount of energy, it releases carbon dioxide, and other pollutant air emissions from chemical residues, from for example dyeing. (Laursen and Hansen *et al.* 1997) Landfill is connected to methane air emissions and ground water pollution and only some garments are easily biodegradable. (Watson, 1991: 65-66; DTIb, 2002) The infrastructure for reuse and recycling and the technology for recycling of clothing are still underdeveloped. (Allwood, Laursen, *et al.*, 2006: 69) Figure 2.1 below presents an overview of the fashion product's life cycle stages and examples of their environmental impacts.

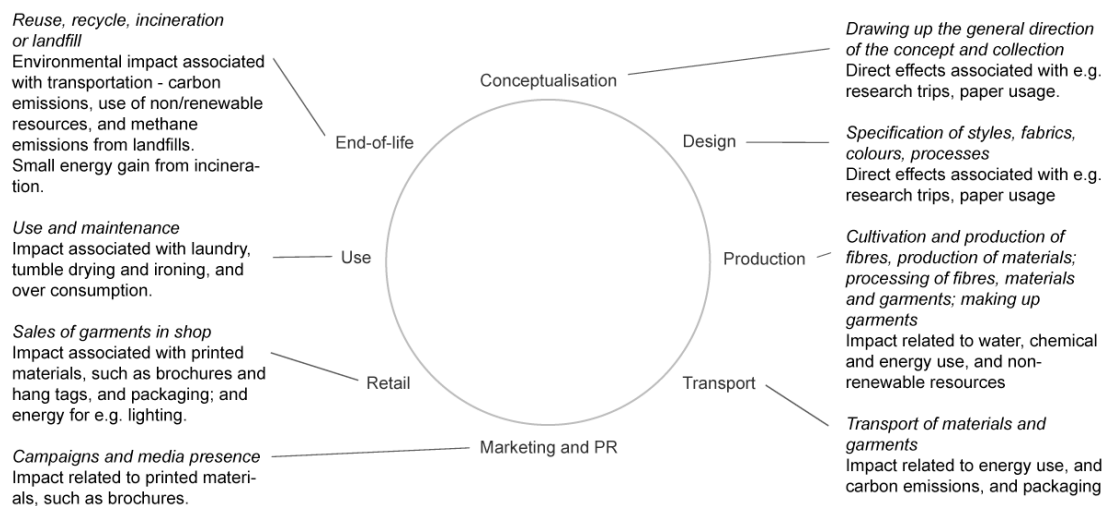


Figure 2.1 Fashion lifecycle stages and environmental impact

Recently an important discussion has been taking place about the resource flows of fashion, a discussion that has achieved its form and kudos through legislation and policy, at global and national levels, and within the fashion companies. The results are efforts to reduce the usage of water, energy and chemicals. While earlier efforts mainly targeted end of pipe – such as the engineering of better and cleaner waste management, increasingly measures are placed at earlier stages, for example eliminating a series of harmful chemical substances in the processing stages altogether. Yet more proactive efforts include the cultivation of organic cotton, where the conventional and ample use of for example pesticides and herbicides is replaced by non-toxic means of farming.⁹ (See e.g. Allwood, Laursen, *et al.*, 2006; Fletcher, 2008) While these developments are highly positive, three key issues present significant barriers to substantial improvements:

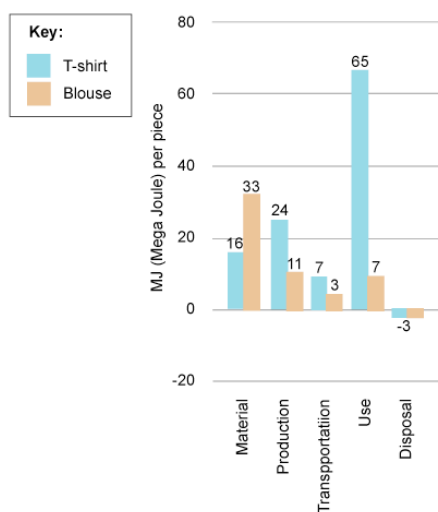
- The complexity of fashion production and the appropriateness in the targeting of issues;
- The speed and scale of the fashion industry; and
- The difference between fashion and clothing.

2.2.1.1 The complexity of fashion production, and appropriateness of strategies' target

Defining best practice in terms of environmental performance is a complex matter, because of the range of variables in the fashion product's lifecycle. The figure below shows the energy profiles of two standard garments, and highlights that strategies must be sensitive to both material aspects, such as fibre specification and immaterial aspects, such as user behaviour (in this case laundry). In the cases presented below, whereas production dominates the energy consumption of the blouse, because the fibre is manmade, for the T-

⁹ The conversion to organic cotton takes around three years. At present demand far outweighs supply. Organic cotton is estimated to constitute approximately 1% of the global cotton market. (Fletcher, 2008: 21) Sales increased from \$19 million to \$66 million between 2004 and 2006. (Organic Exchange, 2007: 6)

shirt the highest energy usage takes place in the user stage, since this product is washed at high temperatures, tumble dried and ironed. (Allwood, Laursen, *et al.*, 2006: 28-29)



T-shirt, cotton, yarn from the USA, making in China, shipped to the UK, washed at 60 degrees Celcius 25 times, tumble dried and ironed, incinerated after disposal.

Blouse, viscose, made in India and shipped to the UK, washed at 40 degrees Celcius 25 times, hang-dried, no ironing, incinerated after disposal.

Figure 2.2 Energy lifecycle profile for standard T-shirt and blouse (Data from Allwood, Laursen, *et al.*, 2006: 27-28)

Yet, up to date the fashion industry at mass-market level targets its efforts mainly at the process and production stages of the fashion product lifecycle, and employs similar environmental strategies for all product types. This means that a stage of significant impact – the user stage – is largely ignored by industry.¹⁰

“80% of a product, service or system’s environmental cost is determined at the design stage.” (Design Council, 2002: 17)

Yet another area that falls outside the direct remit of the strategies for environmental improvement in the fashion industry’s mass-market segment (and beyond) is the conceptualisation and design stage. At this stage the scope for improvement is utmost, as decisions here can make redundant remedial actions further along the line. (See e.g. Keoleian and Menerey, 1994) The principles for environmental improvement by design are discussed further into this chapter.

2.2.1.2 The speed and scale of the fashion industry

A trip to any shopping centre makes evident the significant material throughput of fashion. For example H&M alone handles over half a billion goods per year. (H&M, 2005) With the advent of ‘fast fashion’ - short lead times, a highly profit driven industry, and high consumer

¹⁰ A key exception of which is the initiative by M&S (Marks & Spencer) that encourages users to wash at lower temperatures. (Black, 2008: 31)

demand - shops change ranges virtually every week, and many garments spend a very limited active time in their wearers' lives.¹¹ Moderate environmental improvements at product level are therefore easily eaten up by the astounding scale and speed of the fashion system. They do not constitute the systemic approach needed to reverse the alarming effects of a consumerist and producerist society. (See recently e.g. Lovelock, 2006; Stern, 2006) While increasingly processes in the fashion industries have become cleaner, the potential of environmental improvement by design has remained largely untapped. (See e.g. Fletcher, 2008)

2.2.1.3 The difference between fashion and clothing

Although they often coincide, fashion is different from clothing. Fashion operates primarily at a symbolic level; simply put we do not disregard a fashion item because the garment is threadbare but because it no longer communicates what we want it to communicate. It has lost its precious link to time and space. (See e.g. Barthes, 1983; Kawamura, 2005; and Chapter 3 for a discussion of mechanisms behind consumption, 3.2.1. See Chapter 5 for an in-depth discussion of fashion, 5.8)



Figure 2.3 Fashion and clothing (Fjällräven outdoor jacket, and top from Kate Moss, Top Shop)

Research into environmental issues associated with clothing production, use and maintenance (such as SusHouse, 2000) tend to treat all items in the wardrobe as one, when establishing a use profile. Similarly the environmental strategies of fashion companies target a 'standard' garment, failing to differentiate between various garment types.¹² In contrast, an individual's wardrobe contains clothes of very different profiles, some washed frequently,

¹¹ According to a Dutch study, a piece of clothing stays in the wardrobe for an average of 3 years and 5 months. During this time it is worn for 44 days and it is washed after 2.4-3.1 days of use. (Uitenbogerd *et al.* 1998) A British study from 2006 calculates that approximately 55 kg of textiles and clothing are consumed by each individual in the UK per year, of which 12.5% is sent for reuse, and the rest of which is ends up as waste. British consumers spend an average of £780 on textiles and clothing per year. (Allwood, Laursen, *et al.*, 2006: 2)

¹² This can be compared to taking the measurements from a small child and a tall man and constructing a chair based on the average.

and worn for a long time, others worn only once and then discarded. (Fletcher and Tham, 2004) Literature also focuses almost exclusively on the material aspects of fashion. For example, durability is still a favoured strategy, although it is well known that many fashion items in reality are only used for a very short while. (See e.g. Fletcher, 1999) There is not much point in making a product last for decades if it is to be discarded in a month's time and ends up in landfill. Yet another problem associated with durability, is the specification of components within a garment. If, as often, for example the lining of a coat is of inferior quality than its outer fabric, the coat will be disposed off prematurely, since a repair culture is practically non-existent (and the available services expensive) in the west. (Fletcher and Tham, 2004; Allwood, Laursen, *et al.*, 2006)

2.2.1.4 Lifetimes project

The complexity of the fashion offer and use, the speed and scale of the industry, and the difference between fashion and clothes call for more diverse and systemic approaches to environmental improvement, particularly in the mass-market segment of the fashion industry.

The Lifetimes project sought to respond to these identified needs.¹³ (Fletcher and Tham, 2004) It looked at users' *real* interaction with their fashion, at both experiential and lifecycle data levels. It engaged with the whole system of fashion, and questioned issues such as notions of ownership and hygiene. Perhaps most significantly, it acknowledged the difference between clothes and fashion. This led to an exploration of *appropriate lifetimes* and a diverse set of strategies for more sustainable fashion. The researchers came to the conclusion that the strategies for achieving more sustainable clothing and fashion must be as diverse as users' engagement with what they wear.

The findings were channelled into four futures scenarios from *slow to fast fashion* for the fashion industry's mass-market segment. The fastest scenario targets the party top. It was found that most users had experienced a late Friday afternoon in the shops, frantically looking for something to wear. Finally a top was purchased, worn for one or two nights out, and then spent, sat as a bad conscience at the very back of the wardrobe. The scenario *Rent-a-top* proposed a subscription service where the user, having signed up, visits a shop, takes out a top, has fun with it for a night or two, takes it back, unwashed, and is given a new fashion item. The environmental benefit of this scenario is that all clothes can be bulk washed, saving energy, and that there is less material in circulation to fulfil the same needs. The company makes a profit on fewer garments as it provides a service rather than a product. The user can enjoy fast, changeable fashion with a good conscience. One of the slowest scenarios, in contrast, targeted a classic coat, the highest environmental impact of which concerned the production phase. Here the scenario suggested design involvement in the development of easily updatable styles, in terms of look and size, and the availability of

¹³ The Lifetimes project was conducted between 2002 and 2004 and was funded by the AHRB.

repair kits for the so inclined user, and services provided by the retailer. It was also recommended that materials of equal durability should be specified. The perhaps most provocative case of the research project addressed plain underwear, the most prominent environmental impact of which takes place in the user stage, because of the very frequent wash and tumble dry (after each wear). Here lifecycle data led to a scenario where underwear, produced from recycled, natural fibres, are discarded after one use, and composted. Together the scenarios from the Lifetimes project suggest a range of strategies that coexist, responding to a variety of clothing archetypes, consumer needs, behavioural patterns, and most importantly rhythms in the interaction with clothing and fashion. (Fletcher and Tham, 2004) Figure 2.3 below provides an overview of four scenarios from slow to fast fashion.



Figure 2.4 A slow-fast fashion continuum (Fletcher and Tham, 2004)

2.2.1.5 Systemic approaches to environmental improvement

It is of essence that academia and industry continue building on the body of knowledge on cleaner processes, alternative energy sources and environmentally sounder fibres and materials. However, it is also vital that efforts are dedicated to a systems level perspective on fashion and to learning from environmental strategies in other design fields. The argument for a shift from a design situated at product level to a design that addresses the system is well rehearsed. (See e.g. Papanek, 1985, 1995; Manzini, 1994; 2003) In other design disciplines (see e.g. the realm of transport) such a shift, such as the realisation of

PSS (Product Service Systems), is already taking place. The environmental and financial viability of for example a leasing system for the fashion industry (as proposed above) has been validated in a comprehensive study. (Allwood, Laursen, *et al.*, 2006: 68) Furthermore, clothing rental is not alien to fashion users, as a culture for such an approach to for example party clothing has long existed. The barrier to such a decoupling of fashion and material throughput is considered to be the necessary development of infrastructure and, most importantly, a mental shift from an economy of owning to one of sharing. (For a discussion of an economy of sharing see e.g. Zsolnai, 2004) Yet, the remarkable interest in second-hand clothes in the west in recent years suggests that fundamental attitudinal shifts are possible. Traditionally worn by the poor and artists, in recent years second hand clothes have become widely appreciated treasures, evidenced in how the number of charity shops in the UK increased from approximately 4300 in 1995 to 7100 in 2000. (DTIb 2002) Second hand items are also increasingly sold in ordinary fashion retail environments such as Top Shop or Selfridges. In addition, modified vintage clothes (and clothes made from vintage fabrics) feature frequently in fashion shops.

2.2.2 Social issues associated with fashion

The bulk of fashion production takes place in what is commonly described as developing countries, such as China, India, Cambodia and Bangladesh, and by a poor and predominantly female workforce. It is generally agreed that the textile industry (for export) provides safer and more profitable employment than other options available to the labourers. Yet a series of social issues arise from fashion production. Again, an in-depth account is outside the scope of this text, such can be found in reports by Labour Behind the Label, and Clean Clothes Campaign (LBL AND CCC, 2006) and International Labour Organisation (ILO, 2000; 2006).

To summarise, the social issues associated with fashion production can be divided into two key areas: human rights and human health. Table 2.1 below provides an overview of the most frequently raised concerns.

Human rights	Human health
Long working hours	Hazardous chemicals
Wages insufficient to meet minimum living requirements	Fibre dust (especially associated with cotton processing, and causing the respiratory disease byssinosis)
Insecure employment situations	Noise
Sexual harassment;	Repetitive motions
Child labour	Un-safe working conditions
Lack of freedom to organise	Chemical residues harmful to end-users

Table 2.1 Social issues arising from textile production (Allwood, Laursen, *et al.*, 2006: 14)

Key pressure groups, such as the Clean Clothes Campaign regard the issue of freedom to organise, such as forming unions, as particularly significant for a sustainable industry. (CCC, 2006) Just like the environmental issues arising from textile production, the social issues are complex. Banning child labour entirely in practice, for example, is not necessarily beneficial

since children may be forced to work in even poorer circumstances, instead of going to school. The boycotting of unsafe factories may result in significant job losses, and increased poverty.

In addition to the concerns raised above, the fashion industry arguably contributes directly or indirectly to socio-cultural phenomena such as peer pressure, skewed body image, and global homogeneity of expression and perhaps perpetuation of stereotypical gender roles. (See e.g. Lee, 2003)

As with environmental concerns, in recent years a gratifying development has taken place. Major actors in the fashion industry, such as H&M, have policies, strategies and practices in place and are gradually confident of those labour conditions that adhere to the suppliers with which they work directly. However, it is generally acknowledged that significant problems still exist, and especially where sub contractors are concerned. Wider issues related to the unsustainability of fashion include the power and financial imbalance of north and south transactions and the issue of skewed gender distribution in the fashion industry (70% of textiles workers are women). (H&M, 2007; Allwood, Laursen, *et al.*, 2006: 9)

2.2.3 The triple bottom line – trade offs in the fashion system

The fashion industry constitutes a complex system, comprising a wealth of stakeholders. Cross-referencing social, environmental and economical concerns, such as proposed in the triple bottom line concept, adds complexity and requires the involvement of even more stakeholders. Few studies exist that fully explore the trade offs between ethics, ecology and economy in the fashion industry. Yet again, research into multiple stakeholder collaboration in such a context is virtually non-existent. The *Well-dressed?* initiative goes some way to synthesise the effects of a range of possible strategies. (Allwood, Laursen, *et al.*, 2006) It draws out some considerable contradictions between in particular socio-environmental and economic agendas:

- Garments of environmentally better profile are more expensive for the end-user;
- A reduction in the pace of clothing consumption (through for example longer life garments, leasing systems or second hand usage) can cause decrease in profitability of fashion companies and loss of employment in production countries;
- Currently the focus of environmental policies in the UK and other Western countries is on emissions within the national boundaries. The study suggests that best practice, improving global environmental conditions, might actually increase local impact;
- Price, rather than quality or other means of differentiation, has become the primary factor of competition.

(Allwood, Laursen, *et al.*, 2006: 24, 68)

The above first two barriers to more sustainable practices being implemented in the fashion industry are directly relatable to a current economic model. It is conceivable that future models would decrease the brands' profit to allow no or only a slight increase in retail price, as there is a strong trend for vertically integrated (and cost effective) production, and retail prices approximately double the production costs. (Allwood, Laursen, *et al.*, 2006: 27) On a similar vein, as clothing prices have decreased dramatically in real terms in the last decade, while other consumer goods have become costlier¹⁴ and purchases of women's wear increased with 21% between 2001 and 2005 in the UK (see e.g. Allwood, Laursen, *et al.*, 2006: 11; Sundberg, 2006), perhaps the end-user should expect an adjusted 'real' price level. Finally, a degree of dematerialisation of fashion suggests the possibility of profiting on services instead of products, enabling a higher price per fashion unit¹⁵, and higher (or similar) fees to labourers than presently paid. It is agreed that such developments would rely upon changes in both business models and, most significantly, attitudes.

2.3 Strategies for environmental improvement in the fashion industry

So far this chapter has discussed the broader environmental and social impacts associated with the fashion industry, and established some key barriers to change. It has also identified areas where the scope for improvement is significant, such as the design phase of the fashion product's lifecycle. This section introduces principles for environmental improvement by design and discusses their relative potential.

A series of overarching concepts and principles have emerged geared at, by means of quantification, increasing the understanding of environmental impacts of products and lifestyles. They include the concept of the ecological footprint, which illustrates the land area required to sustain a given human activity (Rees and Wackernagel, 1996), and the ecological rucksack concept, which demonstrates the total resource use of a product over its lifecycle. (Schmidt-Bleek, 1998) The predominant tool used to calculate environmental impact is LCA (Lifecycle Assessment), which can be used to analyse a product's full lifecycle. Its implementation in the fashion industry has been slow, which may be attributed to the significant cost and time required to pursue full studies - of particular difficulty in an industry of such high and fast output.¹⁶ When employed LCA can provide valuable guidance of key areas to prioritise, and offer a detailed foundation for comparisons of strategies. (For a discussion of LCA see e.g. Birkeland, 2002) It should be noted that, common to many *quantitative* tools, the approach of LCA constitutes a contrast to fashion designers' qualitative, creative and intuitive usual methods. (See Chapter 4, **4.5.3.1**, **4.5.3.2**)

¹⁴ With the exception of the price on communications. (Allwood, Laursen, *et al.*, 2006: 12)

¹⁵ Spread over several users.

¹⁶ In 1999 the estimated cost and time for a lifecycle assessment were 300 000 pounds and one and a half years. (Fletcher, 1999: 93)

2.3.1 Product level strategies – reduce, reuse, recycle

In general terms existing principles for environmental improvement can be divided into three broad areas:

- Reduce – limiting resource use;
- Reuse – giving clothing and materials new life; and
- Recycle – closing the resource loop.

As indicated earlier in the chapter, a hierarchy of these principles exist. *Reduce* is preferable, but *reuse* more advantageous than *recycle* (which incurs loss of material quality and energy costs). All three principles can be described as umbrella terms for a series of more specified tools or principles – with several overlaps. Table 2.2 presents a brief overview of the strategies as applied at product level and their respective reach in the product lifecycle. The table draws from the work of Dewberry (1996); the Demi project (Dewberry and Fletcher, 2000); Fletcher (1999, 2008); Birkeland (2002) and Black (2008).

Aim	Principle	Example	Reach in lifecycle
Reduce	Substitution	Replacing conventionally grown cotton with organic cotton.	Process and production stage
	Efficiency	Minimising use of chemicals in wet processes, minimising water use.	Process and production stage
	Design for minimum material use	Using efficient layouts of garment parts, avoiding styles of vast material use.	Process and production stage
	Design for low or no wash	Specifying stain repellent coatings. ¹⁷	User stage
Reuse	Design for durability	Specifying durable fibres and materials, and classic styles.	User stage
	Design for repair	Providing spare buttons	User stage
	Design for adaptation	Ensuring flexible style and fit	User stage
	Design for appropriate lifetimes	Specifying garment components of similar durability.	User stage
	Design for graceful aging	Specifying materials where aging becomes a feature, e.g. denim.	User stage
Recycle	Design for recycling	Labelling individual components with recycling destination.	End-of-life stage
	Design for disassembly	Avoiding composite materials, and production for simple separation of materials, e.g. seams instead of adhesives	End-of-life stage
	Design for biodegradability ¹⁸	Specifying materials that decompose quickly and safely.	End-of-life stage

Table 2.2 Design principles for environmental improvement - product level approaches and their reach

The table features strategies that reach process and production, use and end-of-life stages. Currently only the principles of *substitution* and *efficiency*, both targeting the process and production stage, are in wide usage. In recent years the interest in substitution has increased, with revived fibres, such as hemp, and new options including biofibres, such as soy protein and PLA (poly lactic acid, from cornstarch). (Allwood, Laursen, *et al.*, 2006: 44, 48) While the substitution of conventionally grown cotton for organic cotton may occur at the

¹⁷ In the *5 ways* project a less technology intensive garment concept was developed - ‘No wash’. Garment areas particularly prone to be stained were identified and laminated, and fabric was removed at areas of perspiration. (Fletcher and Earley, 2003)

¹⁸ This principle does not refer to the conventional notion of recycling, but targets ‘closing the loop’ by ascertaining materials are part of the larger cycle of decomposition and regeneration.

initiative of designers, in the main decisions concerning both substitution and efficiency are made by environmental staff in association with buyers. (See Chapter 4, 4.5.3.3) This means that principles for environmental improvement by design are not implemented in the fashion industry's mass-market segment. It also follows that the user stage, which has been shown to have considerable bearing on the fashion product's environmental profile is currently not prioritised by the industry. Furthermore, the current implemented strategies target only the material, and not the symbolic level of fashion, leaving out issues of consumer behaviour such as frequent wash, and over-consumption.

Table 2.3 below provides an overview of environmentally responsible design, on a continuum from 'green design', which is focused purely at product level, and process and production stages, to 'sustainable design', which includes the social perspective and acknowledges the entire lifecycle of the product.

	Product focus	Systems focus	Single issue focus	Lifecycle approach	Sustainability constraints	Time component
Green design	X	-	X	-	-	-
Eco-design	X	-	-	X	-	-
Sustainable design	-	X	-	X	X	X

Table 2.3 Distinctions between environmentally responsible design definitions (Fletcher, 1999: 78)

While the question for green, or eco-design might be 'how can we make this product less harmful?', sustainable design might ask 'how can we meet this particular need in the most responsible way?', or even 'how can we meet this need in the most responsible way *and* increase awareness of sustainability?' Design for sustainability therefore implies engaging with a higher level of complexity, a multitude of stakeholders, a range of timelines, and challenging the role of design, and the materiality of design outcomes. Birkeland describes sustainable (in her terms eco-logical) design as: "responsible, synergistic, contextual, holistic, empowering, restorative, eco-efficient, creative, visionary and multi-dimensional." (Birkeland, 2002: 25-28)

2.3.2 Systems level strategies – reframe

In the introduction, a strong case for the sustainability imperative was presented: the challenge that humanity is currently facing is of such magnitude that the impact of products and services needs to be reduced by up to 95%. (Schmidt-Bleek, 1996) It is estimated that improved processes, as exemplified by those strategies already implemented in the fashion industry's mass-market segment, can reduce the impact by approximately 25%. (Fletcher, 1999: 85) This chapter has further shown that the accelerating speed and scale of the fashion industry overshadows incremental improvements. If concerns are limited to one part of the system, the risk for a rebound effect is always present, a phenomenon where

"reducing cost of one utility may increase levels of consumption of that utility". (Kane, 2003; see also Birkeland, 2002: 129)¹⁹

Achieving the necessary further improvements therefore requires a more radical approach that holistically and systemically addresses the fashion industry. In recent years such approaches have emerged from academia and, mainly, fringe design practices. (See e.g. the research of Fletcher and Earley, 2003, Fletcher and Tham, 2004; and the design work of Amy Twigger, and Otto Von Busch.) This work has drawn inspiration from other thinkers and designers of other disciplines. (See e.g. Benyus, 1997; Brand, 1999; Chapman, 2005; Manzini, 1994, 2003; McDonough and Braungart, 2002; Naess, 1989; Papanek, 1985, 1995; van Hinte, 2004)

Here these systemic approaches are gathered under the umbrella term of *Reframe*, since they all require a new outlook on the fashion industry, and (at least) its socio-cultural, environmental and economic context). Table 2.4 provides an overview of holistic, systemic approaches to design and fashion.

¹⁹ An example of this in the fashion industry would be if organic cotton clothing became very popular and caused an overall increase in for example T-shirt consumption.

Aim	Principle	Example	Reach in lifecycle
Reframe	Biomimicry ²⁰	Studying nature for sustainable design solutions, such as the operation of termite mounds to inform ventilation systems.	Ranges from process and production stage to entire system.
	Industrial ecology ²¹	Heating one factory from e.g. excess steam from another.	Production and end-of-life-stages.
	Cradle-to-cradle ²²	Ensuring closed industrial and ecological loops, i.e. zero waste.	Entire system.
	PPS (Product Service Systems) ²³	Leasing rather than owning a garment.	User and end-of-life stages.
	Local lifecycle ²⁴	Specifying locally cultivated fibres, and making of clothing, local distribution and waste management.	Particularly transport stage but arguably user engagement. ²⁵
	Open source ²⁶	Engaging users in design and making.	Primarily user stage but potentially whole system.
	Slow fashion ²⁷	Designing with nature and users' rhythms, such as acknowledging, and taking environmental advantage of the particular user pattern of a pair of jeans.	The entire system.
	Design for awareness ²⁸	Communicating sustainability at every interface with users and other stakeholders, e.g. through T-shirt print or alternative business model. ²⁹	Primarily user stage, but potentially whole system.

Table 2.4 Design principles for environmental improvement – systems level approaches and their reach

To these approaches, what is sometimes termed democratic or inclusive design should be added. This refers to a design that targets issues of accessibility such as that of the elderly, remote or poor communities or people with disabilities. (See e.g. Birkeland, 2002; and the work of the Helen Hamlyn Centre, RCA, 2007)

The methods briefly described in the table all represent systemic approaches, although their relative emphasis in the lifecycle varies. The strategies also require different resources in their implementation.

- Technological changes – biomimicry, industrial ecology, cradle-to-cradle;
- New business models and infrastructure – Product Service Systems, industrial ecology, cradle-to-cradle, local lifecycle;

²⁰ See Benyus, 1999, and Chapter 5, 5.3.3.

²¹ See Chapter 5. Industrial ecology, 5.3.3, and Fletcher and Earley, 2003: Nine Lives.

²² McDonough and Braungart, 2002.

²³ See e.g. Manzini, 2003.

²⁴ See e.g. the movement in organic food and 'local' restaurants such as Acorn House, London.

²⁵ A British study shows that the environmental impact associated with transport is not significant, and overshadowed by ensuing loss of employment overseas. (Allwood, Laursen, *et al.*, 2006: 34)

However, it is up for debate whether the present discrepancy in labour costs between the North and South can be sustained in the far future. In addition, it can be argued that geographically less remote production, can foster a larger user engagement in the fashion process. (See Chapter 4, 4.6.1.1.1.) The value of contextual design, as opposed to standardised approaches is stated in e.g. Papanek (1985, 1995) and Van der Ryn and Cowan (1996).

²⁶ See e.g. Busch (2008) and Chapter 5, 5.3.7 and 5.4.2.3.

²⁷ See e.g. Fletcher, 2008.

²⁸ See e.g. Katharine Hamnett's slogan T-shirts. (Black, 2008: 32)

²⁹ Increasingly transparency, i.e. accounting for the working conditions and environmental impacts associated with a product, is adopted by major actors in the clothing industry. See e.g. Patagonia, 2008; Marks & Spencer, 2007.

- Attitudinal changes in consumers – Product Service Systems, open source, slow fashion.

As discussed above all these approaches also challenge the role, processes and outcomes of design. For example, biomimicry requires the collaboration with natural scientists, Product Service Systems a greater understanding of real user patterns and needs. Open source indicates a degree of loss of control on the part of the designer and a dynamic understanding of needs, and cradle-to-cradle a substantially extended vision of the product's potential – from one (and only to the point of retail) to several, or even an infinite number of lifecycles. The systemic approaches thus imply a greater emphasis at the conceptual level of the design process, and a more strategic designer role. (The notion of a higher order of design, or *metadesign* is introduced in Chapter 5, 5.3.9 and a discussion of the designer role in a paradigm of sustainability can be found in Chapters 3, 3.5.2 and 3.7.2 and 7.)

It is clear that while measures a product level, such as the replacement of conventionally grown with organically cultivated cotton, and their effects, such as the decrease in use of hazardous substances, can be *controlled* by the designer or the fashion company (or controlled by proxy, with the supplier being accountable to the organisation), the level of control that the designer can exert in the examples outlined above is more uncertain. In terms of the user, the shifts in attitudes and practices asked for by the *reframe* strategies are significant. They imply modes of being with and doing fashion remote from current habits. The table below shows Welford's predicted consumer steps towards a paradigm of sustainability. (Welford, 1995: 195)

Step 1	Purchase only to satisfy need of consumer, no attention to environment
Step 2	More observant of environmental activities, reluctantly comply with existing laws. Display negative attitudes towards environmental legislation restricting personal choice. Purchasing behaviour reflects only enforced actions.
Step 3	Consumers begin voluntarily to seek out products that are less damaging to the environment. They accommodate to environmental concerns.
Step 4	Consumers question the need for the product as a legitimate use of the world's resources. A decision to purchase a product or service must meet buyers' personal criteria for minimum environmental impact, resource and energy use. The purchasing behaviour would exhibit strong environmental demands of the manufacturer, focusing on impacts over the total product lifecycle and its respect for humanity and other living things.
Step 5	Consumers have strong values for all living things in the biosphere. Therefore all production and consumption must show deep respect for others in the eco-system. This translates to a reduced level of human consumption to ensure that the eco-balance is maintained.

Table 2.5 Consumer steps towards sustainability (Welford, 1995: 195)

2.4 Drivers for more sustainable fashion

The final section explores drivers for more sustainable fashion, internal and external to the fashion industry.

2.4.1 Organisation of social and environmental work in the fashion industry

In the fashion industry at mass-market level, social and environmental work is mainly conducted under the term and organisation of CSR (Corporate Social Responsibility). CSR is a voluntary arrangement, its practical manifestations ranging from the development of Chemical restriction lists, the procurement of sustainable raw materials, to community

engagement, philanthropy and stakeholder dialogue. (Allwood, Laursen, *et al.*, 2006: 62)
The target of the CSR work can therefore span both complying with legislation and proactive initiatives.

2.4.1.1 Code of Conduct

Predominantly environmental and social issues associated with fashion production are addressed through Code of Conduct documents. These are informed by for example ILO Conventions, the United Nations' Universal Declaration of Human Rights, the UN's Conventions on children's rights, the UN Global Compact and the REACH legislation, a EU chemical policy.³⁰ They specify a series of social and environmental conditions that have to be fulfilled by a supplier. The Code of Conduct documents have to be signed by the supplier before a contract is agreed, and transactions on the part of the fashion company subject to the suppliers meeting the stated social and environmental requirements. The fashion organisation secures that targets are met through audits from independent organisations, such as NGOs and visits from staff internal to the company. The document is meant to be available to all workers in their own language.

A typical Code of Conduct document includes adherence to the following areas:

- Compliance with national law;
- Meet (at least) minimum salary of production country and follow national laws on maximum working hours, ban of enforced labour;
- Freedom of association and right to collective bargaining;
- Ban of, or restriction of, child labour;
- Safe working conditions and accommodation;
- Ban of sexual and other harassment and discrimination;
- Ban of hazardous chemical substances (usually following the legislation of the most rigorous distribution country), safe procedures in waste management.

(CORE, Corporate Responsibility Coalition, 2001; BCSI, Business Social Compliance Initiative, 2006)

Increasingly Code of Conduct documents are becoming standardised, a development that is advantageous as pressure from many fashion companies is more likely to yield fast responses, and because it makes the work of the suppliers less complicated. SA8000 constitutes such “a uniform, auditable standard for a third party verification system.” (SAI, 2001: 2)

³⁰ International Labour Organisation, www.ilo.org/ilolex/english/convdiscp1.htm;
United Nations, www.un.org/Overview/rights.html;
UNICEF, United Nations Children's Fund, www.unicef.org/crc/;
UN Global Compact, www.unglobalcompact.org;
Registration, Evaluation and Authorisation of Chemicals,
www.ec.europa.eu/enterprise/reach/reach_legislation_en.htm.

Although CSR work, and Code of Conducts can be described as useful to achieve positive change, there are issues of debate.

- Because of the number of, the quick turnover, and sometimes geographical spread of subcontractors they are difficult to audit;
- Auditing systems still need refinement;
- The fashion companies' increasingly high demands on short lead times are difficult to reconcile with humane working hours;
- Suppliers can struggle with the initial investments that for example cleaner water systems incur.

(CCC, 2006)

In addition, some ethical considerations arise from the nature of the work. Firstly, the use of Code of Conduct can be described as 'outsourcing' responsibility, as brands are often not prepared to pay for increased costs in terms of cleaner processes, new machinery, higher salaries, yet the retailers secure the highest profit on fashion items. (For a discussion of margins in the fashion industry, see e.g. Allwood, Laursen, *et al.*, 2006: 27) However, it should be noted that increasingly large corporations are striving for, and seeing the benefit of more long-term collaborations with suppliers, which should ensure a greater degree of equity. Secondly, deciding 'here', what is appropriate 'there' makes for uneasy comparisons with colonialism.³¹ Yet, it is generally agreed that CSR work and Code of Conducts have produced highly positive results in the approximate decade since their first appearance.

2.4.1.2 Eco-labelling

In recent years a range of eco-labelling systems have also emerged. The labels, such as the Nordic Swan or the EU Flower, adhere to a particular product (as opposed to brand). Fair Trade is an example of labels targeting social issues.³² After going through a significant auditing process, a company can register a product, which if deemed to meet the requirements of the particular organisation achieves the label. The criteria between labels vary, and the targets are raised intermittently, after which the fashion companies have to repeat the application process. The labels constitute a potentially important instrument in communication with the end-user, in terms of facilitating choice and general awareness raising, and also appear to raise awareness and increase motivation within the fashion organisation. However, at the time of writing, few fashion companies have signed up. This appears not directly attributable to good or poor environmental and social performance, but relates instead to varying sustainability strategies. For example, it is self-evident that

³¹ Dem Collective, a small Swedish fashion producer has circumvented this issue by co-owning their factories in Sri Lanka with the local work force. (Hallström Bornold, 2006: 24-31)

³² Nordic Swan, www.svanen.nu; EU Flower, http://ec.europa.eu/environment/ecolabel/pdf/market_study/irlinfosheet.pdf; Fair Trade, <http://www.fairtrade.org.uk/>

labelling is more compatible with basic products that are repeated than items of high fashion content. Yet another barrier to larger adoption may be that as yet no comprehensive labelling system exists, although it is hoped that GOTS (Global Organic Textile Standard) might constitute such an instrument.³³

2.4.2 Hard and soft drivers for more sustainable fashion

As previously described, in the main, and up to date, sustainability work conducted by the fashion industry, takes place mainly in compliance with legislation, and other formal policy, such as the UN Conventions. Pressure from the media³⁴ (i.e. the fear of scandals), NGOs (such as the Clean Clothes Campaign and Oxfam³⁵), and – not least - consumers³⁶ are other important drivers. (See e.g. Klein, 2000 for accounts of the power of media coverage and grass-root action.)

The tables below map a series of actual and potential drivers for environmental and social improvement in the fashion industry, and their real and potential reach. These have been organised into hard (formal or organised) and soft (informal or spontaneous) driving forces, targeted at macro (external to the fashion industry) and micro (internal to the fashion industry) levels. The tables constitute a simplified overview with overlaps and focuses on primary areas of reach.

³³ GOTS brings together four of the key international labelling bodies, Soil Association (UK), International Association Natural Textile Industry (Germany), Organic Trade Association (USA) and Japan Organic Cotton Association. (GOTS, 2006)

³⁴ It should be noted that although media pressure is important, the ethics of journalism in this respect can be questioned as reports predominantly focus on scandals, and newspapers show inconsistency in their stance to sustainability. For example, an issue of the Independent featured both an alarmist report on green house gases in relation to flying, and an article promoting the possibility of co-owning your own jet plane. (Calder, 2008: 1-5; Hughes, 2008: 4-5) The Clean Clothes Campaign express disappointment in the media's 'black or white' treatment of the nuanced report they provide. (Kampanjen Rena Kläder, 2006)

³⁵ <http://www.cleanclothes.org>, <http://www.oxfam.org.uk>

³⁶ An expanding body of literature describes the power of consumer pressure on companies, and seeks to educate people on sound consumer choices. (See e.g. Klein, 2000; Mau and Leonard, 2004; Ashton *et al.*, 2004; Steffen, 2006) See also Chapter 5, **5.4.2**.

Level of driver	Driving force	Reach in the fashion lifecycle
Macro level/external to fashion industry	National, EU and UN policy	Process and production stages, transportation and to some degree use (e.g. limiting hazardous substances in washing powder) and end-of-life.
	Economic drivers: taxes, grants, subsidies, tariffs, and infrastructure investments	Process and production stages, transportation.
	Infrastructure	Transport, retail and end-of-life stages.
	Pressure groups, NGOs	Process and production stages, end-of-life.
	Media coverage	Process and production stages, use, end-of-life stages.
	Research and development	Process and production stages, potentially all stages.
	Green procurement ³⁷	Process and production stages.
Micro level/internal to fashion industry	Research and development	Process and production stages, to some degree transportation and retail.
	Information instruments, guidelines, tools	Production and process stages, potentially design, PR and marketing stages, user stage.
	Infrastructure/access	Transport, retail and end-of-life stages.

Table 2.6 Formal/hard drivers of socio/environmental improvement in the fashion industry (See e.g. Young and Charter, 2001; H&M, 2005, 2008)

Level of driver	Driving force	Potential reach in the fashion lifecycle
Macro level/external to fashion industry	Consumer pressure	In particular production and retail stages.
	Zeitgeist ^{38 39} (and psychographics)	Conceptualisation, design, production and process, marketing and PR, retail, use, end-of-life stages.
	Demographics: e.g. age, income, location, education, occupation	Marketing and PR, retail, use, end-of-life stages.
	Trends	Conceptualisation, design, marketing and PR, use, end-of-life stages.
Micro level/ internal to fashion industry	Fashion trends ⁴⁰	Design stage, production and process, marketing and PR, retail and use stages.
	Corporate culture ⁴¹	Design stage, production and process, marketing and PR, retail and use stages.
	Sales figures/consumer demand ⁴²	Design, PR and marketing, retail stages.

Table 2.7 Informal/soft drivers of socio/environmental improvement in the fashion industry (See e.g. Young and Charter, 2001; H&M, 2005, 2008)

³⁷ Green procurement refers to the policy and practice of an organisation of weighing in environmental considerations when making purchases.

³⁸ Zeitgeist: "the general intellectual and moral character or cultural climate of an era" (New Penguin English Dictionary, 2001: 1639)

³⁹ See e.g. Goodwin (1997: 167) on the role of personal motivation in the shift towards a more sustainable society and Shove and Warde (2002) on rationales behind consumption.

⁴⁰ Breds and Hjort et al. (2002) raise the trend work's significance in the fashion cycle.

⁴¹ It is interesting, if not surprising, to note that some of the strongest brands in terms of environmental credentials, started from the perspective of an interest in the outdoors, see especially Patagonia (US), but also Howies (UK), and Klättermusen (Sweden).

⁴² The acute attention to sales previous figures in the fashion industry, arguably could be helpful in diversifying environmental strategies, see the earlier discussion on the need for less standardised approaches.

More general driving forces, which to some extent form a backdrop or are interwoven with the above include:

- Political climate – a radical shift of which has recently taken place with for example the US supporting unilateral agreements on climate change;
- Globalisation, which has added complexity to fashion production, and thereby the monitoring of its socio-environmental effects, but also an increased awareness of their spread;
- Rapid developments in technology, an example of which is ‘just in time production,’ which should support a less wasteful production system, but potentially also supports ‘fast fashion’⁴³;
- Rapid developments in information technologies, which again while arguably increasing global awareness of socio-environmental issues, also promote consumerism.

The overview of existing driving forces (Table 2.6) highlights a strong emphasis on the production and process stages of the fashion industries, which is in itself an important development. However, the cross-referencing of existing and potential driving forces and leverage points, presented in Figure 2.5 below, also identifies areas currently not prioritised by formal policy. The formal drivers do not directly target the user phase, where significant impacts occur, or the conceptualisation and design stages where the scope for preventative actions and proactive initiatives is utmost. Presently formal measures can therefore not be relied upon to reach the necessary reductions in impact from the fashion industry. Yet at the same time, important influences of fashion (soft drivers) appear largely unexploited and unexplored. For example, is consumer demand accurately appreciated, qualified and catered to with appropriate communications and products? What is the potential of capitalising on fashion and lifestyle trends, strong drivers of fashion, to reach the conceptualisation, design and user stages? This thesis will seek to define such blank spots in the map of drivers and explore their scope for systemic and design led socio/environmental improvement in the fashion industry.

⁴³ See e.g. Allwood, Laursen, *et al.* (2006: 37)

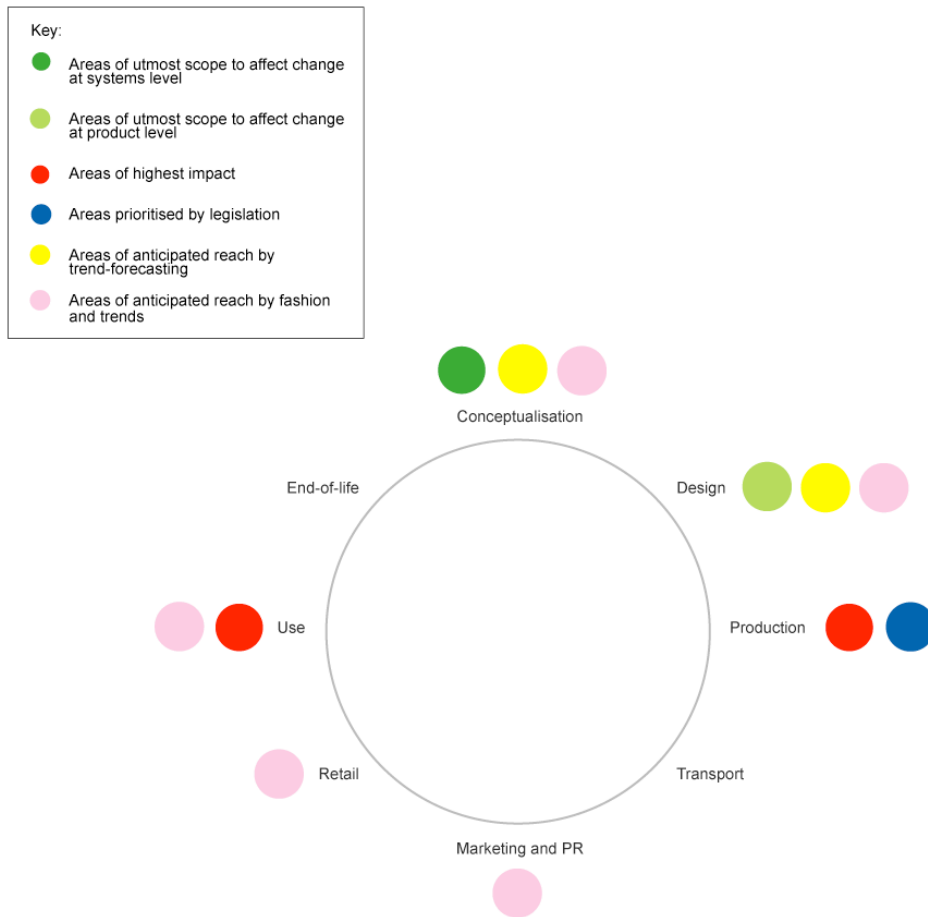


Figure 2.5 Fashion lifecycle stages, environmental impact, scope for improvement, and drivers

CHAPTER 3. FRAMEWORKS FOR FASHION - UNSUSTAINABILITY

3. FRAMEWORKS FOR FASHION: UNSUSTAINABILITY

The previous chapter explored a real and potential context of sustainability for the fashion industry, and introduced drivers and tools for environmental improvement by design. This chapter sketches out some of the reasons behind unsustainability, from the perspectives of natural science, sociology and economics. The identification and understanding of such fundamental, underlying influences for unsustainability is considered important for the eventual support of drivers for positive change.

3.1 An ecological perspective on unsustainability

3.1.1 Natural science

The agreed key areas of environmental stress are:

- Climate change;
- Loss of biodiversity;
- Resource depletion;
- Atmospheric and water pollution; and
- Desertification.

(UNEP, 2007; Natural Step 2007)

The fashion industry impacts, directly or indirectly on all of these areas: for example transportation contributes to climate change, the manufacturing of man-made fibres to resource depletion, intensive use of chemicals to atmospheric and water pollution.

“Our footprint now exceeds the world’s ability to regenerate by about 25 per cent.”
(Figures from 2003, WWF, 2006: 3)

Thorpe presents a transparent description on the causes of unsustainability from the natural perspective. The larger ecosystem or ecosphere comprises four layers: the atmosphere (air), the biosphere (living organisms), the lithosphere (rock and mineral), and the hydrosphere (water). Unsustainability is caused by exaggerated use, and dispersal of materials from one layer to another, and in particular of (non renewable) substances from the lithosphere to air, water, flora and fauna. (Thorpe, 2007: 26-27) According to the Living Planet Report (2006) 48% of the global footprint is made up by climate-changing emissions. (WWF, 2006: 3) Although natural systems are intrinsically resilient, in modern times this dispersal takes place at a speed and scale¹ that the ecosphere cannot support, and while previous societies created most of their artefacts from renewable resources (the biosphere), since the middle of the last century, increasingly objects are constructed from oil and metal (the lithosphere). (Thorpe, 2007: 29 after Gunderson and Holling, 2002)

¹ An estimated 2.6 planet Earths would be required to support a global European lifestyle. (Wackernagel, 2007: 3)

3.1.2 Human-nature engagement

“You ask me to plough the ground! Shall I take a knife and tear my mother’s breast? Then when I die she will not take me to her bosom to rest. You ask me to dig for stone! Shall I dig under her skin for bones? Then when I die I cannot enter her body to be born again. You ask me to cut grass and make hay and sell it, and be rich like the white men! But how dare I cut off my mother’s hair?” (Smohalla, Columbia Basin Tribes, North America, mid 1800s, as cited in Merchant, 1982: 28)

Merchant argues that humans’ perception and construction of nature over the course of history has been central in creating the present ecological crisis. Her work situates human-nature relationships, with economy, politics, religion and science, as a fundamental force in the history of civilization, such as in the rise and fall of populations. Merchant’s reading of the history of ecology describes how humans’ relation to the natural system, initially determined by a responsive symbiosis, and the understanding of nature as alive, gave way to the perception of nature as a dead resource. In particular the Scientific Revolution, and the Baconian project of dominion over nature, spurred this shift from a spiritual engagement with the natural world to a detached and quantitative construction of nature. (Merchant, 1982)

”Central to the organic theory was the identification of nature, especially the earth with a nurturing mother: a kindly beneficent female who provided for the needs of mankind in an ordered, planned universe. But another opposing imagery of nature as a female was also prevalent: wild and uncontrollable nature that could render violence, storms, drought, and general chaos. Both were identified with the female sex and were projections of human perceptions onto the external world. The metaphor of the earth as a nurturing mother was gradually to vanish as the Scientific Revolution proceeded to mechanize and rationalize the worldview. The second image, nature as disorder, called forth an important modern idea, that of power over nature.” (Merchant, 1982: 2)

Simultaneously, important control mechanisms² intrinsic to the perception of nature as alive and connected to human beings were lost, and the new emerging image instead sanctioned an imbalanced and alienated relationship to nature. The natural world emerged a source of recreation, and limitless exploitation of raw material for an accelerating number of commodities. (Merchant, 1982)

“By art and the force of man... [nature can be] forced out of her natural state and squeezed and molded... [and] human knowledge and human power meet as one.” (Bacon as cited in Merchant, 1982: 171)

“For like a man’s disposition is never well known or proved till he be crossed, nor Proteus ever changed shapes till he was *straitened* and *held fast*, so nature exhibits herself more clearly under the *trials* and *vexations* of art [mechanical devices] than when left to herself.” (Bacon as cited in Merchant, 1982: 169)

² An example of the strength of such images is how in the Western Ancient society, and up until the 16th century, mining was compared to the rape of a woman, and tools therefore had to be sanctified. (Merchant, 1982: 34, 41)

3.1.3 Nature and time

Brand offers a macro-perspective on sustainability, through introducing a system of six layers of civilization, from the very fast to the very slow. While the role of the fastest layers is to innovate, the slower provide a supporting and stabilising structure. Under balanced conditions this system “combines learning with continuity”. (Brand, 1999: 37)

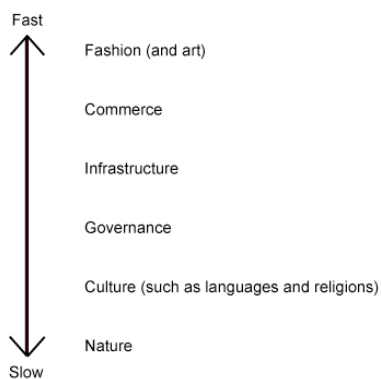


Figure 3.1 The order of civilization (Brand, 1999: 36-37)

In Brand’s view, sustainability depends upon the layers being mutually respectful of each other’s pace and rhythms. Unsustainability is the result of an imbalance in the system, caused by the top layers, particularly after industrialisation, having come to dominate the other layers. (Brand, 1999) Technology, in particular, has increased human beings’ radius of action in time and space. We can move and reach faster and further than the intended stabilising layers can support.³

“Whereas the focus of traditional cultures included the long term aspects of a “tribe” or a larger community, our western civilization has shortened the focus right down to the individual. Me, Right Now! As we disconnect our time from nature-time, we have also, in the short term, disconnected ourselves from long term sustainability.” (Thorpe, 2003: 4)

Brand uses the motto above - “Me, Right Now!” - to characterise our current attitude and priorities and suggests that adopting an alternative “All of us, for all our time” would nurture a healthier balance in the system of layers. In order to manifest and bring to life this motto and to stretch our perception of priorities in the present, he proposes a *clock of the long now*⁴. (Brand, 1999)

³ According to Ornstein and Erlich, the understanding of slow trends were actively suppressed through the process of human evolution, giving way for day-to-day, actable short-term needs, such as finding food. (Ornstein and Ehrlich, 1989)

⁴ In this project Brand has some notable colleagues, including Brian Eno. More information about this project and the Long Now Foundation in general can be found on <http://www.longnow.org/>

3.2 A user perspective on unsustainability

3.2.1 Mechanisms behind consumption

In his seminal text *The Theory of the Leisure Class*, Veblen drew attention to a 'conspicuous consumption'. (Veblen, 1899) In Chapter 2 the symbolic dimension of fashion was highlighted, and the failure of environmental strategies (at large) to address these ephemeral aspects. Barthes defined fashion as the discrepancy between two rhythms, one guided by the degradation of the material, and the other guided by the perishability of symbolic capital. (Barthes, 1983) Indeed, symbolic negotiations is one key aspect that distinguishes human beings from other species. (Westley, Carpenter *et al.*, 2002: 103-119)

Symbolic	Social comparison	How we through our artefacts relate to other human beings.
	Creation of self-identity	A cynic may say that we create a type of 'I-brands' of combinations of lifestyles and artefacts and through them communicate belonging and separation from the group consisting of other such I-brands.
	Mental stimulus/novelty	How the accumulation of new artefacts affords a sense of stimulus, and the feeling that something is happening.
	The Diderot effect/matching	The story goes that the French 18th century philosopher was once presented a beautiful velvet robe in comparison to which his other belongings appeared inferior, wherefore he started replacing them.
	Specialisation	The development towards increasingly specialised goods, an illuminating example of which is the emergence of 'lifestyle' sneakers, where connotations to for example skate culture increases the desirability of the shoes.
Material	Socio-technical systems	The infrastructure that enables and supports other consumption, for example a washing machine is useless without energy and water on tap.

Figure 3.2 Mechanisms behind consumption (Shove and Warde, 2002: 230-251)

Shove and Warde (2002) describe six central mechanisms that support consumption. The first five forces clearly illustrate the strong symbolic and communicative motivations behind consumption - as opposed to the meeting of practical or physiological needs. Although a less bulimic, or promiscuous relationship to the artefacts might be desirable, it ought to be of vital importance that the actual conditions for purchase and use are factored into sustainability strategies. As a constantly changing, and growing collection the fashion artefacts possess meaning, and might even constitute some kind of stability in our lives. However, our relationship with the discrete artefacts is often transient, and with such a limited investment from the owner, that we never learn of their history, their future destination and never understand their complex material conditions.

3.2.2 Fashion consumption

Figure 3.3 below seeks to offer a diversified picture of consumer patterns in the context of fashion.⁵ It illustrates three categories of users and the related impact on the environment of their respective approaches to clothes and fashion. The figure suggests that the general assumption that a high interest in fashion necessarily corresponds with a high environmental

⁵ This argument, and the graph, was developed in the Lifetimes project and grounded in data gathered through user diaries, wardrobe inventories, and interviews with users. (Fletcher and Tham, 2004)

impact may not be true. Instead, the category of users between those uninterested in fashion and those with a very high interest in fashion is responsible for the consumption of clothes with the highest environmental impact. The logic behind this is that an individual with a very high interest in fashion is confident and creative with fashion codes and can therefore with small resources (through car boot sales and adaptation or new styling of old garments) acquire 'new' fashion. On the other hand, an individual that seeks to follow fashion, but lacks the confidence or creativity to experiment with existing clothes, relies on frequent new purchases to be 'right' – a user group targeted by fashion operators of low price level and high fashion content. Of special interest in terms of this study, is that this argument suggests that fashion can be reconcilable with environmentally sound practices, it also further emphasises the need to investigate the fashion industry's mass-market segment at systems level. (Fletcher and Tham, 2004)

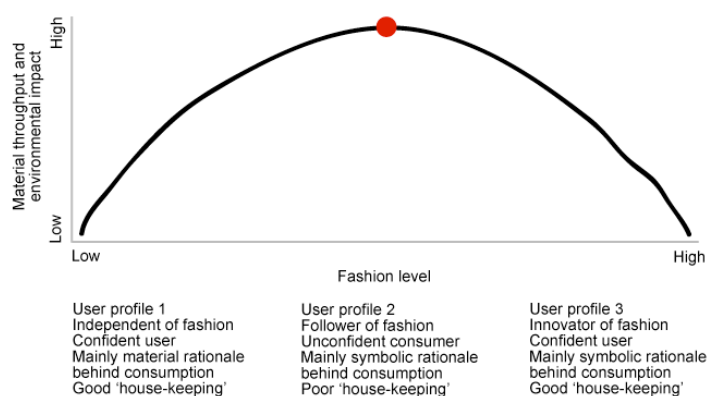


Figure 3.3 Users' interest in fashion and associated environmental impact (Fletcher and Tham, 2004)

3.2.3 A philosophy of object-user relations

While the user perspectives above point in direct terms to environmental unsustainability by introducing some of the motivations behind high and fast consumption, the below presents a wider explanation behind unsustainability as pertains human-object relations. A rich body of work exists that puts human-object relationships in a philosophical context. A strand of such work, highly relevant to this thesis, is the observation and theorisation of relative object presence, and artefacts' role in the bringing together or dispersing a community, offering a critique on the use of modern technologies.

Borgmann and Giddens both draw attention to a tendency for objects that demand less user engagement and skill; technologies are encased to the point of hiding flows, and design focuses on the styling of the object.⁶ (Borgmann, 1995: 15; Giddens, 1991: 22) Heidegger's treatment of technology emphasised the need for a 'free' relationship to technology, in order

⁶ Borgmann contrasts the hearth, which supplies heating and draws people together, with central heating, which provides the former function, but allow the inhabitants in a house to stay in their rooms. A log fire demands a level of skill to operate, whereas automated heating is largely invisible to its passive users. (Borgmann, 1984)

to avoid the risk of us though it veiling central aspects of being, and therefore overpowering the natural world. (Heidegger, 1975) In his later writing, however, Heidegger embraced the fluidity of modern information technologies. (Heidegger, 1977) Chapter 5 (5.3.7) introduces the development of potentially user empowering open-source systems. Both Borgmann and Heidegger described focal – community supporting - activities and artefacts, some of which (for example a meal or a ballgame) that could take on ‘divine’ qualities, of singular presence, and in-tuneness; afforded by the specific tools. (Borgmann, 1984; Heidegger, 1977)

“I believe that a desirable future depends on our deliberately choosing a life of action over a life of consumption, on our engendering a lifestyle which will enable us to be spontaneous, independent, yet related to each other, rather than maintaining a lifestyle which only allows to make and unmake, produce and consume - a style of life which is merely a way station on the road to the depletion and pollution of the environment. The future depends more upon our choice of institutions which support a life of action than on our developing new ideologies and technologies.” (Illich, 1973a: 57)

The argument for an active as opposed to passive engagement with the material world, and a sharp critique of industrial society, were central tenets of Illich’s work. (See e.g. 1973a, 1973b) With the term *conviviality*, he described “the opposite of industrial activity... the autonomous and creative intercourse among people, and the intercourse of persons with their environment.” According to Illich a sustainable society can emerge from “personal energy under personal control” and not from reliance on institutionalised technologies. (Illich, 1973b: 11-12) He proposed a series of “tools for conviviality” aimed at rallying collective and personal motivation, and an antidote to alienation. (Illich, 1973b)

“We say “people are strange.” This is one of our most constant and rudimentary ontological attestations. In fact it says a great deal. “People” indicates everyone else, designated as the indeterminate ensemble of populations, lineages, or races [*gentes*] from which the speaker removes himself.” (Nancy, 2000: 6)

A loss of authenticity in experiences, and a lost idyllic society in general are frequently alluded to in the context of unsustainability. (See e.g. Walker, 1996 who offers a critical perspective on the construction of sustainability as religion.) Nancy, another critic of consumerism, argues that the ‘lost’ community nostalgically referred to is a myth rather than a historical reality, and therefore useless in contemporary community planning, (such as the one arguably called for by the sustainability imperative). The perpetuation of this myth leads to protectionism, insularity, and alienation. (Nancy, 1991: 10) Nancy also offers a nuanced critique of the society of the spectacle – which he claims is inevitable; there is no different, underlying authenticity behind our symbols. In his view ‘appearance’, or symbols are inseparable from being. He proposes a different ontology of ‘being-with’ and a non-subjective freedom. (Nancy, 2000)

The interdependence of human beings and their tools is commonly accepted; the tools define us to the same extent to which we define them and it is thus impossible to separate

design and products from the rest of the world. (See e.g. Papanek, 1985: 293-294; McLuhan, 2001: 41) Latour argues that all relations are socio-technical, all interactions a complex, intertwined web of humans, objects and signs. He also distinguishes between objects of open and closed scripts, the latter affording a more active and fluid user role. (Latour, 1991, 1992) (See Chapter 5 open source, 5.3.7 and metadesign, 5.3.9) Such scenarios are addressed directly in more recent design writing, such as the work of Chapman on 'emotionally durable design,' and Tonkinwise's reading of a decoupling of use from ownership. (Chapman, 2005; Tonkinwise, 2003)

"We do appear to have an addiction to this imperialism of techne's way of finishing things off. It is not coming to us naturally anymore to abide with what we make, sustaining its changing ways of being. Rather than respond to the changes-in-things-over-time, we react, with increasing violence. We replace or displace the offending item." (Tonkinwise, 2003: 9)

Several authors also argue that it is not materialism itself that causes unsustainability, but instead the constructed dichotomy of materialism and spirituality, and materia and value. (Schor, 2004; Twitchell, 2007)

"If we treated the material as sacred... we might become more spiritual about the way we consume and that might help us solve some of our problems." (Schor as quoted in Beavan, 2008)

"Americans are criticized for being too materialistic... Yet, ironically, we are not materialistic *enough*. If we knew how to value the world of stuff, we would not need stories to serve as the markers of value. Things would just mean. Instead we have to install meaning, tell a story..." (Twitchell, 2007: 73)

Together the above offers a discourse where the commodity, and in particular technology's central role in human life and relationships are problematised. A possible, albeit simplistic conclusion can be drawn out, which highlights the importance of an aware engagement in our tools, and a healthy resistance to professionalisation of, and thereby disassociation from them.

3.3 A Producer perspective on unsustainability

3.3.1 Speed and scale

In Chapter 2, two features of the fashion industry were highlighted in the need for environmental improvement at systemic level:

- Speed – the fast throughput of goods; and
- Scale – the size, and spread of the operations.

The former can be exemplified by increasingly shorter lead times⁷ (from sketch to garment in shop), and how purchases of women's and men's wear increased by 21% and 14%

⁷ Spanish clothing label Zara (Inditex) have managed to cut lead times down to three weeks through vertically integrated production (CNN, 2001; Calzado, 2002)

respectively between 2001 and 2005 in the UK. As prices simultaneously went down by 14%, the result was a volume increase of 37%. (Allwood, Laursen, *et al.*, 2006: 11-12) Yet, at £42.45 billion, clothing only represents 6% of Britons' spending. This is partly due to the prices falling – a development made possible by the vast volumes and cheap labour in the Far East. 90% of clothing sold in the UK is imported. (Key Note, 2008)

The scale of the fashion industry can be exemplified by how over 25.5 million people are employed producing textiles and clothing⁸, excluding retail and other functions. The figures show a clear dominance for Asia, with an estimated 19 million of the workers based in China (7.5 million of which are clothing labourers). (ILO, 2006) In the last decade clothing production has increasingly concentrated to China, Pakistan, India, Bangladesh, Mexico, Romania and Cambodia. (Allwood, Laursen, *et al.*, 2006: 10) Simultaneously, because of the demands of rapid turnover of styles, the fashion industry is becoming increasingly concentrated to a few large retailers dominating the market, representing 85% of all sales in the USA and 70% of the sales in Western Europe. (Allwood, Laursen, *et al.*, 2006: 11) The arrival of supermarkets (such as Asda and Tesco) on the fashion scene additionally presses the prices. (Key Note, 2008)

In *Tigersprung: Fashion in Modernity*, Lehmann discusses the interdependence of "mode and modernité." (Lehmann, 2000) The acceleration process described above is not primarily an influence of fashion, but rather is fashion one symptom of inherent mechanisms in modernity, and in particular of industrialism.

The most recent part of our history has involved quicker and more dramatic changes than ever before. Modernism brought the abandonment of small-scale situated production and use for standardised solutions of mass production and mass communication in the name of efficiency and common human good. It promoted instantaneity, temporariness, disposability and a shift from use to consumption, and reinforced the idea that all human needs can be met by material objects. (See e.g. Schumacher, 1973; Naess, 1989) It can be argued that it further separated and juxtaposed society and nature, the individual and the group. (Welford, 1995: 23) and in Naess's terms it promoted "quantity rather than quality of life". (Naess: 1989: 33) The cross-referencing of industrialisation of different sectors providing consumer goods offer an illuminating picture of their interdependence: one industry alone – such as fashion – did not create the astounding speed and scale, instead they enabled each other.⁹

⁸ 13.5 million of whom work to produce clothing, excluding retail and other associated functions. (ILO, 2006)

⁹ For example the spread of cars facilitated the development of supermarkets on the city outskirts, which in turn fuelled a car industry, because access to cheap food required transport. (See e.g. Schlosser, 2001)

3.3.2 Designed obsolescence

“The idea that one disposes of products or artefacts before one actually *needs* to in order to have a more up-to-date or desirable version is at least as old as consumerism or capitalist society, but it is only in the twentieth century that products themselves have been designed and manufactured with some form of conscious style obsolescence.” (Whiteley, 1987: 3)

In the beginning of the 20th century, and in particularly in post World War II America, new tools – such as branding, and product specialisation or individuation - were developed to spur a higher consumption rate by inventing artificial needs. (See e.g. Slade, 2006) Lupton and Miller describe how already in the 1920 and 1930 built-in disposability became a conscious strategy applied to previously durable products in order to stimulate consumer demand. (See e.g. Lupton and Miller, 1992)¹⁰ Planned obsolescence therefore¹¹ emerged a concrete design tool, used to increase the metabolism of the market.¹²

“*Planned obsolescence* is the catch-all phrase used to describe the assortment of techniques used to artificially limit the durability of a manufactured good in order to stimulate repetitive consumption.” (Slade, 2006: 5)

“The policy of “planned obsolescence” pictured the economy itself as a “body,” whose health depends on a continual cycle of production and waste, ingestion and excretion. Advertising became a crucial lubricant for keeping this cycle regular, emerging as a powerful partner of mass distribution in the early twentieth century. Although it raised the cost of conducting business, advertising was defended as a laxative for hastening the flow of goods through the economy.” (Lupton and Miller, 1992: 3)

Generally a distinction is made between two categories of planned obsolescence, in chronologically emerging order:

- Technological obsolescence – the specification of technology or materials with a built in past use date, implementation of new technology before the old is defunct, and difficult or costly repair; and
- Psychological, progressive or dynamic obsolescence – offering a new style on existing technology or functionality. (Slade, 2006: 4-5)

The latter type of *perceived* obsolescence is particularly relevant in a context of fashion, the very essence of which is the relation of style to a particular context and time.

¹⁰ Examples of planned obsolescence at present include the difficulty or impossibility of using an old printer with a new computer.

¹¹ See also Fry’s definition: ‘de-futuring.’ (Fry, 1999)

¹² The term planned obsolescence is considered to origin from a pamphlet *Ending the Depression Through Planned Obsolescence* by London (1932). Packard’s *The Waste Makers* offered an early sharp critique of how in particular the psychological dimension of built-in obsolescence contributes to unsound resource use. (Packard, 1960)

3.3.3 A surrogate society

It can also be argued that design contributes to over-consumption, and unsustainability, by seeding dissatisfaction and unease. Thorpe makes a distinction between internal and external ways of meeting needs, and argues that during the past century we have increasingly focused on the latter – a less effective and sound – approach. Alongside (and directly related to) materialism, one key way in which design is implicated in the unsound quest to meet needs is through “visuality”.¹³ Visuality refers to the pervasive visual culture, through which we to a large extent – and passively - access or process ‘reality.’ Because much of this imagery (such as advertising) is designed to create an illusion, an aspirational mode of being, having and, not least, looking, the viewer experiences a discrepancy between the portrayed ideals (a sample of lifestyles, age, race and body type not representative of a ‘normal’ population) and what is actually achievable. This causes dissatisfaction with the personal circumstances, “we adopt what is shown as a “reverse” validation.” (Thorpe, 2007: 124-127)

3.4 An economic perspective on unsustainability

3.4.1 A symbolic economy

The notion of replacement of goods for symbolic reasons as opposed to material malfunction, ties in with a larger theme, which can be described as the process towards an increasingly symbolic economy. In agricultural society goods were traded against goods, what is termed a barter economy. With the advent of the monetary system (first current in Renaissance Italy, but with much earlier origins), goods were traded against coins, which at first represented a real value, their weight in gold or silver, but gradually became ‘mere’ symbols. (Merchant, 1982: 51) With industrialisation and mass-production entrepreneurs started to distinguish products through branding, and after the Depression marketing tools were refined as companies experienced a need to spur consumption. (See e.g. Pavitt, 2000) Increasingly the brand stories, portraying an array of desirable lifestyles, have taken precedence over the products themselves. (See e.g. Klein, 2000) In present day, it can therefore be argued that symbols (e.g. tools for social belonging or the manifestation of individuality) via the medium of clothes or other products, are traded against other symbols, money. Simultaneously, cash is being replaced by invisible digital money. What remains of the transactions are detached symbols. (See e.g. Haug, 1987)

An argument can be made that such trading of symbols, removed from the material origins and the making, is a factor in both consumers’ and producers’ lack of empathy for sustainability issues. (See e.g. Goodwin, Ackerman *et al.*, 1997) The philosophical ground for this alienation includes Marx’s ideas of separation between man and his tools, in Neo-

¹³ In Max-Neef’s taxonomy of fundamental human needs, the needs of *subsistence, protection, affection, understanding, participation, recreation, creation, identity and freedom* are defined according to the existential modes of *being, having, doing and interacting*. (Max-Neef, 1991)

Marxism focusing on the spiritual and social implications and in orthodox Marxism focusing on economic alienation. (Pepper, 1996; Avineri, 1968¹⁴)

3.4.2 Growth

"Classical economics concerned itself with a substantial part of human needs. The perspective was both philosophical and practical. Modern economics tends to narrow down the perspective and to substitute demand on the market for human needs." (Naess, 1989: 33)

While etymologically 'ecology' and 'economy' are closely related with 'eco' meaning 'house-keeping', through history the two concepts have taken on different meanings and associated practices. (Williams, 1976: 10-11)

"Following the dictionary distinction... TO GROW means to increase in size by the assimilation or accretion of materials. TO DEVELOP means to expand or realize the potentials of; to bring to a fuller, greater, or better state. When something grows it gets quantitatively bigger; when it develops it gets qualitatively better, or at least different. Quantitative growth and qualitative improvement follow different laws. Our planet develops over time without growing. Our economy, a subsystem of the finite and non-growing earth, must eventually adapt to a similar pattern of development." (Meadows, Meadows *et al.*, 1992: xix)

The distinction between quantity and quality, and between growth and development as criteria for progress is a central issue in this thesis. From a strict market economics point of view, the current economic system can be described as effective. However, it is frequently argued that the economic system is not sound in sustainability terms as it is not a closed system. It fails to pay for values and resources not prioritised by the market. The current economic model therefore does not incorporate the control mechanism needed for sustainable futures. (See e.g. Schumacher, 1973; Lutz and Lux, 1988; Hawken, Lovins *et al.* 1999; Gates, 2000; Thorpe, 2007)

"What might be called "industrial capitalism" does not fully conform to its own accounting principles. It liquidates its capital and calls it income. It neglects to assign any value to the largest stocks of capital it employs - the natural resources and living systems as well as the social and cultural systems that are the basis of human capital." (Hawken, Lovins and Lovins, 1999: 5)

In recent years, attempts have been made to integrate ecological values with market economy, through for example carbon offsets, and eco-rent. (See e.g. Stern, 2006; Robertson, 1999: 137–139.¹⁵) Indices alternative to the GDP (Gross Domestic Product) that cross-reference social well-being, environmental soundness and financial performance of for example a nation, are also emerging as exemplified by the Happy Planet Index, and Dow

¹⁴ See also Merchant's description of human beings gradually, through history growing distant from nature. (Merchant, 1982)

¹⁵ See also the Polluter Pays Principle (e.g. OECD, 2001) and WEEE (The Waste Electrical and Electronic Equipment Directive) a take back policy that came into force in the UK in 2007. (Environment Agency, 2008)

Jones Sustainability Indexes.¹⁶ (NEF, 2006; SAM, 2006) The economic argument for sustainability on a global scale (or rather the supreme cost associated with not responding promptly to the environmental challenge) has been made, most notably by Stern. (Stern, 2006) Authors such as Willmott have addressed the synergy effects at corporate level of placing society at the very “heart of a company” claiming that the company motivated by sustainability has better staff retention, higher customer loyalty, and better relationships with the media. (Willmott, 2001)

3.4.3 Prosperity and well-being

While the dominant assumption has been that high financial standard of living equals quality of life, and thus the way of measuring quality of life is rooted in economic theory and described in economic terms - Gross Domestic Product, there are strong reasons to question this assumption. (Eckersley, 2002: 40) A body of research and literature has also decoupled well-being from economic growth. Max-Neef's work on the relationship between economic growth and life quality shows that there is a threshold up to which economic growth in a country correlates with an increased experience of life quality, after which it decreases. (Max-Neef, 1995)¹⁷ Research also shows that how happiness relates to wealth is almost exclusively perceived in comparison to a peer group and/or social setting, in most cases drawing the borders of the nation. (Easterlin in Goodwin, Ackerman *et al.*, 1997: 27; Welford, 1995: 195) However, it is assumed that we are increasingly comparing ourselves with people beyond our immediate context, probably because of mass media and the ‘export’ of celebrities and big brands all over the world. If well-being does not increase with growth, and if wealth is experiential rather than actual (obviously only beyond poverty, and where fundamental needs are met), the traditional way of defining progress can hardly be defended. This becomes an even stronger argument as economic growth, after a threshold actually decreases well-being, and consumption prevents humans from “realizing our valuable capabilities”. (Goodwin, Ackerman *et al.*, 1997: 16; see also Layard, 2005)

3.4.4 The rich poor divide

”Design for sustainability needs to be based on a global perspective which values simplicity, frugality, durability, reparability, distributive justice, smallness of scale, avoidance of luxurious and affluent styles, and easy maintenance. The rich must live more simply so that the poor may simply live.” (Trainer, 2002: 55)

While the above has explored the failure, until recently, to put a realistic price on resources, this section addresses the role of a biased concentration of wealth, to Western nations and

¹⁶ The Happy Planet Index has been developed by The New Economics Foundation and Friends of the Earth. (NEF, 2006)

¹⁷ For example, Americans were never happier than in the 1950s, a time characterised by the relief after World War II, a booming economy, affordable consumer goods and family values still cherished. (Goodwin Ackerman *et al.*, 1997: 38)

to men, in unsustainability.¹⁸ Economy, ecology and well-being are interdependent on global, corporate and individual levels. (See e.g. Thorpe, 2007) Where rich nations harm the environment through over-consumption, poor nations do so by necessity, lacking the resources to, for example, implement better water treatment. (See e.g. Mitchell, 2005) In the context of fashion, poor labourers accumulate significant debts, trying to keep up with the accelerating need to purchase chemicals for cotton cultivation. (Oxfam, 2008) In affluent countries, some environmentally superior alternatives, such as organic cotton clothing, are more expensive than their 'conventional' counterparts. The contrast of over-consumption and resource deficiency is made especially stark in a situation where 1.2 billion of the global population suffers from starvation, and an estimated additional 2-3.5 billion from severe malnourishment, while 1.2 billion suffer from obesity. (Herbert, 2007) Recent figures show that Britons throw away half of their food purchases each year (which corresponds to half the import needs of Africa). (Measure, 2008)

In previous decades, the exponential growth of the global population has been a frequent explanation of unsustainability. However in recent years the discussion is more focused on appropriate and efficient resource use. (See e.g. Shiva, 2000) While the rich poor divide has long been established as a priority for sustainable development¹⁹, increasingly an important discourse is taking place on the colonial aspects of 'exporting' Western models of development to the less (in financial terms) affluent world. (See e.g. the work of, Sardar, 1999; Shiva, 2005, and the discussion of imperialistic Futures studies, Chapter 5, 5.6.7) A series of hands-on bottom up approaches to the fight against poverty have also emerged, as exemplified by the Grameen Bank's micro credits, which reverse traditional banking principles.²⁰ (Yunus, 2008)

3.5 Value systems and unsustainability

3.5.1 An ethical imperative

As has been described in this chapter, in earlier civilisations the relationship between humans and nature was guided by verbal or unspoken ethical codes. In parts of the world religion or spiritual beliefs still exert such an influence. (Merchant, 1982; Shiva, 2005; Mitchell, 2005)

The sustainability imperative, the best-known definition of which is "development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (WCED, 1987) can be compared to the Golden Rule or the ethic of reciprocity (a version of which exists in most religions), which stresses interdependence with

¹⁸ 95% of wealth is concentrated to 1% of the global population, and women control 1% of global wealth. (Thorpe, 2007: 78-79)

¹⁹ See e.g. WCED, 1987; Meadows *et al.*, 1992.

²⁰ By lending to the poor, by lending to women, by lending to the illiterate, by lending small amounts. (Yunus, 2008)

and empathy for others (which can be interpreted as encompassing humans 'here', 'there' and in the future, and other species).²¹ The secularisation of society, and the replacement of God with consumerism, frequently appear in the discourse on unsustainability, and the relativity of right and wrong is a common critique of post-modernity. (See e.g. Walker, 2006; Giddens, 1990) When, as described above, a financial incentive in recent years has rallied significant forces behind the sustainability imperative, and thus spurred significant changes, it can be argued that an ethical dimension is unnecessary, or at least not crucial. Yet, such a transference to financial terms, and reliance on top-down driving forces, risks disassociating the individual from potentially important deeper motivations and instincts, such as trusting an experience of being overwhelmed or even feeling sick by the offer of a supermarket or a high street²² and acting upon what *feels* right and good. It appears therefore that the space for the individual's consciousness and conscience ought to be valued higher in particular *for* that which is good, as opposed to against that which is unsound. (See e.g. the work of Macy, 1991)

3.5.2 Ethics of 'don'ts' or 'dos'

Macy outlines four ways in which human beings (on spiritual paths, but generalisable to other pursuits) "see and relate to our world, and discover what ways can best sustain us to do what must be done." (Macy, 1991: 5) These worldviews (or German *weltbild*) are *World as battlefield*, *World as trap*, *World as lover*, and *World as self*. In the first of these worldviews 'good' and 'evil' are distinctly and easily separable entities, and doing 'good' constitutes a war against a scorned enemy. Thompson calls "the certainty and self-righteousness that goes with it", the "apartheid of good". (Thompson as cited in Macy 1991: 5) The *World as battlefield* view also supports a "moral gymnasium" with lessons to get through and tests to pass. *World as trap* stands for a hierarchical distinction between spirit and matter, where the former is superior to the latter. Striving for perfection entails escaping from "this messy world" to cultivate 'higher' forms of being: "a supra-phenomenal level removed from confusion and suffering." (Macy 1991: 7) The arguments embedded in these two levels can be related to the sustainability imperative, and the drivers for environmental improvement in the fashion industry, which, it can be argued is currently guided by 'don'ts' rather than 'dos.'

²¹ The Golden Rule has been criticised (for example by Immanuel Kant) for lacking moral norms, and not promoting moral autonomy, yet it speaks clearly of emphatic relations to fellow human beings. Kant's work towards a universal truth included notions of the imperative to do good. The hypothetical imperative conditionally demands performance of an action for the sake of some other end or purpose. We are therefore morally obliged to conduct an action only if we know it is the right action and that it will have a certain effect that is a legitimate goal. The categorical imperative, on the other hand, unconditionally demands performance of an action for its own sake. Kant offered the "formula of the end in itself" as: "Act in such a way that you treat humanity, whether in your own person or in the person of another, always at the same time as an end and never simply as a means." (As cited in Kemerling, 1997) Thus Kant's categorical imperative is in accordance with the Christian concept of The Golden Rule "by demanding that we derive from our own self-interest a generalized concern for all human beings." (Kemerling, 1997)

²² Accounts from research participants. (Fletcher and Tham, 2004)

- Formal policy is derived from and dependent upon the understanding that 'police' is required in order for humans to do 'what must be done', that formal and enforced constraints are needed to regulate social and economic relations;
- In the light of such a perspective on human motivations, environmental considerations become a set of *constraints*, and necessary but reluctantly made add-ons to for example the design process;
- The separation between body and mind can indicate a contempt for, or at least non-engagement with the physical world and its problems, including those related to the environment.

However, if the scope of understanding ourselves, and thus our needs, is widened to include other species and human beings living far away from us and after us, new opportunities are opened. Such a scenario, or *weltbild* is implied by systems thinking (and an array of spiritual teachings). (For a discussion of systems thinking see Chapter 5, 5.2) As extrapolated from this worldview (in Joanna Macy's terms *World as Lover* and *World as Self*, Macy, 2005: 5) the position of environmental improvement in the fashion industry changes dramatically. Instead of constituting a web of constraints, environmental improvement becomes an urge of equal significance to the urge of creative fulfilment and the drive to achieve good sales.

3.5.3 Value systems for design and sustainability

Pepper describes the two larger themes of modern environmentalism as reformist or technocentric, and radical or eco-centric. Whereas radical environmentalists believe that "fundamental social change is necessary to create a proper, sustainable, environmentally sound society", reformist environmentalists would argue that sustainability is achievable within the current paradigm. (Pepper, 1996: 7) There are several belief systems underpinning these themes. One of these "truths" is the myth of "nature benign", often subscribed to by advocates of free market economics, which proposes that nature tolerates "human interference" and can restore itself, and that this is a question of good "management politics". (Schwartz and Thomas as cited in Pepper, 1996: 3) An opposing view, the myth of "natural ephemeral", portrays nature as vulnerable and potentially harmed by all human activity, is often embraced by radical environmentalists who mean that we must be extremely cautious with development. A third view, "nature perverse/ tolerant" agrees to development if it respects the "laws and limits of nature". Those adhering to this myth believe that scientists are most suitable to tell us about the laws and limits and are called "hierarchists". (Pepper, 1996: 3)

"Each myth functions as a cultural filter, so that adherents are predisposed to learn different things about the environment and to construct different knowledges about it. In this way beliefs about nature and society's relations with it are linked with

particular rationalities, that support the modes of action appropriate for sustaining the myths.” (Harrison and Burgess as cited in Pepper, 1996: 4)²³

The table below presents an overview of some key strands of ‘green thought’ and their respective explanations of unsustainability.

	Problem Definitions	Major Concern	Means of Change	Desired Ends
Greens (general)	Industrial growth	Government policy	Ecological understanding	Sustainable practices
Social ecologists	Hierarchies	Institutional forces	Social organisation	Anarchism
Deep ecologists	Anthropocentrism	Perception of world	Expanded identification	Biocentrism
Eco-socialists	Individualism	Economic forces	Political reform	Communitarian
Eco-Marxists	Class society (capitalism)	Forces of production	Class struggle	Socialist or classless society
Eco-feminists	Abuse of power Androcentrism and Hierarchical dualism	Patriarchy, i.e. power-based order and culture	De-linking power and masculinity Social redesign	Beyond power

Table 3.1 Major green philosophies (Birkeland, 1993, in Birkeland, 2002: 21)

The two overarching belief systems that Pepper presents constitute two different frameworks for design and sustainability. The reformist model remains a ‘design context’ within the current economical framework. In this framework sustainability concerns are brought into current design priorities (to bring a concept, product or service to the market place), resulting in incremental or pragmatic improvements. The more radical model brings design into a framework of sustainability. The goal is to bring a concept, product or service to the market place according to the realms of sustainability. Thus, the intended outcomes go beyond economic profit and include environmental, ethical and cultural concerns. Within this more extensive framework the role and function of design is much broader; for example, the final product is not limited to physical objects.²⁴ (See e.g. Thorpe, 2007)

3.6 Alienation

“For radical thinking in modernity, at the self pole emptiness exposes itself, and at the world pole, estrangement. How an emptiness is supposed to recognize itself in a stranger can not be imagined by our reason no matter how hard we try.” (Sloterdijk, 1983: 538)

Although this thesis does not support a romantic notion of a lost and perfect society, it does hold with the argumentation that the separation between human beings and their tools, human beings and nature (be it an age old, or modern phenomenon), and a ‘surrogate society’ where humans seek to meet needs in superficial and unsatisfactory ways, are problematic in the context of sustainability.

²³ For a discussion on social constructivism and ‘controlling imagery’, see Chapter 5, 5.5.3.

²⁴ The first model mirrors what is popularly called *green design* while the second model would imply what is termed *eco-design* or *sustainable design*. (See Chapter 2, Table 2.4)

From this reading of the reasons behind unsustainability, alienation therefore emerges an overarching theme and is considered a useful metaphor to address unsustainability at a systemic level. In the fashion industry alienation can be described to be staged in how:

- Production is geographically remote from retail and consumption²⁵;
- Outsourcing production results in environmental and social effects also being 'exported';
- A remote production means that we cannot directly witness the environmental and social effects associated with fashion production;
- The geographical remoteness of production therefore arguably results in a mental disassociation.²⁶

Within the industry itself and in the context of environmental improvement, yet other examples of disassociation have emerged, in how intrinsic aspects of the fashion industry are not addressed in environmental strategies, such as the speed, scale and the symbolic dimension of fashion; and as will be discussed in Chapter 4, how even key stakeholders *within* the fashion company, such as designers and environmental officers, have no direct contact and working relationship. Finally, although an important shift toward sustainability is underway in the fashion industry, the associated values of fashion and sustainability respectively, emerge seemingly irreconcilable, and the conventional language and strategies – scientific, quantitative and constraint focused - of environmental improvement remote from the practice of fashion.

The theme of cynicism is closely associated with alienation as it acts as a barrier to engagement.²⁷ Sloterdijk defines cynicism as “enlightened false consciousness”. He considers it the “predominant mindset of the post 1960’s era, both on the personal and institutionalised levels, a sensibility that is well off and miserable at the same time, able to function in the workaday world, yet assailed by doubt and paralysis.” (Sloterdijk, 1983: 2)

Cynicism may thus be described as a mood that permits us to stay outside the inner circle of engagement, that which is emotional and intense, both in happy and unhappy senses, while still participating in the ‘mechanical actions’. Cynicism replaces action and life force with apathy and detachment. It is a surrogate mood. In the novel *Generation X* Coupland

²⁵ Since the 1960s virtually all fashion production has moved from the UK and Sweden, first to other regions in Europe, such as the Baltic countries, and later to the Far East.

²⁶ Designers working at the time of the prime of the Swedish textile industry describe how the lakes adjacent to the big factories took on the colours of the current trends. (Personal communication, Kvarnström, 2002)

²⁷ The very first meaning of cynicism, in ancient Greece, was that of a ‘happy go lucky’, *carpe diem* (seize the day) mood; to live like the dogs. (In ancient Greek *kunikos* was ‘doglike’.) Because nothing lasts forever or stays the same, we might as well enjoy the moment. With time, this notion that everything is constantly in change, turned into the idea that nothing can ever be trusted, everything will perish; scepticism towards everyone and everything. (Sloterdijk, 1983: 2)

presents a visceral account of a generation defined by cynicism, having grown up in the context of Aids, an ecological crisis, and recession. (Coupland, 1991)

“Sometimes I’d just like to mace them. I want to tell them that I envy their upbringings that were so clean, so free of futurelessness. And I want to throttle them for blithely handing over the world to us like so much skid-marked underwear.” (Coupland, 1991: 98)

Especially in the light of the complexity of the sustainability imperative, it is understandable that we stand confused, disempowered and passive. The work of Macy describes yet another level as the sorrow and despair of facing global unhealth. (See e.g. Macy and Brown, 1998)

3.7 Two frameworks for fashion: sustainability and unsustainability

This section concludes the chapters on sustainability and unsustainability, by summarising the two frameworks, and exploring possible routes for fashion to situate itself within sustainability.

3.7.1 Problem formulation and target area

The fashion industry celebrates creativity and innovation and is an important generator of wealth: in socio-cultural terms by providing cultural capital, and empowering fashion moments; and in economical terms by providing employment, profits to shareholders and taxes to the state. Simultaneously, the fashion industry contributes, directly and indirectly, to environmental degradation, and ethically unsound conditions.

There exists a substantial body of knowledge in the field of sustainability and textiles, although fashion specific literature is still limited and the field is young and underdeveloped. A small but growing number of researchers and niche designers are exploring environmental improvement by design in the realm of fashion at a level that approaches the systemic. These approaches have not been implemented in the fashion industry’s mass-market segment, the speed and scale of which is astounding. Those strategies that are implemented (mainly in compliance with legislation) focus on the process stages of the fashion product lifecycle, and therefore do not reach where impact can be highest (user stage) and scope for improvement is the utmost (the conceptualisation and design stage). Current strategies cannot achieve the necessary reduction levels, an estimated 90% or a Factor 10. (Schmidt-Bleek, 1996) These reductions in impact require improvements of such dimensions that it is necessary to address the larger system of the fashion industry; targeting and re-evaluating some deeply rooted characteristics of it, such as the speed and transience, and both consumer and producer attitudes and practices.

This project therefore targets change beyond what legislation currently requires, and what is sometimes referred to as a level or factor of hygiene. It seeks to address the *helpful* point on

a continuum from harmful to helpful design. Where *harmless* refers to knowledge building and incremental improvements, *helpful* indicates the active and creative strive to affect change. This continuum can be compared to the Buddhist idea of "Right Livelihood", which describes levels of participation and activism. (See e.g. Krishnamurti, 1992)

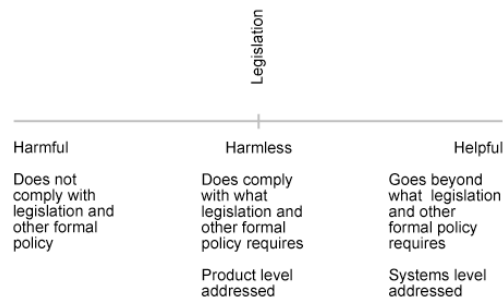


Figure 3.4 Harmful-helpful continuum

The research on socio-environmental impacts associated with fashion focuses almost exclusively on the material level of clothing production and consumption, as do principles and strategies for environmental improvement. (With the exception of e.g. Uitdenbogerd *et al.* 1998 that addresses non-material reasons for laundry; Allwood, Laursen, *et al.*, 2006; and most recently Fletcher, 2008) This is understandable, and such work is important as it is obvious that material throughput does indeed in direct terms cause environmental degradation. However, the reasons behind purchase, use and disposal of fashion products are to a large degree of symbolic, rather than material nature. The design strategies were not primarily developed for the field of fashion (and in particular its mass-market segment).

The problem of unsustainability at present cannot be attributed to a lack of a body of knowledge as pertains environmental effects and preferable alternatives. This knowledge does exist, at least to the point where is possible to start directing attentions to environmental improvement at systems level in the mass-market segment. Instead, the problem lies in the lack of a larger *implementation* of knowledge in the fashion industry. (See also WWF, 2006: 3)

The purpose and scope of this study is therefore not to develop more environmentally sound textiles or production methods, but instead to explore ways of implementing proactive and systemic environmental design practices in the mass-market segment of the fashion industry. In light of this overarching aim, additional conclusions can be made. Until recently (see e.g. Breds, Hjort *et al.*, 2002, Black, 2008, Fletcher, 2008) almost none of the texts found on the subject of the environmental impacts of textiles were written for a fashion designer audience. Therefore, because of its quantitative and scientific nature, in the main the existing literature on environmental problems and strategies for improvement as regards fashion (and in general) is not easily accessible to fashion designers. There is still little

documentation that gives a comprehensive account and hands-on advice to help fashion designers make environmentally appropriate choices – at product and systems levels. Authors such as McRobbie (1999) and Jessel (1998) agree on the importance of considering the particulars of a designer audience when conveying information to it.

3.7.2 Implications of fashion's journey from unsustainability to sustainability

Together Chapter 2 and 3 provide a theoretical map of two conceptual frameworks for fashion, each with a set of discrete characteristics. Figure 3.5 below portrays the two frameworks and their associated values and qualities.²⁸

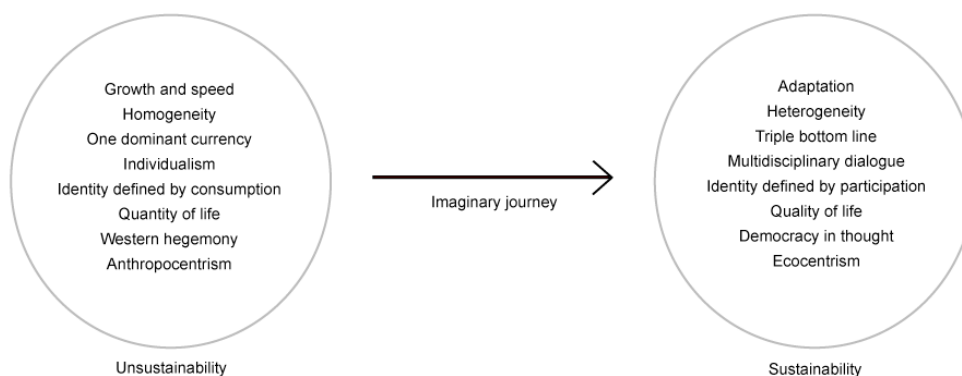


Figure 3.5 Two frameworks for fashion²⁹

These frameworks constitute the start and end points of the imaginary journey - for fashion and trend-forecasting - that this PhD project purports to study.

"The six parts of the function complex are informed by the past: experience and tradition. But Janus like the function complex also faces the future. The ongoing dimensions of what we design, make, and use lie in the consequences. All of our tools, objects, artefacts, transportation devices, or buildings have consequences that reach out into such diverse areas as politics, health, income, and the biosphere." (Papanek, 1985: 23-24)³⁰

A shift in the fashion industry's location from a paradigm of unsustainability to one of sustainability implies significant changes for the fashion company, and in particular for the designer role. Current product level strategies have the benefit of familiarity because employers can keep operating from within a well-known framework, and such strategies do not require much, if any commitment from the designer. In addition, the technological and scientific focus of the solutions enables evaluation in quite immediate terms. Figure 3.6 and 3.7 below illustrate the current organisation of fashion and a sustainable fashion organisation, according to Breds. (Breds, Hjort *et al.*, 2002: 28-29)

²⁸ Similar dichotomies can be found in Pepper, 1996; and Birkeland, 2002.

²⁹ 'Eco-centrism' encompasses human concerns.

³⁰ The function complex is Papanek's model for the equivalent of sustainable design. (Papanek, 1985: 7)

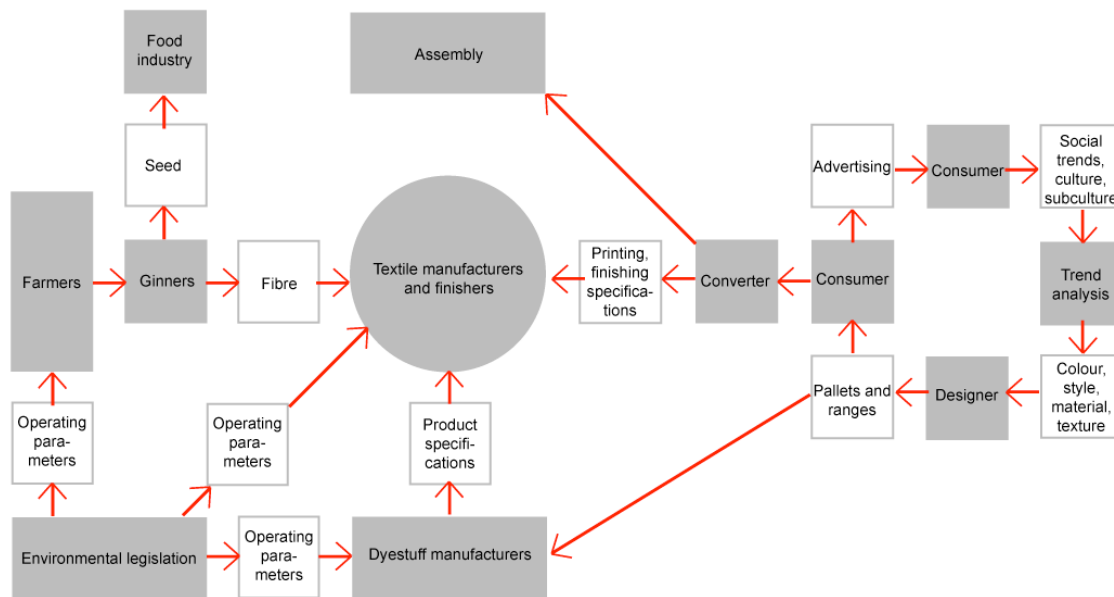


Figure 3.6 The role of the designer/buyer. The old model. (Breds, Hjort *et al.*, 2002: 28)

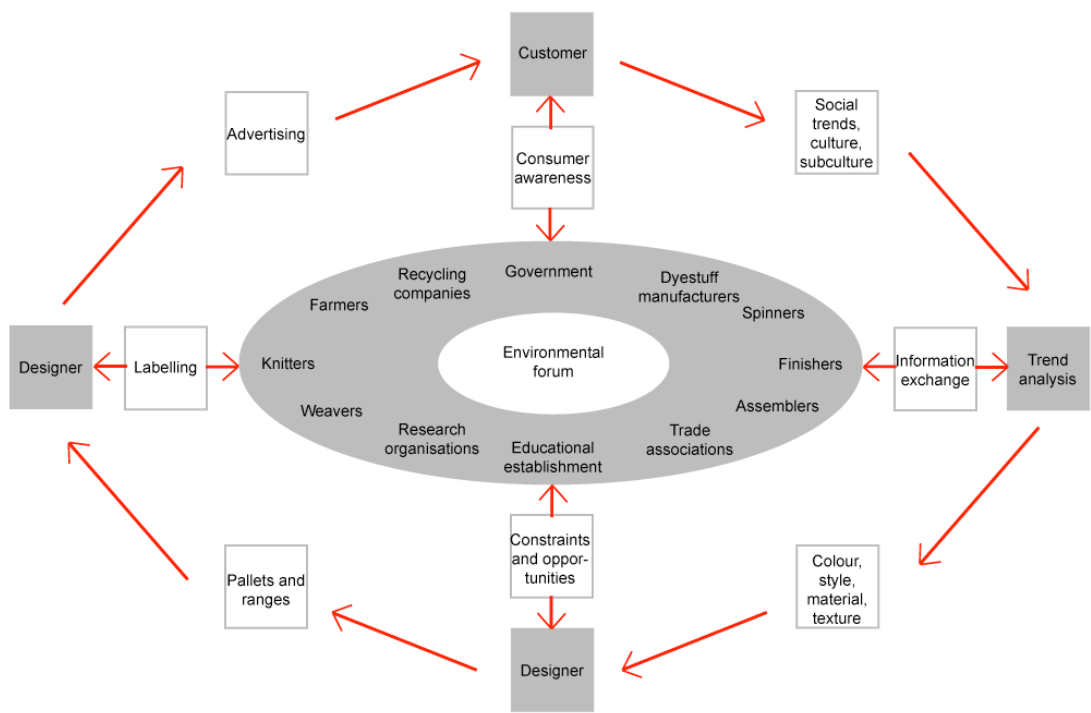


Figure 3.7 The role of the designer/buyer. The new model. (Breds, Hjort *et al.*, 2002: 29)

Achieving a holistic design approach initially requires significant investment as regards time, money and courage, and not least motivation, because the entire organisation must be educated and new communications channels and working methods developed and implemented. Some of the benefits are long-term which make them less tangible. (See e.g. Welford, 1995; Birkeland, 2002) On a larger scale, the fashion designer and organisation must be open to questioning the role and purpose of fashion design, the role and practice of the fashion designer, the mechanisms of business, and the structure of the organisation and

its situation in the world. However, it is anticipated (and see e.g. Breds, 2002; Macy, 1991; Willmott, 2001) that this scenario also leads to a higher level of engagement and that employees experience a higher degree of fulfilment from their work. Figure 3.8 outlines some key characteristics of the two frameworks for socio-environmental improvement in the fashion industry's mass-market segment. It should be noted that the proposed second framework also comprises aspects of the first; for example it is assumed that the designer role will be *both* operational and strategic.

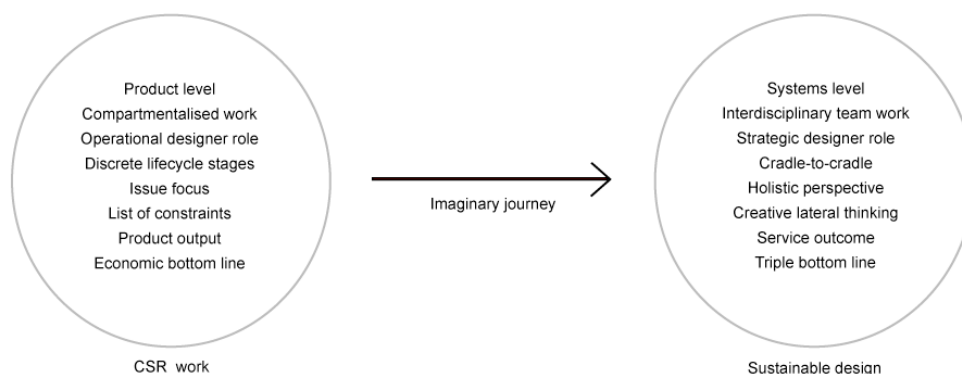


Figure 3.8 Two contexts for environmental and social improvement in fashion

3.7.3 Towards a soft driver for sustainable fashion

The topic review has exposed a gap in existing driving forces for sustainability by matching them to stakeholders and lifecycle stages in the fashion industry and the fashion product lifecycle. It has also exposed distinct areas of opportunity, currently unexploited. For example, since fashion has a strong presence in contemporary culture, and touches people at an emotional everyday level, through conscious or unconscious fashion choices, it may serve an important influence for sustainability. A gap can therefore be described to exist in terms of:

- Reach – failure to directly target lifecycle stages and associated stakeholders of high impact, and utmost scope for improvement;
- Level – failure to address socio-environmental concerns at systemic and holistic levels;
- Range – failure to include symbolic aspects of the fashion offer into environmental strategies;
- Communications – failure to tailor communications appropriately to a fashion audience;
- Scope – failure to take advantage of the inherent creativity of the fashion industry, and its socio-cultural influence.

The review therefore suggests that there is a strong case for alternative, *soft* drivers for more sustainable fashion.

In the reading of unsustainability that the Chapter 3 brought forth, the fashion industry can be understood as a system with absent or severed feedback loops. It is a system where important channels of communication are missing, thus blocking vital information, at both rational and emotional levels, from getting through. On a larger scale this concerns the whole ecological system, upset by a lack of attention to a sound rhythm and flow. This thesis argues that trend-forecasters, whose skills lie in 'linking' an organisation with a larger context and the future, can be helpful in /re/establishing feedback. (Chapter 5 offers an introduction to some characteristics of the ecological system, **5.2.1** and the notion of feedback, **5.2.2**, **5.2.3**)

The next chapter explores the current location of the fashion industry's mass-market segment on this journey, and teases out potential support for and barriers to a shift from unsustainability to sustainability. It further defines the scope for trend-forecasting as a soft driver for change.

CHAPTER 4. MAPPING FASHION,
TREND-FORECASTING AND SUSTAINABILITY –
What is the scope for trend-forecasting as a positive
driver of change in the fashion industry?

4. MAPPING FASHION, TREND-FORECASTING AND SUSTAINABILITY -

What is the scope for trend-forecasting as a positive driver of change in the fashion industry?

4.1 Introduction

This chapter presents the first empirical study of the PhD project *Lucky People Forecast*. The study took place in spring 2005 and included a case study of a major fashion organisation, and interviews with fashion industry professionals. The aim of this study was to shed light on the current interrelations between the three key strands of the thesis: fashion design, trend-forecasting and sustainability, in order to understand the scope for trend-forecasting to act as a soft driver for sustainability in the fashion industry.

The two previous chapters established that although strategies are increasingly in place to limit the environmental impact of the fashion industry, it still has a significantly detrimental effect on the environment. 'Hard' driving forces, such as legislation and financial prompts, do not specifically target areas of major impact, such as the user phase, nor areas where the scope for positive change may be highest - the conceptualisation and design phase. (Franklin Associates 1993; Graedel, Reaves Comrie *et al.* 1995)

At present the trend-forecaster works to empower a fashion company commercially, through a process of outlook and insight - and what passes as foresight. The thesis presented here is that the trend-forecaster might, with approximately the same tools, enable a fashion company in its wider sustainability endeavours. It is suggested that trend-forecasting might reach where established, formal driving forces for sustainability cannot.

After introducing the scope and research questions of this first empirical study, the chapter describes its methodological approaches, the research process, and finally presents and discusses the findings that the study generated.

4.1.1 The scope of the study

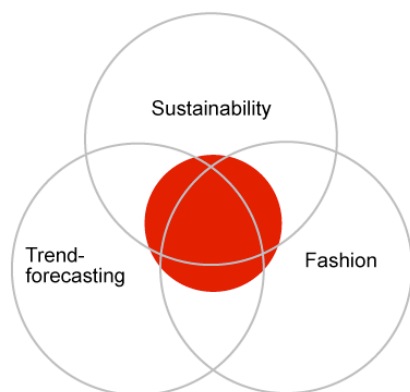


Figure 4.1 The area of study

The scope of this study was wide, and by necessity so; it was the study of an open system comprising a multitude of stakeholders, and operations taking place at a range of timelines. Understanding how the three strands function as a system was critical in order to find points in time and place where opportunities might be harnessed. Therefore the strategy of the study was that of progressive focusing.

It should be noted that while this study focused on the environmental dimension of sustainability, it acknowledged that sustainability implies the healthy interdependence between and respect for environmental, ethical and economical concerns. (See Chapter 2.)

4.1.2 Research aims and questions

The aims of the study were threefold:

- To understand how the three strands of sustainability (represented by environmental work), the design process and trend-forecasting co-exist in the fashion industry at high-street, mass-market level;
- To understand at which stages in the design process that trend-forecasting services are used, the nature of these services and their purposes, and how they are experienced and valued by the fashion industry;
- To understand how fashion designers experience sustainability in general, and their involvement and non-involvement with environmental issues in their role as fashion designers in particular.

And from the above three:

- To understand the potential for trend-forecasting to act as a soft driver for more sustainable practices in the fashion industry, and to locate suitable intervention points for such a driver;
- To inform the second empirical study.

These aims were developed into research questions organised in four levels of complexity from questions that concerned *what, when and who* to questions that sought answers to *how* and *why*.

Understanding the background	<p>What are the characteristics in terms of educational background and career of individuals working in the fashion industry at high street, mass-market level?</p> <p>What is the make-up of a fashion company at high street, mass-market level, in terms of organisation and company profile?</p>
Understanding the process	<p>What is the nature of the process of a fashion company at high street, mass-market level?</p> <p>How is trend-forecasting situated in the design process of a fashion company at high street, mass-market level?</p> <p>How is environmental work conducted in a fashion company at high street, mass-market level?</p>
Understanding the relationships	<p>What drives design work in the fashion industry's mass-market segment?</p> <p>To what extent is trend-forecasting a driver of high street, mass-market fashion?</p> <p>What is the experience of trend research in the fashion industry's mass-market segment?</p> <p>What drives environmental work in the fashion industry's mass-market segment?</p>
Understanding the rationales	<p>What motivates designers in the high street mass-market segment of fashion?</p> <p>What is the role of trend research in the fashion industry's mass-market segment?</p> <p>What are the reasons why fashion designers do not engage more with environmental improvement?</p> <p>How do background factors such as individuals' education and role, and a company's organisation, profile and culture influence its readiness to adopt environmental practices?</p>

Figure 4.2 Four levels of research questions

4.2 Methodological concerns

A range of methodological approaches was considered before an operational research design was agreed. The resulting study was diagnostic, descriptive and exploratory and situated in the interpretative research paradigm.

4.2.1 Study format

The study comprised of a small case study of an influential fashion company at high street, mass-market level. The study also included interviews with five designers at other high street fashion companies and with one trend-forecaster. The organisations' respective public documents provided additional information.

4.2.2 The case study as a research methodology

The case study can be viewed as a methodology in itself or an object of study where a variety of methods, such as interviews and observations, and sources, such as documents, audio-visual material or physical artefacts, can be used. Yin describes the case study as "an empirical inquiry that investigates a contemporary phenomena within its real-life context,

especially when the boundaries between phenomenon and context are not clearly evident.” (Yin, 1994: 13)

The case study format is often used to explore the interaction of factors and events taking place at a specific institution, providing a deep, rich and situated understanding. While the case study can offer data of both qualitative and quantitative nature, it is often used qualitatively. (Yin, 1989) Because of the broad scope of data sourcing, data can be triangulated and a wide perspective on an issue obtained. The case study can be used as a “stand-alone” strategy, to follow up a survey or to provide directions for a study yet to take place. (Bell, 1999:11)

The case study can be intrinsic: the institution offers a unique case in itself, or instrumental: the institution is chosen because it can illustrate the issue of investigation. (Cresswell, 1998: 63) Langrish describes several rationales behind the choice of case and the use of the case study: comparative, representative, best practice, next door, unusual example, taxonomic. (Langrish, 1993: 354-367) The analysis of a case study can be holistic, covering the whole case, or embedded, focusing on a specific aspect of the case. (Yin, 1989) The case study can focus on one or several instances: single-case or multiple-case design.

The critique of the case study, on the other hand, includes the difficulty of generalising conclusions drawn from the study of a specific case. However, “the extent to which findings from the case study can be generalized to other examples in the class depends on how far the case study example is similar to other of its type”. (Denscombe, 1998: 36-7) Bassey holds that the *reliability* of a case study is more important than its *generalisability*. (Bassey 1991: 85) Another concern is how the scope of the case can be limited in terms of time and topics covered. Yin highlights how the topics of decision-making, implementation processes and organisational change may be especially difficult to contain. (Yin, 1994: 137)

4.2.3 The profile of this case study

A case study was deemed appropriate for this study as the object was to understand a complex process, which involved several professional categories. It was also important to understand how these professionals experienced working together and how their respective rationales informed decisions. Furthermore, a case study offered the opportunity to give voice to several stakeholders and to investigate a system rather than ‘isolated’ parts, which supports the paradigm of sustainability, the central tenet of this thesis.

The particular organisation chosen for the case study, H&M, was perceived likely to be representative of other fashion companies that offer products with a high fashion content to a

high street audience.¹ This case study was an instrumental within-site case study. However, as Yin (1994: 137) points out, the scope of the case study can be difficult to contain, and as discussed earlier the fashion industry, or a fashion company, is not a closed system. Indeed, it was the interaction between the fashion company and the stakeholders outside; the environment, formal driving forces (such as legislation and financial prompts) and fashion and lifestyle trends that was of particular interest for this study. Therefore, both during the study and in the discussion of it, I have attempted to acknowledge and honour this complexity.

4.2.4 Interviews as research methodology

Initially a questionnaire, which is typically used in order to reach a larger sample (space triangulation), was considered for the part of the study that explored designers' use and experience of trend-forecasting services. However, it was decided that the interview format would allow more flexibility in following up particular experiences of the designers, and that a smaller sample, but access to richer material was preferable. It could "achieve depth and roundness of understanding rather than broad understanding of surface patterns". (Mason, 2002: 80) Interviews are also preferable when the type of data desired may be based on emotions and experiences, relate to sensitive issues, or depend on access to privileged information; all of which can be difficult to obtain in a questionnaire. (Denscombe, 1998: 111)

Burgess describes qualitative interviews as "conversations with a purpose", referring to the relatively informal style. (Burgess, 1984: 102) Interviews are a commonly used method in qualitative research, either as the only method, or part of a mixed-method strategy. They can be used to prepare or follow up a questionnaire, or to triangulate data generated through other methods. Interviews can take place with an individual, a group, a group of people in a focus group design, face-to-face, over the phone or via email. The type of data generated may be literal ('facts' to be checked), interpretative (underlying meanings) or reflexive (about the role the interviewer plays in the exchange). This relates to the wider methodology frameworks and whether data is assumed to be "excavated" or "constructed". (Mason, 2002: 78)

4.2.5 Types of interviews

Interviewing constitutes a continuum of approaches from the structured to the loosely structured. The distinction between the formats is the level of control that the researcher exercises over the flow of the session. (Denscombe, 1998: 114)

The structured interview with limited-option responses bears strong resemblance to the questionnaire/survey format. Responses are pre-coded which means relatively easy data-

¹ Because the company is Swedish, I had previously been in touch with them, and access was estimated to be more probable than with organisations in the UK.

analysis and that quantitative analysis is possible. (Denscombe, 1998: 113) In the semi-structured interview, a list of issues is still used, but the order and mode of questioning is less fixed and the questions are open-ended. This allows for flexibility to follow up on emerging issues, and to let the interviewee provide more detail. (Denscombe, 1998: 113) The loosely structured interview, topic based but with less control induced as regards the direction of the conversation, puts even more emphasis on the interviewee's own ideas and thoughts.

“people’s experiences or understandings... can only be *constructed* or *reconstructed* in interviews, and of course the interview method is heavily dependent on people’s capacities to verbalize, interact, conceptualize and remember.” (Original italic, Mason, 2002: 64)

The disadvantages of the qualitative interview (where semi-structured and loosely structured interviews can be placed) include lesser consistency between interviews, and therefore less straightforward comparisons than what the structured interview or the questionnaire allows. Adding to the complexity, there is the “interviewer-effect”, the risk that interviewees tailor responses to please the researcher. (Denscombe, 1998: 116) There is a range of approaches to this in qualitative research, from trying to adopt a “neutral”, non-judgmental position, to value explicitness. On a practical note, the resources needed to carry out qualitative interviews, the actual meetings, transcription and data analysis are significant, which means that a smaller sample can be targeted than for instance the postal questionnaire would afford.

In a structured interview or questionnaire the questions, the order of questions and mode of asking them are standardised to simplify analysis and comparisons and to minimise bias so that “variation in responses will be a true measure rather than a product of your method.” (Mason, 2002: 65) However, this is an assumption based on a positivist approach to research; the interpretivist researcher would argue that a sequence of questions and language used in the questionnaire, and the interviewee’s previous experiences, attitudes and values always affect responses. More importantly, the qualitative approach is often not dependent on interviewees responding to identical sets of questions, as the points of comparison are likely to be conceptual rather than straightforwardly empirical. (Mason, 2002: 66)

4.2.6 The interview format and procedure of this study

Denscombe (1998: 111) presents three scenarios where the type of data desired may justify taking an interview approach rather than using a survey:

- When data is based on emotions and feelings;
- When data is based on sensitive issues, and
- When data is based on privileged information.

All three applied to this study, the focus of which was on experiences and attitudes. Although information about 'how things work' (in the particular organisation and the industry in general) at a more factual, logistic level was also desired, the complexity of the sequence of events was high.

The qualitative point of view, that knowledge is contextual, and influenced by interaction, means that the interview format should seek to optimise access to situated information. Therefore, Mason advocates asking specific rather than abstract questions for each interview. (Mason, 2002: 64) In the case of the interviews of this study, this was designed in by letting the discussion focus on the work with a specific collection and season. Similarly, addressing reasons behind decision-making and judgements was estimated to generate richer data if focused around a specific real event than would asking questions about general views or practice.

The interview format in this study ranged from structured to semi-structured. The interviews were recorded, transcripts were sent to interviewees to check. The interviews with trend-forecaster and designers were designed in a similar format to those in the case study, so that they would be comparable. The interviews were also designed to allow flexibility to go into more detail where it was suitable or to omit questions that were irrelevant for a specific participant.

4.2.7 Sensitive information

Informal interviews in the earlier stages of the research had revealed that designers sometimes experienced unease or even guilt when the subject of sustainability was raised. They would become defensive in their answers and their loyalty to the employer would make it difficult for them to speak freely. It was anticipated that the interview format would allow more sensitive and nuanced probing than would a questionnaire. However, on the other hand the risk of a face-to-face meeting was that of making the interviewee more eager to 'please' the researcher. In relation to questionnaires, Bell advocates leaving sensitive issues until later in the questionnaire. (Bell, 1999: 131) This was viewed to be a suitable strategy for the interviews, where possible. However, it was also important that interviews end on a positive and amicable note. Therefore the questions about the designers' motivation – deemed a lighter subject – were placed at the end. All interviewees were promised anonymity where this was realistic.

4.2.8 Personal value position

It should be re-stated that my starting point in the research project was an interest in and commitment to sustainability concerns. I kept this bias in mind during the study, especially in contact with interviewees who were already aware of my sympathies.

4.2.9 The focus of the case study and interviews

The case study was designed to focus on a specific product range/collection with a high fashion level. The participants were asked to bring in a diary/project plan or equivalent from the most recently completed collection they had worked on. All interviews were structured so as to follow a product's life cycle, from conceptualisation to end-of-life (or re-use/re-cycling). While I was aware that the interviewees may have limited or no involvement in some of the stages, including them in the interview topics might spur comments that could give insights into the awareness that for example designers had about these stages, and suggestions about who to interview further. (See interview questions, Appendix A, A.1)

4.3 Sample

The fashion industry's professionals travel extensively and are pressed for time. The industry itself can be regarded as secretive and protective. These factors mean that access can be difficult. The sample chosen for this study was therefore opportunistic; I used my network to recommend appropriate candidates. After this first introduction was made, the prospective interviewees were contacted and given further details. The table below shows all participants in the study.

Category	Role of participant	Profile of organisation
Case study	Manager of CSR	Retailer
	Designer	Retailer
	Buyer	Retailer
Designers	Designer	Retailer/wholesaler
	Designer	Retailer
	Designer	Retailer/wholesaler
	Designer	Retailer
	Designer	Retailer
Trend-forecaster	Designer	Retailer
	Senior consultant	NA

Table 4.1 Overview of sample

The study consisted of interviews with fashion professionals from organisations of a high fashion level, and a mass-market audience. The following paragraphs describe why this particular sector was deemed appropriate for the study.

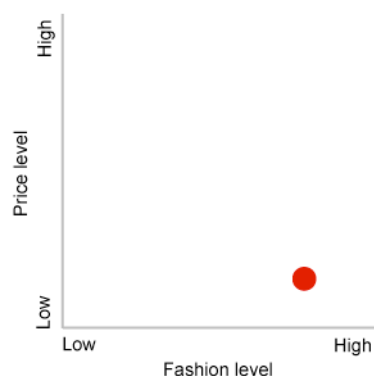


Figure 4.3 Profile of study object

Preliminary research had shown that this type of organisation uses trend-forecasting services most extensively, whereas the services are not as valuable (or affordable) to avant-

garde brands, or small independent designers. Another factor deciding the inclusion of a company in the study was that it should have a Corporate Social Responsibility agenda (or equivalent) in place, which meant that they could be described to operate on the *harmless to helpful* side of the spectrum of commitment to environmental issues, introduced in Chapter 3, Figure 3.3.



Figure 4.4 Study object's position on harmful-helpful continuum

In addition, an analysis of user groups had pointed to the appropriateness of selecting as an object of study representatives of the mass-market/high fashion level segment. (See Chapter 3, Figure 3.2)

4.3.1 Profile of H&M case study

One of the major high street fashion companies in the world, with a high fashion level, and a wide consumer group in twenty-eight countries, H&M was deemed ideal for this study. Although all companies operate slightly differently, H&M appears fairly typical in the sense that all production is out-sourced, mainly to the Far East, and the buyer has a prominent role. However, H&M has a strong design department, with over a hundred designers. The company has a well-established CSR department, and preliminary investigation indicated that its environmental practices were perceived similar to those of other organisations of its type. (H&M, 2005; 2008)

The case study involved a designer, a buyer, and an environmental officer. The buyer was included because this role usually entails closer relations with factories than the designer has, and therefore arguably more direct contact with environmental issues. It was also hoped that including the buyer would offer a richer and more rounded understanding of the designer's practice, and of the overall processes. In addition to the interviews, H&M's web site, Annual Report and CSR Report were consulted. (H&M, 2005; 2008)

4.3.2 Pilot case study with IKEA

Initially a pilot case study was planned with IKEA, also a mass-market company offering products of high 'fashion'. It was anticipated that including a product design company, where the 'fashion' cycle is slower and environmental concerns more embedded in the design process (which was indicated in the preliminary informal investigation), might add insights valuable to the fashion study. However, as the planning of the study progressed, it was decided that the focus should be on getting a more in-depth understanding of the fashion industry rather than one of comparing industries. A comparison of how the

sustainability imperative manifests itself in different design disciplines is still perceived to be an area of potential, but is outside the scope of this PhD.

4.3.3 Interviews with designers about commercially available trend-forecasting services

The aim of this study was to get a broader and deeper view of designers' use and experience of trend-forecasting services and of environmental improvement in the fashion industry. The sample constituted fashion designers based in the UK and Sweden representing the following organisations: Levi's, Pringle, TopShop (UK), Åhléns and Indiska (Sweden). Altogether five designers were interviewed.

The designers had between five and twelve years work experiences, all from at least two companies, which was anticipated to enrich the study. While all the organisations represented have a presence in the high street (at least in some of the ranges they offer), Pringle and Levi's stand out with a higher price level, and offering both retail and wholesale. However, the respective designers still used trend-forecasting material and worked in cycles comparable to the other design companies.

4.3.4 Trend-forecasting methodology and attitudes to environmental issues

Finally, in order to get an inside perspective on trend-forecasting services in general, and in the light of environmental concerns associated with the fashion industry, a consultant from a trend-forecasting agency was included in the study. The initial plan was for several agencies to be represented in the study, however, out of six contacted only one agency was willing to participate, and only if it could remain anonymous. The reasons behind the reluctance to take part in the study may be due the industry's innate secrecy, and that I could be perceived as a competitor, or due to the topic of sustainability, or simply lack of time. Although a larger sample of trend-forecasters would have been desirable, it is not deemed to have compromised the study significantly as the purpose of their inclusion was mainly to triangulate the experience of the designers.

4.3.5 Ethical considerations

The Swedish fashion scene, as is indeed the international one, is small in the sense that most professionals are acquainted with each other. Job acquisitions and information exchange are network based; for many the fashion industry serves as a social community as well as a professional one. The fashion scene is also competitive and secretive. All these characteristics raised concerns as to how research participants could be treated in an ethical manner. In the case of the participants at H&M it would be impossible to grant anonymity. Excluding the company's name was not realistic since it has particular features not easily concealed and of importance to the study. Within the company designers and environmental officers might be recognisable. The designers outside the case study were not considered as

vulnerable as they represented different companies. Altogether the concerns around anonymity resulted in that the more in depth probing of values and experiences was conducted only with participants outside the case study, whereas it was designed to focus on logistics. This was appropriate, as the purpose of the case study was primarily to gather data about timelines, processes and the extent of people's involvement in specific stages of the process.

4.3.6 Changes in the study

All interviews also included questions about educational and professional background and other 'hard facts'. During the course of the interviewing process, questions were adapted and added as my understanding of the field increased. This is considered appropriate in the qualitative, interpretative paradigm. In the main, the questions remained the same, which ensured comparability. In the planning stage of the study, it was thought appropriate that the interviews of designers outside the case study should not focus on logistics in the fashion design process. However, as the study progressed, it became evident that for example the variation in timelines between different fashion companies was highly relevant in terms of access and value of trend-forecasting services and the study was expanded to include more detail of the process in the interviews with all designers.

4.4 Conducting the study - some practical considerations

The following paragraphs describe how the study, which took place between February and May 2005, was conducted in more practical terms, specifying the process and the research techniques used.

4.4.1 Time and access

The participants' time constraints were an issue during the research process. Many interviews had to be rescheduled several times. However, once the interviews took place, all participants were generous with their time and had set aside the 45 minutes agreed.²

4.4.2 Notes on transcripts and translation

Seven of the interviews were conducted face-to-face and two over the telephone. The earliest four interviews were not recorded, as I anticipated that a tape-recorder would be an intrusion. However, because of difficulties to keep up with transcriptions of notes, later interviews were recorded (with the participants' consent). Contrary to my belief, the interviewees displayed no unease, and I found the increased richness that comes with a complete transcript valuable.

² The issue of time constraints is interesting to note since it was also a frequent topic raised by the participants in the interviews.

The participants' native languages were English, Swedish and Belgian and interviews conducted in English or Swedish. In the latter case the transcripts were approved by the interviewee and then translated and coded. The transcript sent for approval was in the participant's native language to ensure that the participant would have full understanding of the contents. As the researcher was the interface in all the interviews, the language variation is not perceived to be a problem. In the translation, the emphasis has been to remain as close as possible to the transcript, rather than a good or accurate flow in English. In the cases where the Swedish choice of word is particularly important and where a correspondent term in English does not exist or is not used in the same way, notes are provided to explain the original meaning.

While my personal and professional background afforded easier access to participants in Sweden, interviewing participants in Sweden and in Swedish added complications to the study. Firstly, as it proved impossible to schedule all interviews around one trip, travel proved time-consuming, costly and moreover, and ironically, resulted in contributing to environmental degradation. Although the interviews conducted in Swedish flowed somewhat more easily; this benefit was not significant whereas the translation process was very time-consuming. It did give me an increased understanding of the information stored in different languages, and the large extent to which language is made up and shared by a local professional community.

4.4.3 Analysis of the study and organisation of data

The transcripts were divided into sections corresponding to the topics raised in the interviews. The participants' answers to all questions within a topic were entered into Excel charts. In the charts, patterns were identified, where participants' answers were identical or similar, and where participants' answers varied dramatically. The charts were then adjusted for data compression and enhanced readability. The transcripts were also analysed in terms of more overarching themes. Table 4.2 shows the organisation of data into five categories. Corresponding data charts can be found in Appendix A, **A.3**.

Category	Type of data
Background data	The interviewees' educational and professional background, the companies' formal structure, such as size of teams, assigned roles.
Process: Trend and design process Environmental process	The organisation of the fashion cycle within the individual company, placing activities on a time line and listing professionals involved at each stage.
Trend-forecasting	The various sources accessed, the frequency and points in time of use, the experience of trend-forecasting services.
The fashion designer role	The experiential aspects of fashion designers' situation in the fashion industry.
Environmental experiences and perception	The participants' knowledge of, interest and involvement in environmental issues.
Emergent themes	Issues, opinions and values raised and expressed by participants about their role in the fashion industry.

Table 4.2 The organisation of data

4.5 Presenting the data

This section opens with a vignette to illustrate the type of data gathered throughout the study. The section proceeds to present and discuss the data in the order of the research questions driving the inquiry. (See Table 4.2) These were categorised into four levels of information desired, on a continuum from 'objective facts' (*what, who and when*) to 'subjective (but grounded) interpretation' (*how and why*). (See Figure 4.2)

4.5.1 Vignette

Emma is 38 years old and senior designer at H&M, in a team consisting of one other senior designer, five assistant designers, seven buyers, eight assistant buyers, two print designers, four pattern constructors and two economists.

Having started out as a shop assistant at age 22, she advanced to assistant designer, later designer and now a senior designer responsible for one of H&M's many concepts. Emma did not pursue a full fashion degree, instead she went through a series of shorter courses in sewing, pattern construction and art, and worked her way up in the company. Her educational background is unusual, but not for H&M at the relevant time.

"It was different in those days, much of the recruitment was done in-house, it was possible to work one's way up in the company. That would probably be more difficult today, now one has to have a full design degree." (Designer B, 2005: 1)

In her current position Emma is responsible for the season's colours and trends as regards her concept. Emma's work also includes creating style guidelines for and co-ordinating the collection at hand. Assistant designers carry out most of the actual sketch work.

Emma consults trend and colour books and she uses the trend service WGSN (World Global Style Network) on the Internet almost daily for quick updates. She visits yarn and fabric fairs seasonally and attends trend presentations. On city trips to Paris, London, Tokyo and New York she buys samples from shops and flea markets and looks at what people are wearing in the street. Each such trip is followed by a process of analysing and adapting the material to her specific concept.

"When I look at trends I look for that which is possible to realise, it is simply fashion trends in focus and it has to be concrete ideas. For example, the last time it was very evident that ethnic and African influences are in focus. We can never separate what we do from the concept, which can be boring at times. Trend books and trend presentations are important for our work mostly to check whether they feel strongly about the same things that we do or if they have some other trend that we haven't thought about and that may spur new thoughts. However, sometimes it can feel as if we have already done everything as we are quick at recognising trends and as trend books quickly become dated." (Designer B, 2005: 2)

Emma finds the trend material on the market useful primarily as a point of reference. Equally useful to her are the catwalk shows, which she follows on the Internet to make sure that

she has not missed an important style or trend. At H&M it is possible to work very close to a season; in fact some additions can be made in season. This means that Emma is sometimes working in three seasons: following up the previous season, making additions to a collection soon ready for distribution and developing next season's collection.

“At times it can be stressful that the pace is so high and that it has to be new, new all the time. The most difficult part is... to get the timing exactly right. But I can't really imagine working for someone else. In Sweden there is only H&M.” (Designer B, 2005: 6)

4.5.2 Understanding the background

4.5.2.1 What are the characteristics in terms of educational background and career of individuals working in the fashion industry?

All but one designer participant had a BA in fashion, which was also the background of the trend-forecaster. Only one designer had a postgraduate degree in fashion, which can to some extent be explained by the limited availability of such courses in Sweden at the relevant time. However, it appears that in the high street domain of fashion a post-graduate degree is not generally asked for or particularly valued. On the other hand, most of the fashion designers had undertaken several courses - in sewing, pattern construction and fine art - before they embarked on a BA. Two participants (the designer and buyer at H&M) had no formal degree, having instead, after preparatory courses, worked their way up in the company. None of the participants had a formal degree in environmental education and none of the designers had received environmental training either in college or at work. The Manager of CSR at H&M had a degree in economics.

All participants but two had previously worked or freelanced for other companies. The trend-forecaster had worked as a designer before joining the agency. Those professionals working for H&M had been with the company for all their professional life in fashion. Considering the industry's international and dynamic nature, this appears quite extraordinary. A possible explanation is that individuals who are not prepared to move abroad find other options in Sweden limited and that H&M must be doing something very 'right' to foster such loyalty.

The designer participants' ages ranged from 30 to 40. This is a natural age for the senior roles that they occupied. All participants, but one, were women. This ratio appears comparable to that of the fashion industry's mass-market segment at large. Some of the implications that gender distribution in the fashion industry and gender constructs that relate to fashion might have for the advancement of this thesis are addressed in the concluding discussion of this chapter. (See **4.6.1.3.3**)

4.5.2.2 What is the make-up of a high street fashion company, in terms of organisation, and company profile?

All designers worked closely with buyers or equivalent. The designers reported to seniors with either creative or economic roles. All roles in the fashion organisation were highly specialised with a clear division between operational and strategic employees. The designers' work did however involve contacts with a wide range of professionals, including economists and marketing specialists. No designer worked directly with environmental officers or general CSR staff.

The companies included in the study represented retailers, which only sold products through their own outlets, and retailer-wholesalers, which sold products both through their own shops and other retailers. All designers included in the study, bar one, designed women's wear.

The fashion level of the companies included in the study varied. Whereas the concepts representing Levi's and Pringle strove explicitly to be directional - to create trends that would influence fashion, the other companies can be described to be followers.³ However, particularly H&M and TopShop had a high fashion content in some of their products and ranges, and Åhléns⁴ to a lesser degree. Indiska⁵, did follow trends to some extent but its specific style inspired by India resulted in the fashion level of the products varying according to 'ethnic style' being 'in' or 'out' which in turn influenced which type of consumer the company attracted at a given time.

Figure 4.5 below provides an overview of the key insights generated from the study of individuals' and organisations' background.

³ It should be noted that while 'followers' do copy 'directional' brands, the practice of copying is not as straightforward as it may seem. It is facilitated by the easy access to catwalk shows on the Internet and by the fact that high street retailers, such as H&M, because they can omit a sale stage, have much shorter lead times than 'designer' companies, such as Marc Jacobs or Levi's. However, whereas historically fashion filtered down, from the European courts and other influential actors, today much of the content in fashion collections and magazines are styles or styling that have been picked up on the streets. (See e.g. Polhemus, 1994) Zeitgeist and current trends are accessible to all fashion professionals, whether they work for Prada or TopShop. The fashion offer of a particular company appears to have more to do with considerations of brand, target group and timing than lack of awareness, or superior awareness of trends.

⁴ A department store comparable to M&S.

⁵ Comparable to UK based Monsoon.

Education at BA level	Only one participant had undergone a course at Master's level.
No formal training in environmental issues and practices	No participant had undergone formal training in environmental issues and practices.
Loyalty with H&M	Those participants working for H&M had done so during all their professional life in fashion. Other participants had changed companies.
Clear division between operational and strategic roles	The organisations represented in the study were highly specialised, with clear boundaries between strategic and operational role remits.
Designer-buyer teams with wide range of colleagues	Designers worked with buyers on a daily basis and with senior creative staff, marketeers, financial staff regularly.
No environmental officer in design team	The designers did not work directly with environmental/CSR staff.
Varying fashion level	The fashion level varied between companies, but all had items with high fashion content.
Retailers and wholesalers	The sample included both retailers - with their own shops, and wholesalers - which distribute goods externally.
Gender bias	The majority of designers were women.

Figure 4.5 Background themes

4.5.3 Understanding the process

4.5.3.1 What does the process look like in a fashion company with a high street audience?

This section starts with a more in-depth account of the design process at H&M, informed by the interviews with designer and buyer at H&M and corporate documents (HM, 2005), and continues by drawing out some key themes that were found across the sample of designers and organisations.

4.5.3.1.1 The design process at H&M

"[our presentations must be] as rich in detail as possible, we have to convince with evidence and rub in the ideas." (Designer B, 2005: 3)

"The [catwalk] shows provide a kind of key to what we have been thinking, a confirmation." (Designer B, 2005: 4)

The fashion design process is complex. Seasons overlap and at times the designer and buyer are working on three seasons simultaneously: following up the previous season, finishing a season soon to be distributed, and starting up the new collection. Adding to the complexity, and generally speaking, basics with a relatively low fashion content are produced the furthest away as such orders can be placed early, and because these are volume products and the price level critical. Products with a higher fashion content are generally placed as close to season as possible, and therefore closer to the distribution countries. H&M divides its products into 'basics' and 'stars'; on a triangle the basics constitutes a base and the top represent the 'trendiest' clothes as shown in Figure 4.6 below. (H&M Annual Report 2004, 2005; Designer B, 2005: 4).

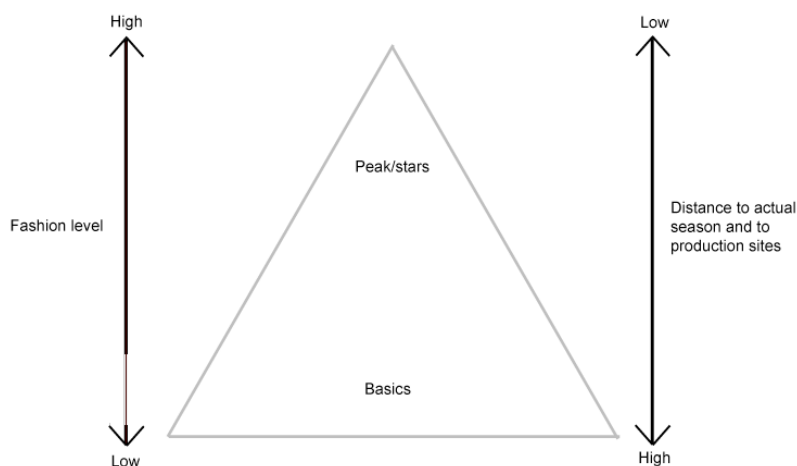


Figure 4.6 H&M's categorisation of products, implications for time schedule and production

In the interviews the work on Spring/Summer 06 was used as an example season. Additional information was obtained for adjacent seasons so that a chart representing the complexity of the process could be created. (See Appendix A, **A.3.2**)

For purposes of readability Figure 4.7a below only includes the work on Spring/summer 2006. The figure also represents the flow of information during the work on a collection. Again, the representation is simplistic; the reality is much more complex as the fashion company is not a closed system but relies upon the exchange of information with a wide range of stakeholders. The arrows in the figure are colour coded to distinguish the direction of the flow of information from the domain of trends and design to the realm of finance and vice versa.

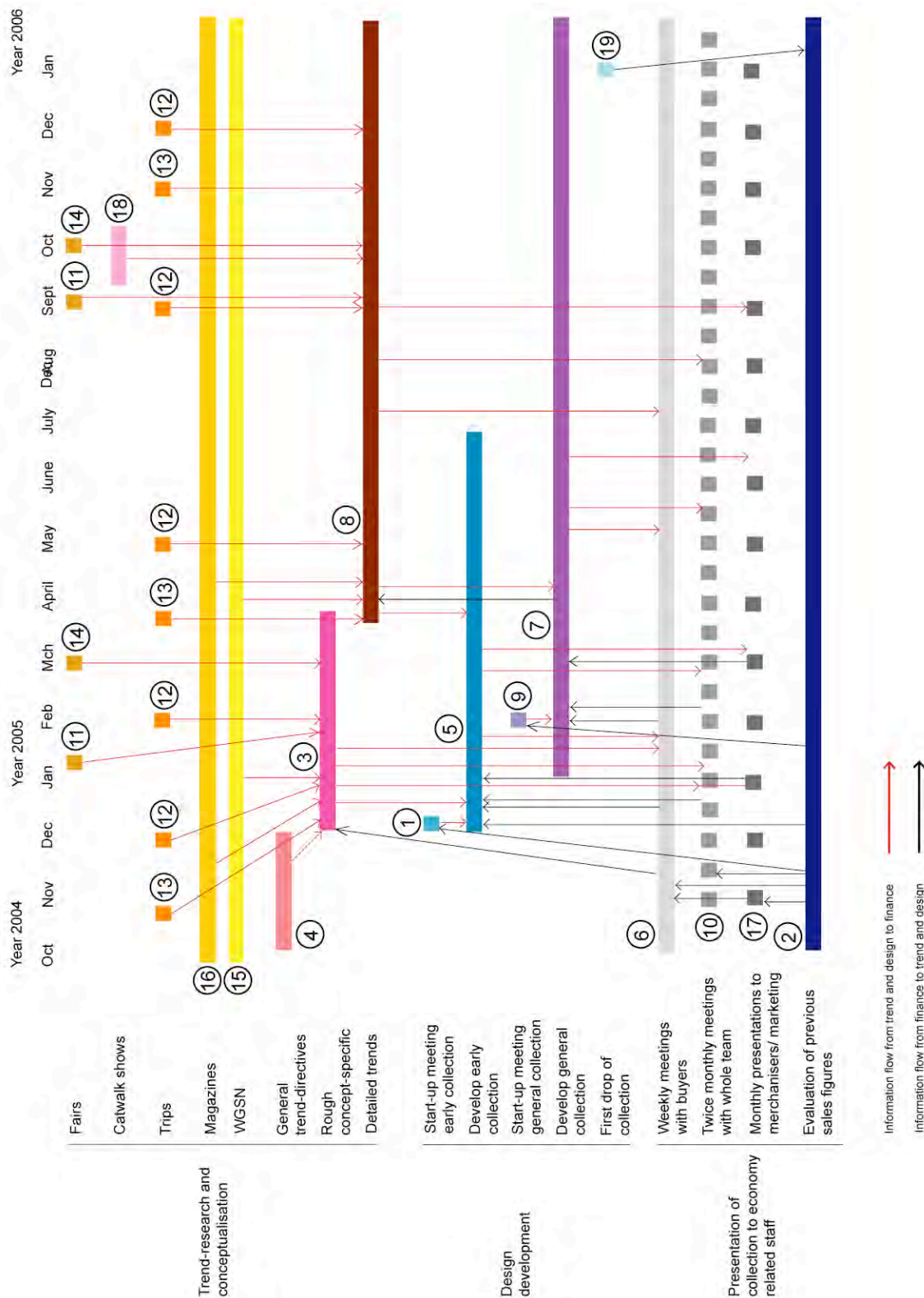


Figure 4.7a H&M design process and information flow

December - February	<p>The work on Spring/summer 2006 collection begins with a start-up meeting. (1) Sales figures (2) from the previous season are discussed and decisions made regarding which styles to continue with, update or drop. At this point the priority is knitwear, jersey and those tailored garments to be produced in the Far East.</p> <p>The designer prepares rough trend and colour guidelines for the particular concept (3) building on the general guidelines for the whole company prepared earlier in the autumn by a team from various concepts and the director of design. (4)</p> <p>The design process begins. (5) The designers provide guidelines for the collection, most design of the actual products is delegated to design assistants who first create rough sketches and later technical drawings.</p> <p>The buyer gives the technical drawings to the pattern constructors who make patterns or measurement lists. The buyer send these off to suppliers and get back samples in return. The same style is sent to several factories for comparisons of making and price. While fabrics are decided in co-operation between buyer and designer, most fabrics are sourced by the factory, and in many cases the fabric one that the company has used before. When samples return, the designer attends a fitting and when a garment has been agreed, an order is placed. The designers and buyers thus work closely, with meetings on a weekly basis. (6)</p> <p>The work on the range with higher fashion content starts. (7) Again the trends and colours are reviewed and specified in even more detail. (8) This work is carried out by the designer and presented to buyers whose comments are taken into account.</p> <p>The process from sketch to fitting and placement of order is repeated for the different drops (the different points of delivery to shops during a season).</p> <p>The designers and buyers travel to Pitti Filati, a key yarn fair in Florence. (11)</p> <p>A major planning-meeting takes place (9) where previous sales figures (2) are presented and emerging trends (3, 8) considered. Best-selling styles are updated, and new styles created. Planning meetings take place twice a month all through the process. (10)</p> <p>The designers and buyers travel frequently, to London (12) at least twice per season and to New York or Tokyo (13) once per season. On these trips they study people in the streets, visit shops and buy samples from competitors and from the higher end of the market, and flea markets and second-hand shops. After each trip the information is analysed from the perspective of the brand, and the specific concept and target group. (2, 3, 8)</p>
March - August	<p>Designers and buyers visit Europe's leading fabric fair, <i>Première Vision (PV)</i> in Paris (14) to attend trend presentations, look at trend forums and meet suppliers. The purpose of the trip is mainly inspirational as the European weavers have price levels beyond the brand's profile. The trend forums at PV present key colours, fabrics and prints for Spring/Summer 06. The presentations by trend-forecasting agencies such as Promostyle, Precler and TrendUnion feature trends for that same season or for the following Autumn/Winter. Trend research forms an important part of the designer's work. The designer consults trend-books from some of the above mentioned agencies and accesses the trend web site WGSN (World Global Style Net Work) (15) almost daily. Fashion magazines are regularly used, and more rarely the trade trend magazine <i>Textile View</i>. (16)</p> <p>After PV, and an analysis of key fabrics, items and silhouettes, the designers draw up a more detailed trend scheme (8) which is presented to the whole team (10) and to the marketing department. (17) The entire collection is presented to merchandisers from the distribution countries and to managers heading up overarching product groups (such as knits) of the organisation. (17) The merchandisers act as representatives for the respective countries of distribution. They comment on how well the collection meets the demands of their particular market and suggest changes.</p> <p>At a later date the collection is introduced to all those working with knits and tailored garments respectively in order to check synchronicity. (17) All the presentations constitute boards, containing images from magazines, key words, fabric swatches and garment details.</p> <p>From the end of March and onwards, the range of higher fashion content, to be produced at suppliers with shorter lead-times, is built and the process from sketch to placed order repeated many times. (5, 7) The trend guidelines and the distribution dates provide a structure for the organisation of the work as all styles are placed under a particular trend theme and drop. The boards are continuously updated and grow increasingly rich in detail. All through the spring and summer this work continues, interrupted by the trips to London and New York or Tokyo (13). After each trip, new ideas, for styles, fabrics or prints are fed into the collection. (7, 8)</p>
September - January	<p>The catwalk shows in London, New York, Milan and Paris take place, where the high-end designers' collections for Spring/Summer 2006 are presented to press and buyers. (18) Considering them an important checkpoint, the designer accesses the shows through the Internet.</p> <p>After the catwalk shows, additions are made to the collection in order to make sure that all major trends and key items are covered. (7, 8) The work on the season of Spring/Summer 06 continues with small additions even into the actual season.</p> <p>The first garments are distributed to shops. (19)</p> <p>When the designer and buyer started developing the Spring/Summer 06 collection in December 2005, they were still working on Spring/Summer 05 and Autumn/Winter 05-06. In the summer of 2005 they visited yarn and fabric fairs to inform the Autumn/Winter 06-07 range. Sales figures from the collection currently on offer were continuously reviewed to provide guidelines for seasons to come. The designers were also in contact with marketing and provided trend books with guidelines for presenting the collection in the shops to the display teams.</p>

Figure 4.7b H&M design process and information flow

4.5.3.1.2 The design process across the sample of designers and organisations

The process of all companies represented in the study was highly specialised (although in the smaller companies the designers covered a wider range of tasks).⁶ This specialisation resulted in a distinct separation of the product life cycle stages so that designers, buyers and environmental officers had little insight into stages beyond the immediate scope of their work. Important characteristics of the process were the fast pace, that work at some points in time could relate to up to three seasons, and the frequent travel (approximately six trips per year, some of which covered several destinations),

"I do about six trips per year. Tomorrow we are going to Tokyo – for inspiration and sourcing, then Hong Kong for 5 days to work with the suppliers and factories, then Sydney for more inspiration. I have already been to Chamonix because I was doing something around skiing for the winter. I have also been to Paris, South Italy and Antwerp." (Designer E, 2005: 4)

The rigorous framework of the fashion cycle, to deliver two main collections each year, set the pace and guided the organisation of the work. The profile of the respective company, retailer or wholesaler-retailer, dictated the start and end points of the design work.^{7 8} Since the latter type of company also had a sales process to consider, its design process started earlier and was also completed earlier; the conceptualisation and design were placed further away in time from the actual season.

The designers' role was mostly one of a co-ordinator. In the main their work consisted of creating guidelines while assistants designed the actual products, or the design was outsourced to suppliers. A proportion of the companies' products consisted of updated 'cash-cows' and modified or copied samples. The designers had little involvement in production, for which the buyers provided an interface.⁹

⁶ At the smallest organisation of the study, Indiska, the designer representing this company, although occupying a senior post, conducted more actual design work and even made technical drawings. This designer also appeared to have more insight and involvement in the different processes than the designers of larger organisations. This may be partly due to Indiska being a family company, and having a less formal, more 'familial' atmosphere.

⁷ As both Levi's and Pringle are wholesalers as well as retailers, their process must accommodate a sales stage wherefore the timelines diverged significantly from the rest of the sample. For example, at Levi's the work on Spring/Summer 06 started already in October 2004.

⁸ Having the shortest lead times of the companies, TopShop started the collection work later (in April 2005), and could add products far into the actual season, being able to react very quickly on sales in shops.

⁹ Contrary to the designer at H&M, those of Pringle and Levi's did visit factories for the purposes of product development on a regular basis, while the designer of Indiska did so more rarely and mainly for inspirational purposes.

4.5.3.2 How is trend-forecasting situated in the design process of a fashion company at high street, mass-market level?

"I also look at books and surf the Internet. I look at youth culture, the catwalk trends, but mainly British - European is not so interesting for us. I look at lifestyle trends... Then I try to milk out good stories. The stories have to make sense, this is important... The product must eventually speak for itself. The consumer today is very well educated; he wants a good mix of function and aesthetic." (Designer D, 2005: 2)

Trend research constituted an integral part of the design process. All designers included in the study used both *formal* and *informal trend sources* to support the design work. Tables 4.3 and 4.4 at the end of this section provide an overview of the role of formal and informal trend sources respectively. Images 4.1 and 4.2 give visual examples.



△ JACKETS
Cropped silhouettes, either belted or with a nipped-in waist. Washed-out denims and tweeds, either with large and oversized buttons.

▽ SKIRTS
Volume skirts with pleats or gathers. Feminine silhouettes with floral pattern and details, either cut to the knee or ultra-mini.

△ KNITWEAR
Crochet knits in warm autumnal or faded pastel colours and lots of drapey volume to wrap up in.

▽ ACCESSORIES
Long jewelled and pendant chain necklaces, metallic finished bags and an abundance of wide leather belts.

A



Key look 1: black magic

Never underestimate the power of black. The new less-is-more approach to colour this season is perfectly embraced with this simple colour statement as exposing fabric mixes add subtle layers of tone and texture. **Key items:** black-on-black combinations present us with the perfect palette for eveningwear and party, or ones decorative qualities to add depth to simple tailoring. **Key fabrics:** here the look is for contrasting texture - matte with shine, plush with sheer. **Key colours:** black is black.

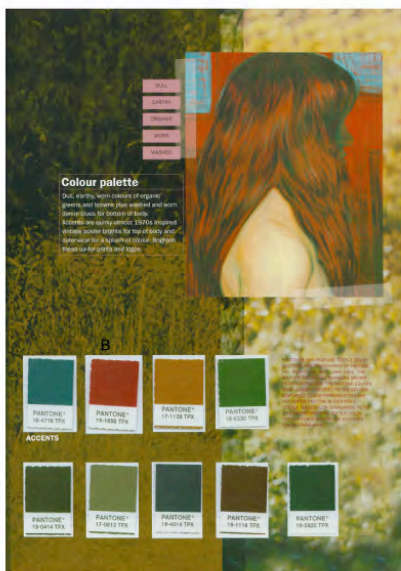
B



Empire line

The defining dress shape placing the emphasis on the bust. This takes on either a fitted bodice or an empire bodice or a delicately cinched bust with full of the empire silhouette.

C



D



E

Image 4.1 Formal trend-sources. A) City report, Amsterdam, autumn 05; B) Catwalk report winter 05/06; C) Silhouettes, winter 06/07; D) Colour theme, winter 06/07; E) Lifestyle. (All Textile View Magazine, 2005: 42, 72, 153, 197. Courtesy of Metropolitan Publishing, 2008)



Image 4.2 A) City research, Tokyo, autumn/winter 2009; B) Mood board, autumn/winter 2009 (Both courtesy of Malin Dyer, 2008); C) Research, autumn/winter 2008 (Courtesy of Ann-Sofie Back, 2008)

Formal trend sources here refers to commercially available trend material offered by trend-forecasting agencies targeting high-street fashion companies. The offer includes trend and colour books¹⁰, trend presentations,¹¹ web sites and consultancy, thus spanning from fairly general material accessed by a large amount of fashion companies, to bespoke services. All material targets a specific season, and often product category; such as men's, women's, children's or sports' wear. The offer from trend-forecasting agencies ranges from inspirational, lifestyle orientated and broad presentations to more prescriptive material with detailed technical drawings. From the study it appeared that most fashion companies accessed a mix of detailed and inspirational material. The fashion designers were not loyal to specific trend-books, but shopped around for novelty.

"I suppose one could say that this thing with buying trend material and not buying trend material, well you notice that there are sort of trends in that as well. I mean our clients are obviously as curious as we are, one wants to try if there are new things appearing and so forth...." (Trend-forecaster I, 2005: 5)

Informal trend sources refers to other sources, such as city trips, magazines¹² and catwalk shows¹³, that the designer consulted for trend research purposes. The decision to include the informal sources was made when, during the interviews, it transpired how important a role these played.

"LA is more market research, check the shops, we went to Rose Ball which is the world's biggest vintage market, that was mostly for inspiration, that is where we bought a lot and I took quite a lot of pictures of people. And Mexico, that was the part of the trip that was pure inspiration for graphics and colours, we visited one of those surf villages, and checked the vibe." (Designer F, 2005: 3)

The designers used trend sources to inform and inspire the design work and, (in particular formal trend sources) to confirm that the product was 'right' - in terms of timing, market

¹⁰ Almost all the designers found colour books more indispensable than trend books and took swatches from the colour books both for the in-house presentations and to specify a dye to the supplier.

¹¹ Audio-visuals and lectures that often take place in relation to a fashion trade fair. The presentations usually consist of a series of themes with a compilation of images (both of general 'lifestyle' and of garments) and short catchy headlines, accompanied by music. The form can be described as being somewhere between a sales pitch and an art performance.

¹² All designers used fashion magazines widely and continuously. They used images for their presentations and generally 'scanned' magazines for new trends. The magazines have much shorter lead times, are more frequently published and cost less than the specialised trend publications. The significance of magazines as a trend source can also be explained by a development where some stylists seem to enjoy as much or even more credibility as trend-setters as designers. And although stylists may not be more trend-aware than designers may be, their output is a lot faster.

¹³ The catwalk shows take place twice annually during the women's and men's wear fashion weeks the most notable of which are set in London, Milan, Paris and New York. Here 'directional' designers show their collections to buyers and press. The garments on show reach the shops approximately six months later. With the advent of the Internet and the swift uploading of catwalk shows on this media, they have become an important resource for fashion professionals. Since the lead times of the high street retailers are so much shorter than those of the brands showing on the catwalk, most designers in this study could use them as a key to what trends and items to add to the collection.

considerations and competitors. Finally, the designers used images and stories from trend-research as arguments or 'evidence' in presentations to 'sell' their ideas to buyers and other colleagues. The designers' respective concept, profiles and target groups guided the trend research. This framework, which in some cases also specified visual direction in quite concrete terms, was prepared by the management and branding staff. The designers' actual work with trends constituted of images being collated from web sites, magazines, trend books and trips, and garment styles, details and prints from samples. Colour stories and swatches were obtained from colour books, web sites and samples. This material was then analysed and categorised into trend themes or stories. The designers created boards, with increasingly more detail, so that the 'mood' and later the collection could be communicated to the team and other relevant staff. When the designers presented their ideas at various stages these boards or slideshow presentations, were important tools to convey the message of a season.

"We try to feel what are obvious key qualities, key items and silhouettes. It should be as rich in detail as possible, we have to convince with evidence and rub in the ideas." (Designer B, 2005: 3)

The trend forecaster confirmed the use of the material stated by the designers with the addition that sketches from trend books were sometimes sent directly to the suppliers.

"...there are some who copy the sketches in the books and as a matter of fact send these to the factory. And then we get really funny email, 'yes in the women's guide bottom of page 53, well that was a best seller... Perhaps you have got a follow-up piece?'" (Trend-forecaster I, 2005: 6)

The designers mainly used formal trend-sources at the start-up phase of the design process, but accessed catwalk reports at a later stage in the process and consulted trend web sites, magazines and went on research trips continuously. The advanced schedule of the wholesalers meant that the value of and access to formal trend-information and fairs was limited to the designers of this category; it mainly constituted colour predictions, normally produced earlier than other information. Because the designers often worked on three seasons simultaneously, the trend material they accessed at any point in time spanned from general inspiration to garment details. Key actors in terms of formal trend sources were UK based online service WGSN¹⁴, and the trend-forecasting companies Trend Union, French, and Svenska Moderådet, Swedish.

"If I am in the office, I check [WGSN] everyday. You get newsletters in the mail every day, and then maybe you check through those quickly to see if there is some special trend... if there is something of interest... they are quite good because you can sign

¹⁴ All participants mentioned World Global Style Network (WGSN), a London based trend-forecasting service, which is accessed through the Internet by a password that subscribers obtain for a substantial fee. Surprisingly it was not the fashion predictions they found most useful but instead shop, city reports (that offer tips on new retail outlets, new restaurants and city areas and exhibitions of interest) and catwalk reports.

up to various areas of interest, for example if I am interested in denim, and then they will send me a report if there is something new on that site...” (Designer F, 2005: 7)

Some key events were especially important for design direction, most notably the fabric fair *Première Vision*^{15 16}, Paris, and the catwalk shows, both of which take place twice annually.

”Especially the catwalk shows are important. They influence what we do, such as a key piece from Marc Jacobs and Chloé. We design around the catwalks.” (Designer E, 2005: 7)

”At *Première Vision* I see all the normal suppliers but what is really exiting to me are the forums with all the new development... we can’t afford the fabrics, so I know it’s a bit cheeky but I order the over headers and ask our suppliers if they can source a similar fabric. I think *Première Vision* is really good for trend direction, to see where it is going. Like last season there was a lot of this girlie Chanel thing going on. Now the tweed is more traditional, more out-doorsey in checks and with muted colours.” (Designer E, 2005:4)

Source	Frequency of use	Purpose of use	Perceived value
Trade fairs	Twice annually, minimum one fair. In the start up phase.	To get an ‘impression’ of the season’s trends and check new fabric developments.	High
Web sites (WGSN)	Almost daily. Continuously through out the process.	Mainly to gather information about travel destinations. Some trend research.	High for city reports Low for trend reports
Trend books	Twice annually, minimum two books. In the start up phase.	Broad inspiration or detailed, prescriptive. Mainly reference point.	Moderate
Colour books	Twice annually, minimum two books. In the start up phase.	As reference point and for swatches to send to suppliers.	Moderate to high
Trend presentations	Twice annually, minimum one presentation. In the start up phase.	Broad inspiration or detailed, prescriptive. Mainly reference point.	Moderate
Trend consultancy	Only sporadically at most companies. Two had regular help in terms of catwalk and city reports.	Isolated lecture or workshop. Customised city and catwalk reports.	Low to high ¹⁷

Table 4.3 Formal trend sources, frequency of use and perceived value

¹⁵ All the designers in the study (as well as some of their buyers) visited trade fairs. These take place approximately a year before the clothes reach the shops. The most important fair for the majority of the sample is *Première Vision*, Paris, the leading European fabric fair that takes place twice a year. At a fair such as PV, the designers accessed both broader, such as general colour charts, and more specific trend information, such as new technological developments in fabrics. In the main the fairs served to give the designers an ‘impression’ of the season that they were about to develop as (with the exception of Pringle and Levi’s) the fabrics offered at *Première Vision* did not fit their price profile. To a lesser extent the designers also visited garment fairs, (such as Bread & Butter, which focuses on street wear and runs in Berlin and Barcelona twice a year, approximately six months before the clothes reach the shops.) This type of visit was predominantly oriented at market research, to see what competitors were doing, and as most fairs are based in metropolis the designers used the occasion to visit shops and watch people in the streets.

¹⁶ The trade fairs also offer trend forums on colour, fabric and print trends. These are commissioned by the fair and created by trend-forecasting companies. There are also trend magazines on offer that provide reports for several seasons in each issue, at different levels of detail, depending on how close to the respective seasons the magazine is produced. The publishers of these magazines (of which View on Textiles was the most frequently named by the interviewees) again commission various trend-forecasting agencies to develop features. The magazines also provide colour and trend predictions from major trade fairs such as *Première Vision*.

¹⁷ Participants pointed out that the consultant has to understand the brand and target group in order for it to be useful.

Source	Frequency of use	Purpose of use	Perceived value
Catwalk shows	Twice annually, through the Internet. The catwalk shows take place when retailers are almost finished with a season. Wholesalers present own collection at this point.	To confirm their own ideas and obtain 'last minute' key items and stories to add to the collection.	High Low value for wholesalers
Magazines	Continuously through out the process.	To find inspiration and source images for presentations.	High
City trips	Approximately six trips per year, some covering several destinations. Retailers mainly metropolis, wholesalers more 'original' destinations.	Market research, look at high-end designers and competitors, buy samples, photograph people in the street.	High
Other, such as exhibitions, books, music, films, festivals, the Internet	Mainly at start up. The participants felt they had not sufficient time to conduct much 'original' research. Therefore the Internet was used for ease and speed.	To add authenticity to a trend story, in terms of both mood and detail.	High when possible due to time constraints

Table 4.4 Informal trend sources, frequency of use and perceived value

The process of the trend-forecasting agency represented in the study largely replicated the trend process of the fashion companies. It even consulted other formal trend sources, such as presentations, although it refrained from purchasing material.

"We make a point of not buying so that nobody should think that we copy." (Trend-forecaster I, 2005: 5)

4.5.3.3 How is environmental work conducted in a fashion company with a high-street, mass-market profile?

This section starts with a more in-depth account of the environmental work at H&M, which is informed by the interviews with the designer, buyer and Manager of CSR at H&M and H&M's Annual and CSR Reports. (H&M, 2005; and 2008) The section proceeds to address the environmental work across the sample of designers and organisations.

4.5.3.3.1 Environmental work at H&M – an overview

H&M has had CSR strategies and documents in place since 1997. It defines CSR as "a concept whereby companies integrate social and environmental concern in their business operations and in their interaction with their stake-holders on a voluntary basis in order to meet or exceed the ethical, legal, commercial and public expectations that society has of business". (H&M, 2005) The CSR department is based at H&M's offices in Stockholm. The Manager of CSR reports directly to the Managing Director and is part of the management team. The suppliers' compliance with Code of Conduct is monitored by Code of Conduct auditors and over a hundred quality controllers based in the various production offices. Reports are communicated both to the local office and to the CSR department in Stockholm. H&M has environmental representatives in its advertising, building, IT, logistics, travel and

H&M Rowells (the mail-order collection) departments as well as in all production and sales offices. The role of these representatives is mainly to “be the communicative link with the CSR department”. (H&M, 2005) Staff that makes decisions that H&M deems of high environmental bearing, such as the logistics department, undergo more in-depth environmental training. The garment designers and buyers are not included in these ‘key groups’. In terms of other staff the focus is on awareness building. Environmental information is conveyed through the Internet and an Intranet, in an internal newsletter, through optional courses in the buying department and in ‘key groups’ training programmes. (H&M, 2005) The CSR work is carried out through Code of Conduct documents that all suppliers must sign before they are contracted. (Code of Conduct was introduced in Chapter 2, **2.4.1.1**)

The main environmentally problematic areas associated with H&M’s operations, as presented in the CSR Reports are the dyeing and processing of fibres and fabrics (including water pollution and chemical treatment), carbon dioxide emissions associated with transport and waste (in terms of packaging, display material etc). The environmental part of the Code of Conduct includes a Chemical Restriction List that defines hazardous substances that H&M bans or seeks to minimise. H&M creates its restriction list to comply with the distribution country with the most rigorous legislation for any particular substance and EU legislation (REACH). The list also includes chemicals that H&M has made a proactive choice not to use. In addition, this document includes guidelines on waste management of hazardous substances and chemicals. According to H&M’s CSR Report and the interviews, all fabrics are sent to test laboratories, in most cases externally. A statement from the Manager of CSR of H&M in 2005 suggests shifts in approaches to environmental and ethical work: “from ‘policing’ to constructive interaction with suppliers to achieve sustainable improvements” and “to start asking the question ‘why’ things are wrong rather than just observing ‘what’ is wrong”. (H&M, 2005: 4) Since the time of the case study, H&M’s work in the sustainability realm has indeed expanded, and become more transparent. Most notable is the steep increase in use of organic cotton; 2007 saw H&M launch ranges of 100% organic cotton for men, women and children. (H&M, 2008)

In terms of the environmental practices at H&M, the designer and buyer could offer very little information. Similarly, the Manager of CSR had limited knowledge of how environmental practices were situated within the design process. As foreseen, none of the three participants could offer a full account of the lifecycle of a product. In the case of the Manager of CSR, the information given focused on the process and production stages. The distribution and the retail environment were also discussed, but neither use/maintenance nor end-of-life were mentioned. The designer and buyer’s accounts of the product journey stopped at the point when products go into production to resume when sales figures from a previous season were analysed at the start-up phase of a new season. In addition, the designer possessed some information regarding marketing and retail, but not in terms of

environmental practices. The quotes below illustrate some of the participants' views on environmental improvement at H&M.

The designer's view:

"Most of the environmental work is conducted in the production countries. But I obviously know that we for example don't work with PVC, nickel and cadmium. I haven't really thought a lot about this. I believe legislation and media are the most influential factors. It is very dangerous to get on the wrong side of the media. We don't talk a lot about this kind of thing in the team, but obviously it is important. It does feel unfair that H&M is often portrayed as the worst culprit, we have to take a lot of shit, although we often carry the heaviest burden." (Designer B, 2005: 5)

The buyer's view:

"We don't have to deal with it that much, the Quality Department does that. The Quality Department informs all the production offices about which qualities we can use. All buyers and designers know certain things, such as the fact that H&M doesn't work with PVC. The production offices conduct tests on all materials. If a material contains for example chemicals that H&M doesn't approve, the material will be stopped before it has gone into production. All suppliers receive information on what H&M accepts and what we will not accept. Each country has its own lab where they test all materials... The Quality Department will visit us buyers and tell us about new developments. We can check on the Intranet as well. But most of the time we are not involved, unless there is a problem with a material or a supplier... I wouldn't want to be more involved in environmental issues than I am, we already have so much to do." (Designer C, 2005: 5-6)

The Manager of CSR's view:

"We don't have direct contact with those responsible for design as the design phase does not have direct environmental impact." (Manager of CSR A, 2005: 6)

"We have of course the Chemical Restriction List that describes which chemicals we don't work with, but this is directed at production. In practical terms, the designer designs the garment and the buyer specifies the material and finish together with the designer. After this the Quality Department conducts tests on the material. If the tests show that we can't approve the material because it does not meet our standards, the designer has to compromise and use a material that is acceptable... I think it's rare that the designer is brought in at that stage. Possibly the buyer. In this way the designer doesn't need to limit herself in the design phase, instead the environmental aspects become more of a technical issue in the production phase." (Manager of CSR A, 2005: 6)

4.5.3.3.2 Environmental work across the sample of designers and organisations

"It [the responsibility for environmental issues] probably lies more with those working with development. Because we only work with it on a visual level. We only see to that and say this is what we want. And then how it is developed, I don't give a damn." (Designer F, 2005: 11)

The environmental work of all organisations represented in the study focused on the process and production stages of the fashion product lifecycle. In the main, it was separated from the design process and designer role and conducted by specialised staff. According to the designers, they had no direct involvement in environmental work, and no direct contact with

environmental staff, which was confirmed by the Manager of CSR at H&M. (Manager of CSR A, 2005: 6) There were some choices that designers and buyers were involved in, such as not specifying PVC or fur (the latter of which is essentially an ethical rather than environmental stand point). The Manager of CSR at H&M pointed out discrete areas where designers' involvement might be desirable or possible.¹⁸

Although H&M had a well-established CSR department and auditing process, most environmental work was 'out-sourced' to the suppliers via a Code of Conduct document. Although generally the company's environmental guidelines 'merely' complied with legislation, some proactive initiatives went beyond what legislation requires.

The environmental work across all companies included in the study appeared primarily driven by legislation. It mainly constituted of eliminating hazardous substances through a series of constraints in a 'tick-box' manner. As the scale and speed of the operations were not addressed, nor lifecycle stages beyond the companies' immediate control, such as use and disposal, the environmental work was situated at product rather than systems level. The strategies can be described as techno-centric, quantitative and operational in nature rather than qualitative, systemic and creative. No eco-design principles were implemented in any company, and to date H&M's corporate documents make no mention of direct designer involvement in environmental improvement.

No designer voiced ideas as to what designers might do to decrease environmental impact (beyond learning more about dyes and fabrics, which they generally thought was the buyer's remit). The designers' expressed knowledge on environmental issues and strategies was restricted to certain 'sample facts' such as the company's decision not use PVC, but few links were made between these facts. The designers themselves expressed awareness that their knowledge was limited.

"I know the bleaching of cotton causes huge amounts of damage to the environment, contaminating the local water, which effects cattle and crops... other than that I am not educated in this area, unfortunately." (Designer E, 2005: 6)

Most of the designers interviewed considered their companies to be stronger in the realm of social issues than environmental issues. This was confirmed by their web sites. (See e.g. Arcadia Group, 2005; Indiska, 2005) The links between humane and environmental issues were not mentioned.

"There is more focus on humane aspects than on ecology. We have a person who works with these issues full-time, but to a large degree it is the humane aspects she works with, not so much ecology." (Designer G, 2005: 6)

¹⁸ "It may be beneficial for designers to be knowledgeable about materials which are not easily replaceable, such as endangered shells. If a particular designer voiced interest a small, contained

Figure 4.8 below draws out the key themes generated from the study on the process of the mass-market segment of the fashion industry.

Limited insight into lifecycle stages beyond immediate scope of work	The organisations represented in the study were highly specialised so that the individual designer only worked and had direct insight into few product lifecycle stages.
Limited design of actual products	The designers' role was mainly one of a co-ordinator with little actual design output. This was instead delegated to assistants and suppliers.
Fast pace, frequent travel	The designers worked with three seasons simultaneously at times, were expected to turn out work fast, and travel frequently.
Discrepancy in timelines at retailers and wholesalers	Because of an added sales stage, wholesalers start and end dates for work with a season were placed earlier than for retailers, which affected access to formal trend sources.
Trend research integral	Trend research was an integral part of the design process and constituted use of both formal and informal trend sources.
Trend research for information, inspiration, confirmation, persuasion	Designers used trend material to inform and inspire design, to receive confirmation of ideas, and as evidence when 'selling' ideas to colleagues.
Company profile in relation to trend sources	The company profile, i.e. retailer or retailer-wholesaler dictated which formal sources were used. For the latter, because the design work took place further in advance, only colour predictions were available.
Visionary - open, or detailed - specific trend sources	Trend predictions ranged from the open and visionary to the detailed and prescriptive.
Key points in time and frequency of use of trend sources	Designers mainly used formal trend sources at the start-up phase, but web sites and magazines were consulted continuously, and trips took place throughout the process.
Key trend events	Key events for trend research in relation to design direction were trade fairs, most notably <i>Première Vision</i> , and the catwalk shows.
Key trend actors	The trend-forecasting agencies most frequently named were UK based online service WGSN, French company TrendUnion and Swedish Moderådet.
Designers separated from environmental work	The environmental work was separated from the design work, which both designers and environmental staff considered appropriate. No eco-design principles were mentioned.
Fragmented knowledge/sample facts	The designers had a fragmented awareness of environmental issues. They expressed their knowledge in isolated 'sample facts' which were not linked up.
Limited lifecycle approach	The environmental work mainly took place at process and product level rather than systems level. It did not take into account the full lifecycle. It primarily complied with legislation instead of being proactive.
Tick-box system	The environmental work appeared to primarily constitute of 'tick box systems' geared at limiting e.g. hazardous substances.
Focus on human issues over environmental issues	The participants perceived social issues to be prioritised over environmental issues in their organisation.

Figure 4.8 Process themes

4.5.4 Understanding the relationships

4.5.4.1 What drives design work in the fashion industry's mass-market segment?

project focused on recycling might be possible.” (Interview A, 2005: 5 and 7)

“When we sit down in order to start an intake, the buyers have prepared figures that are based on last year’s season. What sold, what didn’t sell? Perhaps the budget has been cut for a product group if it didn’t sell particularly well last year, or if it doesn’t seem of interest to the intake we are preparing. If nothing sold last season one may choose to start from scratch and avoid looking back.” (Designer G, 2005: 4-5)

“The design brief consists of the previous figures, what sold well. It is like a business and line plan. We get all the product categories and specifications of how many v-necks, what the products can cost and so forth. The head of sales is involved in creating the brief.” (Designer D, 2005: 5)

Unsurprisingly the key factor, in terms of what guided design direction in the represented companies, was ‘what the market wants’. The nature of the design brief embodied this bottom line as it was based on previous sales figures. The design brief did not include environmental requirements or goals.

Almost all the designers (and the buyer) perceived their work as driven by the market, and their organisations as ‘buyer driven’. The relationship between designer and buyer emerged a significant one, explicitly addressed by all designers, and not without friction. Although they were realistic about their work’s commercial context, some designers expressed frustration about the negotiation process that ‘selling’ their ideas constituted.

“...you become a killer sales person because you don’t have the authority to decide. You just have to sell your ideas. And justify and know why and why and why. That is something you have to be good at. If you can’t be verbal about why you have thought, that it should look this way then you are finished, you should only be an assistant. In fact, it doesn’t matter if you have the best ‘touch’ in the world if you can’t sell.” (Designer H, 2005: 15)

Although all designers occupied senior positions, their roles were mainly operational. None were included in more strategic discussions about product ranges or the company’s future.¹⁹ The designers did have continuous contact with buyers or equivalent and most met with economists and marketing representatives at sparse but regular points in time. However, these contacts were confined to one layer of the hierarchy and related to operational and practical matters, although input from designers fed into some strategic decisions.

“It is very concrete: 5 blouses, 3 T-shirts, etc. But afterwards we designers will sit down with the boss and think about what kind of blouses these blouses are. Perhaps we think that blouses are so important that we ask to change our composition to 8 blouses and no t-shirts.” (Designer G, 2005: 5)

4.5.4.2 To what extent is trend-forecasting a driver of high street, mass-market fashion?

¹⁹ Out of the companies represented in the study, Top Shop appeared to have the most hierarchical organisation, with senior, junior and assistant members of staff whereas Indiska, a family company, appeared to have the flattest organisation.

The design brief was also informed by designers' trend research, and it was clear that the trend work – an integral part of the design process - guided design direction.

Much of the trend research constituted of looking at competitors and leading brands, and a proportion of the design work the 'tweaking' of previous bestsellers or samples from competitors. This system of self-reference must be understood in the context of the extreme speed and competitiveness of mass-market fashion, which presumably creates a degree of fear. 'Wrong' fashion decisions result in loss of market share, and reductions in share value. In such a context, the influence that trend-forecasting agencies yielded over the fashion companies is not difficult to understand - none dared not to consult them. This in turn arguably resulted in the predictions of major forecasters actually becoming reality, which in turn confirmed and boosted their influence.

"[We use the trend sources] so that we make sure that we are on trend with the rest of the market as we know they all use the same agencies." (Designer D, 2005: 2)

4.5.4.3 What is the experience of trend research in the fashion industry's mass-market segment?

Yet, there appeared to be some contradictions in the designers' experience of the role of trend-research. As all activities were filtered by considerations of brand profile, price category and target group, the trend research and 'conceptual' stage of the design process was directed and convergent rather than open and visionary. Unsurprisingly under the circumstances, the designers looked mainly for concrete and specific fashion trends, rather than broad and visionary lifestyle trends.

"We work in a reality where we have to look at what Gucci does and what they do at Prada and what things from them will be big in terms of high street level. That is where we are." (Designer H, 2005: 3)

"Well, why a tunic? Because I've seen it on trips, or this is a very big colour at Première Vision, and all trend bureaux have shown this. That's why one has all the information that one has to collect." (Designer H, 2005: 15)

"...if one is a designer and one is having a really hard time with some daft buyer, in such a case the material can also work as a, have a look at this, this is what they are saying and this is what they have done in [name of agency] books. So in that situation it sort of becomes a tool to make something happen." (Trend-forecaster I, 2005: 7)

On the other hand, the designers preferred the broader outlook, and the independent research. They felt that their 'trend-awareness' was higher than that of the trend-forecasting companies (and the buyers). Two designers expressed frustration about their 'trend-awareness' not being fully respected in the organisation, and several that time constraints limited original research so that in the main the research constituted of consulting secondary sources. There appeared to be a hierarchy in trend-research where the more visionary reports were favoured over the prescriptive, and original research over commercially

available sources. Yet in reality, because of time constraints, and demands on specific 'evidence', the least favoured type of sources was that predominantly used.

"[The worst thing about being a designer is] to constantly be reminded of the market, i.e. that it has to be commercial. There is no respect for designers' sense to predict trends. One does have a certain sense of what is going to happen." (Designer F, 2005: 13)

"I go to shops in London, to markets. I go to exhibitions... What is a shame is that one rarely has the time to do those things. I use the Internet a lot. ... it's much easier and it's much quicker to check on the Internet than books, exhibitions or film or music. It saves time." (Designer F, 2005: 9)

Furthermore, the designers sometimes spoke in derogative terms of both their own trend research, and of trend-forecasting agencies, and were apologetic about this aspect, a significant part, of the work.

"Trend books and trend presentations are important for our work mostly to check whether they feel strongly about the same things that we do or if they have some other trend that we haven't thought about and that may spur new thought. However, sometimes it can feel as if we have already done everything as we are quick at recognising trends and as trend books quickly become dated." (Designer B, 2005: 3)

"We buy colour charts from TrendUnion but I actually mainly use those as a point of reference. I usually think that their colours are rather ugly so in fact it sort of works as an anti-inspiration." (Designer G, 2005: 8)

"We buy TrendUnion's books. I visit Première Vision, Pitti Filati and Shirt Avenue. I go to seminars by Pecler's at Pitti Filati. Pecler's is more concrete than Trend Union. I look at colours and garment techniques. But you have to take what they say with a pinch of salt." (Designer D, 2005: 1)

4.5.4.4 What drives environmental work in the fashion industry's mass-market segment?

In the main, the participants saw top-down strategies, such as legislation and other policies, as the best way to achieve environmental improvement generally, as well as what drove such work in their organisation. Only one participant offered 'company philosophy' as a driving force for CSR work.²⁰ Media was also mentioned as an important factor, although participants experienced that their organisation was unfairly treated in coverage.

"I haven't really thought a lot about this. I believe legislation and media are the most influential factors. It is very dangerous to get on the wrong side of the media. We don't talk a lot about this kind of thing in the team, but obviously it is important. It does feel unfair that H&M is often portrayed as the worst culprit, we have to take a lot of shit, although we often carry the heaviest burden." (Designer B, 2005: 5)

²⁰ H&M's CSR report also speaks of CSR work as part of the company philosophy. (H&M, 2005)

The participants felt that they, as individuals and representatives of an organisation, rated environmental issues more highly than did others (companies, consumers and general zeitgeist) and compared their company's ('good') practice to other companies' ('bad') practice.

"I think it is mostly legislation... at the end of the day, I don't think that it is the consumer because the consumer would rather have cheap products." (Interview F, 2005: 12)

The Manager of CSR at H&M also referred to top-down, formal driving forces as those most influential. In terms of the environmental work at H&M she felt that her initiatives, and central position in the organisation, were key drivers. In fact, the CSR department at H&M was established on her initiative on her return from working in production countries. She attributed her own engagement to experiencing conditions of production first hand.

"It feels important that I am part of the management team. This means that the environmental issues are well anchored with for example the head of finance. The fact that I as head of CSR am located in the management team means that the CSR issues are placed centrally in the organisation, this lends weight, substance." (Interview A, 2005: 4)

"[The CSR department was set up in 1997] because I came home at this time. I had been in the production countries and I had seen the needs with my own eyes in for example Bangladesh and Pakistan. I spent much of the 1990s in a suitcase visiting the factories and the local offices. When one gets closer to the production it is easier to feel engaged. I personally felt for these issues. But environmental and social issues were already on the agenda of H&M, these issues had popped up more and more during the 90s, for example through the Clean Clothes Campaign in Holland and Belgium. It was primarily the social issues that one started to discuss more at this point in time. We were no better nor worse than anybody else. One had standard agreements/contracts, but no real control over whether they were observed out in the factories." (Interview A, 2005: 2)

Figure 4.9 below draws out some key insights from the study of relations between trend, design and environmental in the fashion industry at mass-market level.

A design brief based on sales figures	The design brief was built on previous sales figures and written by economy-related staff, with some trend input from designers.
Buyer-driven organisation	The designers perceived their work as driven by the market, and their organisations as 'buyer driven'. Although realistic about their work's commercial context, some expressed frustration about the negotiation process that 'selling' their ideas constituted, and about not being party of strategic decisions.
Operational rather than strategic design role	The concept - in strategic terms and to some extent visually - was prescribed by senior (non-designer) colleagues and outside the designers' scope. This meant that the designers mainly had an operational role.
Directed trend research	In the main designers looked for concrete fashion trends rather than broad lifestyle trends and senior colleagues defined the scope of the research.
Fashion is self-referential	The fashion industry refers back to itself to seek guidance for design direction. Much of the trend-research constituted of looking at competitors and leading brands.
Relative trend-awareness	The designers felt that their trend-awareness was higher than that of the buyers and trend-forecasting companies.
Derogative attitude to trend research	The designers spoke of trend-forecasting companies in a derogative manner and belittled the role of their own trend-research - an integral part of their work.
Hierarchy of trend research	Independent research and visionary material were valued over prescriptive trend sources. However, in terms of actual use the latter dominated.
Top-down driving forces	The participants saw top-down strategies, such as legislation and other policies, as the best way to achieve environmental improvement.
I/we and the others	The participants felt that they rated environmental issues more highly than others (companies, consumers and general zeitgeist). They compared their company's ('good') practice to other companies' ('bad') practice.
First hand experience drives involvement	The Manager of CSR's engagement with sustainability stemmed from experiencing working conditions first hand.
Individuals take initiatives	The CSR department at H&M was established on the initiative of the Manager of CSR.

Figure 4.9 Relationships themes

4.5.5 Understanding the rationales

4.5.5.1 What motivates designers operating in the fashion industry's mass-market segment?

The designers saw the creativity in drawing up general trends and colour themes as the most rewarding part of their work. They expressed interest in what they saw as the 'big picture'.

"[The most enjoyable part of the work is] to create the trends, the broad outline. To work with the big concepts and then to see garments in the shops." (Designer G, 2005: 8)

"I was always artistic, I like drawing, I am very tactile and like fabrics. I also like seeing different cultures when I travel. I never wanted to spend all my time in front of a computer." (Designer E, 2005: 8)

Yet, the designer role as it appeared in the designers' accounts was in the main operational rather than strategic. In terms of the probable general view of fashion design, a highly

creative and artistic area, the reality for those designers included in the study differed significantly. Only a small part of their overall workload constituted of 'typical' creative tasks, such as collating colours or drawing, and creativity had strict boundaries.

All designers described time constraints as a key disadvantage of the profession. On a practical level stress was related to fitting a variety of tasks, which involved contacts with several different professionals into a very limited time schedule, with frequent travel interrupting the flow. On a conceptual level working in an industry where a very fast and constantly 'new' output is essential caused stress. In addition, the constant compromises resulting from having to consider a wide range of parameters, such as budget, target group and brand profile meant that some designers experienced disappointment in the final results.

"The worst part is the stress and it's sometimes boring to have to do the more concrete stuff such as measurement lists and technical drawings and that kind of thing. Another thing that is negative is that it's difficult to make time for creative work." (Designer G, 2005: 8)

The discrepancy between the reality of the design work at mass-market level, and what the designers found most rewarding appeared significant.²¹ Yet, the negotiation between individual expression and demands of profit is natural in the commercial realm and the designers were fully aware of the context in which they worked. In the main, they seemed satisfied with their work in the fashion industry. There were several bonuses, such as interesting journeys and the freedom that the work presented. Their accounts suggested that commercial success had to some degree replaced the satisfaction of creative fulfilment. When a designer's products fared well with the consumers, not only was this a satisfactory conclusion of a period of hard work, and showed the company that the designer's 'trend awareness' was trustworthy, it also boosted the designer's decision mandate for the subsequent season.

"The most enjoyable thing is producing nice garments, and the confirmation one receives when the sales are good." (Designer B, 2005: 6)

"The best thing is that it presents freedom with responsibility. I find the teamwork creatively rewarding. I wouldn't want to work entirely alone. It's sometimes stressful to work on different seasons simultaneously. It's also rewarding to see people wearing things we have made. We were talking the other day about how if one were to lay out all the 10.000 garments, how far they would reach." (Designer C, 2005: 6)

The trend work constituted an integral part of the design work, and a part highly valued by the designers. Yet here, again, some conflicts were staged in hierarchies of trend research, and an apologetic attitude to it in general. No designer was vocal as to how the process of gathering and sorting trend material actually worked. Instead the designers frequently spoke of *gut-feeling* guiding them to the 'right' look and this work therefore appeared largely based

²¹ The standard fashion design degree emphasises creative individual expression.

on intuition, an unconscious processing of visual ‘facts’.²² Although the research served to convince non-designer colleagues, the arguments were often after constructions of a non-linear journey where they had ‘known’ what was ‘right’ at an early stage, and later sought ‘evidence’ to back up their ideas. Only one of the participants used the word *research* to describe the process of gathering information and inspiration and subsequent analysis, and she was the sole participant with a Master’s degree.²³ The designers seemed to have acquired a type of tacit knowledge - trend awareness - resulting from their living in the fashion cycle. (This awareness is further discussed in Chapter 5, 5.7.3) The designers’ uneasy relationship to trend work may be partly attributable to the silent knowledge and process it appeared to constitute.

“Most of the time (the ideas are) concrete. Sometimes a feeling, a gut-feeling that this feels exciting. Like in LA where there was a special 2nd hand shop that had collected especially many garments from a certain part of the 1970s and which felt un-exploited.” (Designer G, 2005: 2)

4.5.5.2 What are the reasons why fashion designers do not engage more in environmental improvement?

“All designers know that we don’t work with PVC. But otherwise, we don’t believe in putting demands on the designers, we don’t have any interest in that. We don’t want to restrict their creativity. The most important thing is that they are creative in the design phase and therefore the limitations are placed in the production phase, with the exception for example of the case of PVC or fur. It is a conscious decision to not involve designers in the environmental work.” (Manager of CSR A, 2005: 5)

All designers claimed that environmental issues were important to them and their organisations. A few stated a wish for a higher degree of involvement in environmental improvement, yet it appeared that in the main all parties were satisfied with the separation between design and environmental work.²⁴ The Manager of CSR described that not giving designers environmental constraints was in fact a strategy at H&M. Generally, time limitations were stated as a reason for designers’ non-involvement in environmental improvement. A more fundamental reason appeared to be ‘because the designers did not have to’, and because ‘they weren’t invited to’. Since environmental work was primarily placed in the production and process stages, it was considered outside the scope of the designer role - by both designers and environmental staff.

The above suggests underlying assumptions about both the designer role and environmental work:

²² All the fashion designers (and the buyer and trend-forecaster) participants frequently used words such as *feel* and *sense* in relation to their decisions.

²³ Other participants used the made up term ‘*to trend*’ (these were Swedish participants. I have translated Swedish *att trenda* with *to trend*) or had no specific term for this part of the process.

²⁴ Several participants mentioned children’s wear as an area where designers are actively involved in safety issues, but these adhered to garment construction rather than environmental issues.

- The particular creativity of designers is not compatible with, or not valuable for environmental improvement;
- Environmental issues should be addressed at product rather than systems level and therefore not in the conceptualisation and design stages.

The interviews further qualified the resistance to engage with environmental work, which can be described as a series of myths, or stereotypes:

- The consumer is not interested in environmentally friendlier fashion;
- Environmentally friendlier fashion is more time consuming to design and costlier to produce;
- Natural material are always superior to man-made (therefore limiting designer options);
- Environmentally friendlier clothing has an unfashionable 'look'²⁵;
- Environmentally friendlier fashion is not compatible with the profile of fast, low price, mass-market fashion.

"The Eco wave during the mid 90s didn't help. It spread these prejudices and then there was a backlash. After all beige it just went to black and lime. We did have an organic line with a 'label' of our own called Eco-cotton, but it didn't sell. Within fashion organic is marginal and difficult, the consumer doesn't understand the 'added value/USP'. Especially at H&M where the focus is fashion at a low price, organic is not the right selling point, instead it can repel consumers." (Manager of CSR A, 2005: 3)

"H&M is too commercial for re-used clothes and materials to work. If we were to do something around recycled garments, and involve designers more actively in the environmental work, this would be an isolated, limited project, apart from the regular concepts. If designers were to show an interest, I can't see why this would not be possible, but it would not be something big." (Manager of CSR, 2005: 6)

These perceptions appeared not to be based on cohesive information. Instead they were founded on 'sample facts' that the designers had been fed at work and from popular debate. The circulating assumptions permeating the fashion industry (and probably beyond) had, because they were so frequently repeated and 'triangulated' by different sources, become *truths*.

The participants did not actually *know* which were the best fibres to specify (which is in itself a complex and relative matter). They did not *know* that consumers would be repelled by explicitly environmentally friendly fashion. They did not *know* that environmental improvement would result in higher production costs and more expensive products, or that it would be too time-consuming for them to engage with environmental issues. They did however have many assumptions. It seems possible that these assumptions provide an

²⁵ Participants often referred to the Eco-looks of the late 1980's and early 1990's and the resulting consumer backlash. They assumed that environmentally friendly fashion today would share that 'look'

obstacle to a further engagement with environmental issues and that they block a creative process where designers may find ways of reconciling fashion with more environmentally sound practices. The participants seemed to use the stereotypes, or perceived truths, as arguments and justification for their lack of involvement. The designer participants recognised their limited knowledge of environmental issues and strategies and expressed a lack of confidence in relation to environmental work, referring to specialist staff.

The language that the designers used in reference to environmental improvement - "we are not allowed", "we can't use", "they are very rigorous" – indicated that it was communicated as a set of limitations. The language used in the organisations' reports on environmental policies was in the main of quantitative and scientific nature – thus distinctly removed from the emotive, and experiential style of general fashion communications. It is therefore not surprising if the participants viewed environmental issues as a constraint rather than a creative opportunity. They were perceived as yet another restriction to the creative process, alongside time and budget constraints, and consideration of target group and brand profile.

Finally, the designers expressed cynicism as regards the future of environmental improvement, again referring to a rigorous commercial framework, guiding both corporations and consumers.

"To be crude [designers might get involved] if environmental issues came into fashion." (Designer B, 2005: 5)

"But unfortunately, ecology is not a topic of interest, people are not interested. It is a long way to go. Hopefully once the humane aspects are sorted with working conditions and so forth, it will be easier to set to work with the ecology." (Designer G, 2005: 6)

"...everybody including the customer wants the best price, to make the best profit margins if you are the buyer or to make the best saving if you are the customer". (Designer E, 2005: 6-7)

"We tried recycled denim... but it didn't work. The eco-trend may have worked in the 90's but people in 2000 are so decadent. Fashion is disposable and people don't care about the environment. They do care if the product doesn't match up to the price. If it's not special enough. So eco-fashion doesn't work." (Designer D, 2005: 5)

4.5.5.3 How do background factors such as individuals' education and role, and a company's organisation, profile and culture influence its readiness to adopt environmental practices?

There were a number of factors in the companies' structure and in the individuals' profiles that might hinder but also provide opportunities for design led environmental improvement.

and subsequently fare poorly with the consumer. (See Chapter 2, 2.1.2, for a discussion of the legacy of early eco-fashion.)

Mainstream fashion design education at BA level (the predominant background of the designer participants) emphasises practical skills, individual expression and a certain type of creativity²⁶ over critical analysis. No participant had received environmental education at BA level. As it appeared, the standard fashion educational framework did not promote the holistic problem solving and the open-minded interdisciplinary teamwork that are implied by a paradigm of sustainability, and resultantly it did not support proactive environmental improvement. In their professional lives, fashion designers again were not educated in environmental issues beyond isolated 'sample facts', and their understanding of environmental problems and potential solutions were clouded by stereotypes. They were also not encouraged to use their creativity on a strategic level or to employ critical thinking beyond immediate, mostly practical tasks. However, some participants did express interest in more in-depth information, which, they said, would encourage their involvement in environmental work.

The fashion designer at mass-market level appeared to occupy a 'high status, low status job'. On the surface a creative, dynamic profession, the designers in this study expressed ambiguity about their work in the fashion industry. This came through in defensive attitudes as regards environmental work, in how only a proportion of the work was experienced as genuinely creative, the experience of not being trusted, and the uneasy relationship to trend work.

Fashion is a discipline underpinned by little theory (scarcely accessed by professionals outside academia). The research methods used in trend prediction are not formalised or described in terms that resonate with those found in formal research methods, if indeed described at all. In fashion education, the trend work, which has a prominent role in the actual work, is largely ignored or not explicitly addressed. The partial unease with the fashion profession may relate to and have bearing on the environmental problems associated with fashion, and potential improvements, and is discussed in the conclusive section of this study report.

The designers saw the creativity in drawing up general trends and colour themes as the most rewarding part of their work. They expressed interest in what they saw as the 'big picture'. In reality the fashion companies were compartmentalised into creative, strategic-financial and CSR staff and work. Designers had little connection with actual production and associated impacts. These circumstances appeared to result in a lack of engagement with environmental issues. On the other hand, direct insight (to actually experience and see production and related impacts on site) was perceived as positive in terms of spurring more interest and involvement. The designers seemed to experience some lack of respect for

²⁶ Such as generating 'wild' but practically manageable ideas, and experimentation with materials and techniques.

fashion from both non-designers and themselves. In jocular mannerism, they confirmed the stereotypes about fashion. The designers therefore appeared locked in a role that they were not wholly comfortable with. Realistic about, and mostly content with the commercial framework of fashion, the designers still displayed some cynicism and frustration. They implied that the system of fast cheap fashion could never change and pointed to previous, in their view failed, attempts of environmental improvement in fashion.

This study lacks the scope to explore the company culture of the represented companies in depth. However, some significant points on company culture were raised by the participants. The designer at Indiska felt that her company conducted CSR work (mainly in the social area) because “we want to feel ok about what we produce”. (Designer G, 2005: 7) She also voiced how she saw her company as more friendly²⁷ and less profit driven than the other four organisations she had worked for.²⁸ From studying H&M, another but equally significant type of corporate culture emerged. Both the buyer and the Manager of CSR valued the “freedom with responsibility” that offered room for individual initiatives, and which was perceived as a significant part of H&M’s success. An especially illustrative example of how an individual enjoyed the trust to drive an issue in such a large organisation was how the Manager of CSR at H&M established the CSR department after she had seen “the needs with my own eyes” on her frequent travels. (Manager of CSR A, 2005: 2) A system characterised by a balance of rigour and flexibility can be described by the term *Bounded Instability* and will be explored in Chapter 5, 5.2.5.

Company culture evolves organically, and can therefore not be seen as a direct instrument for the implementation of environmental improvement. However it may be of interest to study those companies with successful CSR work as there may be elements in the culture that support CSR work and that can be transferable to other organisations.

Figure 4.10 below draws out some of the key insights from the study of rationales in the fashion industry’s mass-market segment.

²⁷ An example of which was generous policies on maternal or paternal leave.

²⁸ Indiska appeared the least hierarchical company of those represented in the study. It is a family business in the third generation, and since its start in 1901 the family has cultivated close relationships with suppliers in India, and send designers and buyers there for inspirational trips annually. The relationship with India constitutes a core of the brand, which had resulted in both professional and emotional bonds with this country and the people in the factories.

Creativity - big picture	The designers saw the creativity in drawing up general trends and colour themes as the most rewarding part of their work.
Limited creativity	In terms of the probable general view of fashion design, a highly creative and artistic area, the reality for the designers included in the study differed significantly, with a large body of the work of administrative nature.
Stress	The designer participants experienced stress at two levels: on a practical level fitting a variety of tasks into a limited time schedule, on a conceptual level coping with the demands of very fast and constantly new output.
Sales are rewarding	The designers considered the confirmation they got from good sales rewarding. The commercial success of a product to some extent replaced the satisfaction of a creative fulfilment, which the framework did not allow.
Self-fulfilling prophecies	The influence the trend-forecasting companies seemed to yield over fashion companies meant that the predictions of major forecasters did become reality, which in turn confirmed and boosted their influence.
Trend research a tacit process	The designers' trend-research seemed guided by intuition and the designers were not articulate about the processes.
A high status low status job	The perception - internally and externally - of fashion was ambiguous. The designers experienced a lack of respect of fashion from both non-designers and themselves. At the same time, in jocular mannerisms they confirmed the stereotypes about fashion.
Environmental stereotypes	Much of the participants' understanding of environmental issues and practice seemed based on assumptions that had acquired the status of truths. These truths muddled the debate but also provided arguments against proactive involvement.
Environmental improvement is outside the scope of the designer role	The fashion companies were compartmentalised into creative, strategic-financial and CSR staff and work. Environmental work was placed in production and process stages.
Environmental concerns are anathema to fashion	The participants perceived environmental concerns an anathema to fashion, in particular to the low price segment of the fashion industry.
Lack of confidence	The designer participants were aware of their limited knowledge; they expressed a lack of confidence in relation to environmental issues and referred to specialist staff.
Constraint culture	The environmental work was carried out through and perceived by designers as constraints rather than creative opportunities.
Money over morals	The participants had low trust in corporations' and consumers' motivation to do 'right'. Instead they experienced drive for profit and savings as an overriding force.

Figure 4.10 Rationales themes

4.6 Conclusions and discussion

This section discusses the findings of the first empirical study of the PhD thesis. It opens by introducing overarching, emergent themes, and proceeds to offer recommendations for the second empirical study, and reflections on the research process.

4.6.1 Emergent themes

The emergent themes constitute a synthesis and interpretation of the key findings generated through the study. The findings were mapped, and links, in terms of both compatibility and incompatibility with the overall aims of this the PhD project, were identified. The emergent themes were organised according to their estimated role (counteractive - negative, supportive – positive, and neutral - but important to consider) in the context of a paradigm of

sustainability and in particular environmental improvement by design in the fashion industry's mass-market segment. Figure 4.11 below presents an overview of the emergent themes.

Negative emergent themes	Alienation Constraint culture Stereotypes Cynicism Lack of knowledge
Positive emergent themes	Interdisciplinary teamwork Creativity The big picture The wild west
Neutral emergent themes	Intervention points Language Gender

Figure 4.11 Emergent themes

4.6.1.1 Negative emergent themes

Although the following emergent themes were viewed as negative or challenging in terms of the overall aims of this PhD project, they provided valuable clues for the advancement of the study and are accompanied by some ideas as to how the barriers they were considered to present might be partly resolved.

4.6.1.1.1 Alienation²⁹

Already described in the literature review (3.6), alienation serves an appropriate gathering term for a group of findings. It was staged at several levels, in how:

Organisation

- Company staff were highly specialised and production stages were allocated to separate departments;
- Environmental strategies were placed at product rather than systems level;
- The designers were geographically remote from the production;
- The designers mainly functioned as co-ordinators of the collection and as such conducted little of the design of the actual products.

Culture

- The designers had very limited knowledge of the impacts caused by the fashion products they design;
- Social concerns were described as separate from and addressed to a higher extent than ecological concerns.

²⁹ "The concept of alienation in philosophical parlance was popularized by some unfaithful disciples of Hegel: Hess, Feuerbach and, especially, Marx. Alienation is a process whereby products of human work and life gain a quasi-autonomous existence and dominate (or oppress) people like foreign powers; people lose control of their own creations. God is alienated humanity, money is the productive effort alienated from the producers. The word 'alienation' is often used in a vague sense of being injuriously separated from society or one's own milieu – Professor Leszek Kolakowski." (Editorial note, *The New Penguin Dictionary*, 2001: 31)

Attitudes

- Designers displayed a lack of confidence as regards environmental issues and practices;
- Designers spoke in a derogative manner of trend research and showed ambivalence towards the fashion role.

The separation and disassociation staged at different levels in the fashion industry constitute a contrast to the intrinsic requirement of a systemic and holistic perspective of a paradigm of sustainability. The effects of such a specialised organisation can only be speculated about, but it appears likely that it should lead to a psychological remoteness. It seems that in order for designers (and others) to get engaged with environmental issues, a holistic understanding of the system, with personal, situated, visual and tactile experiences of the various many links that form fashion production, may be invaluable. The example of the CSR manager was enlightening in how the first hand experience of conditions in production countries spurred her to take action. If a space could be created where designers were encouraged to reflect on how their personal values are embodied in their professional practice, and where examples from industry of how these two different frameworks can be reconciled were introduced, perhaps it could encourage further engagement with environmental issues.

4.6.1.1.2 Constraint culture

Everyday activities of a fashion designer operating in the mass-market segment of the fashion industry were circumscribed by a number of factors. Thus a constraint culture emerged evident in how:

Organisation

- The designers perceived their work as driven by the market and the organisation as buyer-driven;
- Considerations of brand profile, price category and target group permeated all design decisions;
- The design brief was primarily based on previous sales figures, but 'came to life' through trend input supplied by the designers;
- The designer role was (in the main) operational rather than strategic;
- The designers experienced stress, caused by the nature of the fashion cycle and a heavy workload interrupted by frequent travel, and time limitations were a frequently mentioned barrier to designers' involvement in environmental improvement.³⁰

³⁰ Stress is a widely spread phenomenon, and perhaps a significant descriptor of our time. It should however be noted that the broad range of references and the speed and scale of the fashion industry listed above as contributors to the designers' experience of stress, also constituted important positive traits of their perception of what it is to be a fashion designer. Similarly, some of these factors, such as

Culture

- While the designers expressed enjoyment of the creative, more strategic elements, this only constituted a small proportion of the total workload and was prescribed by concerns of brand profile, price category and target group, and by senior colleagues' directives;
- The fear of not being in tune with competitors and leading brands resulted in a process of constant self-reference;
- The buyer-culture, described above, frustrated designers as they experienced that their ideas and knowledge were not fully appreciated, and they felt excluded from overall strategic decisions;
- Environmental issues and practice were communicated and perceived as restrictions.

Although not voiced as such by the designers, it appears likely that a lack of education in and confidence about environmental issues also functioned as constraints. Similarly, a specialised organisation that sent the message 'this is not your area of expertise' and designers' and their colleagues' appreciation of designers as creative (rather than analytical and strategic) appears likely to have functioned as a mental barrier to what designers could achieve. Again, it appears likely that stress necessitated some level of 'tunnel-vision' and focus on the immediate tasks at hand, and did not generally support visionary, out-of-the box, lateral thinking that the descriptions of a sustainable paradigm would imply. At the same time, awareness of environmental issues, and of the enormity and complexity of the problems, may cause stress, which would be especially true if there did not seem to be practical, achievable measures to be taken towards a solution. The stress and sorrow connected to an individual's realisation of the urgency, scale and complexity of environmental degradation is well documented in Macy's work. (Macy, 1991)

Most of the constraints outlined above may seem intrinsic to and practical for commercial activity. However, in terms of the ultimate aim of this thesis, all practices must be up for closer scrutiny. A paradigm of sustainability requisites a creativity that challenges accepted truths, which in turn arguably requisites brave, confident individuals. If alternative solutions could be explored on a smaller scale, and with a more flexible budget and timeline, perhaps valuable lessons could be learnt that were adaptable back to the ordinary business framework. Perhaps a more situated and holistic understanding of environmental issues and practice, and accessible and suitable tools, could amend designers' experience of stress, and could empower designers towards more positive action. This would of course also necessitate appropriate resources and support from the organisation. The buyer-culture appeared a logical enforcement of the commercial framework's parameters, and thus a factor not possible to circumvent in the short-term. Therefore it appears essential that communication of sustainability prove the financial viability of environmental improvement.

the constant flow of information and the directed creativity may well support a paradigm of sustainability.

(See Chapter 2, **2.2.3**) The operational designer role is again a circumstance difficult to negotiate in the immediate future. However, although a fashion designer in a strategic position might find wider solutions of more dramatic effects, a fashion designer in an operational role could also positively affect a product's environmental profile. (See Chapter 2, **2.3.1**) Yet again, the shift from buyer-culture to designer culture and from an operational to a strategic fashion designer role does not necessarily depend on large, structural changes in operation. Instead, fashion designers' experience of their role may be much more significant.

4.6.1.1.3 Stereotypes

Just like *Stress*, the theme of *Stereotypes* came through in the interviews with most of the participants (including the buyer and the Manager of CSR). They constituted a complex web with threads from tradition, education and practice and included:

Environmental stereotypes:

- Environmentally friendlier fashion has a special look and associated values;
- Environmentally friendlier fashion repels a fashion conscious consumer;
- Environmental concerns are problematic, or impossible to reconcile with fashion with a low price profile;
- Environmental improvement is outside the scope of the fashion designer role (because it is best conducted in the process and process stages where the problems are caused);
- Environmentally friendlier is costly in production and for end-users;
- Environmental work is time consuming;
- Natural materials are environmentally superior to man-made materials.

Fashion stereotypes:

- Trends, and trend-forecasting companies do not really influence design direction;
- Designers should conduct original research rather than look to such secondary sources that trend-forecasting companies provide;
- Fashion is inspired by art;
- Fashion design is glamorous, superficial and light-hearted.

The stereotypes consisted of assumptions that, because they were so frequently repeated and by a range of different 'messengers' and thus appeared triangulated, had become accepted *truths*. There was an element of convenience in these truths as they, in their strengths as arguments, functioned to maintain a status quo. Wider assumptions appeared to underpin the stereotypes. Firstly, the location of environmental problems and their potential solutions - at product level rather than systems level, and through techno-centric measures rather than changes in habits, lifestyles and general value systems. Secondly, the

perception of the fashion designer role as operational and creative (again in a stereotypical way), rather than strategic and creatively visionary.

The designers seemingly alternately fought and tried to meet the fashion stereotypes.³¹ Admittedly, this might have been a show of good humour, but came across as a defensive strategy by somebody anticipating to be challenged. On the one hand, fashion is part of a framework that promotes the myth of the artist creating unique pieces from divine inspiration. Although subculture is perhaps more appropriate than 'divine', the fashion designers were fostered in an education that makes virtue of individual expression and of privileged inspiration. On the other hand fashion design exists in a design hierarchy where architecture is at the top (male, technological, rational, strategic, visionary and enduring) and fashion probably at the bottom (female - or gay, irrational, superficial, crafts-based and short-lived). Fashion is traditionally associated with the decorative arts and crafts, and women's domains. It is not considered a force in public life and work, and in societal change.³²

In terms of the ultimate aims of this study it appears crucial to address – refute or put into context - at least some of the above described stereotypes. This is regarded important both in terms of supporting change within the fashion industry itself, and in terms of a wider appreciation of the benefits and impacts of the fashion industry.

4.6.1.1.4 Cynicism

Cynicism³³ was represented in how:

- Designers experienced that the bottom line of fashion activity at high-street, mass-market level was profit, at both corporate and consumer levels;
- The Manager of CSR of H&M, having tried a more 'heart on sleeve' strategy (an eco-line) before and failed, had later retreated to 'hidden agendas' ('sneaking in' some percentage of organic cotton). Although this strategy was evidence of persistence and flexibility, it also displayed a loss of faith in the organisation and the end-users. Other participants were similarly discouraged at the consumers' failure to adopt previous attempts at environmentally friendlier fashion.

As with stereotypes, cynicism appears significant to address, by contextualising and providing nuance to past events, and by providing new and appropriate successful examples

³¹ The latter was exemplified in responses such as one designer's admitted standard answer 'I go to exhibitions' to the question 'where do you find inspiration?' when in reality she rarely had the time. Other more subtle examples were how designers replicated fashion mannerisms ('dahhling') and jokingly described market research as 'shopping'.

³² Although fashion's role as a manifestation of politics is well documented. (See e.g. Polhemus, 1994).

³³ Cynicism means to be "sceptical about the existence of altruism; believing that people are motivated by self-interest". (The New Penguin Dictionary, 2001) See also Chapter 3, 3.6.

from industry. It also appears crucial that the fashion designers, and their colleagues, are offered a sense of agency through for example appropriate and immediate tools.

4.6.1.1.5 Lack of knowledge

Lack of knowledge constitutes the final *Negative emergent theme* and was manifested in how:

- The designers' awareness of environmental issues was limited and in the main constituted of isolated 'sample facts';
- The knowledge they possessed was located at process level, and weighted towards causes rather than effects and solutions;
- No participant mentioned eco-design principles.

The level of knowledge of designers on environmental issues evidenced in this study is similar to that of a previous study on designers' awareness of environmental issues. (Fletcher, 1999) This is disappointing as in the years between popular debate and media coverage on environmental issues and eco-fashion in particular has significantly increased, and CSR work in organisations been established. (See Chapter 2, 2.4.1) The apparent lack of interest in such developments from fashion designers can be partly attributed to elements the emergent themes - *Cynicism, Stereotypes, Stress and Constraint culture* - describe.³⁴ Together these themes point to the fundamental issue of communication. The problem of low awareness and knowledge levels, and a low engagement, appears not to relate to the issue itself – environmental improvement and sustainability generally, but to its inadequate presentation, which was simply not palatable to a fashion audience. This might go some way to explain why an industry of highly opportunistic professionals, thriving on future trends should fail to engage with the sustainability imperative.

To achieve higher degrees of awareness and agency, it appears vital that fashion education provides opportunity for designers to make links between personal value systems, professional practice, and the larger context, in both dialogue and practice. Such explorations should include anticipating environmental work in both fringe/conceptual and mainstream/commercial design areas, with the variety of constraints and opportunities that the respective frameworks entail. In education, and in the professional realm, the communication of sustainability to a designer audience would merit undergoing assessment. For example, designers are more likely to assimilate information when it incorporates a high visual content. (Jessel, 1998) In summary, educating fashion designers on environmental issues and practice, with the aim of encouraging their direct involvement in environmental improvement at product *and* systemic levels would necessitate:

³⁴ For example, and unfortunately new initiatives of environmental fashion have often embodied those stereotypes that make ecology seem irreconcilable with fashion.

- A format and message that fashion designers find accessible, informative and inspiring;
- A trustworthy channel through which such material could be introduced and conveyed;
- The support, in terms of both time and financial resources and corporate culture for fashion designers to use such material.

4.6.1.2 Positive emergent themes

This section discusses themes that are considered to support a paradigm of sustainability and environmental improvement by design in the fashion industry, and outlines ideas for how the opportunities that the themes present may be harnessed.

4.6.1.2.1 Interdisciplinary teamwork

Interdisciplinary teamwork was to some extent manifested in the fashion companies represented in the study:

- All the fashion designers worked closely with designer colleagues, with buyers (or equivalent) and had less frequent contact with economists, marketing and sales (at retailer-wholesalers);
- Two designers visited producers for development purposes on a regular basis, whereas one did so for inspiration;
- No designer had direct contact with environmental staff as an intrinsic part of the process;
- All designers accessed trend material, but direct contact with trend-forecasters only constituted one-offs.

Although their organisations were organised into specialised departments, the fashion designers were used to a range of contacts with other professionals. The intrinsic and beneficial aspect of stakeholder dialogue was discussed in Chapter 2, **2.3.2**. For the purposes of the ultimate aims of this thesis, the element of interdisciplinary work that was present in the organisations is therefore deemed as a positive feature that may be expanded at least at the local level.

In the case of H&M, for example, one building in Stockholm houses designers, buyers, CSR officers and management. If small groups, comprising representatives from all departments and local end-users, could be formed, a direct knowledge exchange could be facilitated and perhaps new proactive ideas would emerge. Such work would obviously need to be supported by the organisation, all participants would need to see the value of it and the groups facilitated in such a way that the meetings were experienced as useful. However, the extended network could arguably lead to a fuller and more situated understanding of the fashion product lifecycle for fashion designers as well as other stakeholders, and synergistic skills and knowledge exchange.

4.6.1.2.2 Creativity

The notion of creativity was a recurrent theme across all participants, and contained some ambiguity:

- The fashion design education at BA level (the educational background of most participants) is focused on individual expression, a certain type of creativity and practical skills;
- All the designers favoured what they perceived as the most creative elements of their work - drawing up the larger trend, colour themes and stories - and expressed frustration at the small proportion of the work that it constituted;
- A common understanding of the term creativity (fine art based, visual expression, initiated by sudden inspiration) may have limited how it was applied and appreciated in the fashion industry;
- An environmental officer at H&M perceived a division between H&M's 'creative staff' and the more 'square staff'. (Interview A H&M, 2003: 2);
- It was a strategy of H&M not to limit designers' creativity with environmental concerns. (Manager of CSR A, 2005: 5);
- It appeared that the commercial success of a product to some extent replaced the satisfaction of creative fulfilment for the designers.

Creativity, a key motivation for the fashion designers included in the study, was steered to support a commercial framework, and a specialised organisation. Arguably a paradigm of sustainability requires a less rigid appreciation of creativity. If its definition could be expanded to respect a range of types of creativity, smoother teamwork might be one result, and better harnessed resources another. If the notion of creativity was extended to include the systemic perspective, the notion of creative fulfilment might also be extended. Such fulfilment might come from non-visual or non-material output, design at systems and product levels, common rather than individual goals and expression, the reconciliation of personal and professional value systems and longer-term rewards. (The phenomenon of substituting one reward for another was discussed in Chapter 3, 3.3.3.) This scenario requires changes in attitude on a large scale. Not least does it imply the need for a new perception of the fashion designer.

4.6.1.2.3 The big picture

In the study findings a macroscopic perspective featured to some extent:

- The designer participants had, in the main, a co-ordinator role, drawing up the general guidelines, while assistants or suppliers conducted much of the design of the actual products;

- The trend research carried out to support the 'big picture' constituted an integral part of the design process, and an aspect of the work that the designers rated most highly;
- This conceptual work was limited in scope and direction by concerns of brand profile, price category and target group³⁵;
- At times the designers experienced frustration with the strict framework, and the need to 'sell' ideas to economy-oriented staff;
- The designers asked for more visionary trend material, and for trend material that included references to larger tendencies in society; such as politics and youth culture;
- On a daily basis, the designers found trend material of fashion-specific, concrete and prescriptive nature most useful.

Brand speaks of 'stretching the now' as a metaphor to encourage environmental awareness. (Brand, 1999) It appears that *Alienation* demands not only real or fictional travel in space, to stop a lack of engagement caused by geographical remoteness, but also fictional travel in time in order to foster empathy with generations yet to come. Sustainability is integrally concerned with futures. Fashion is also preoccupied with the future, albeit the near future (and with many adapted recapitulations of the past) and fashion designers arguably conduct a type of practical futures studies.³⁶ There appears to be an opportunity to integrate these perspectives on 'the bigger picture'. Perhaps fashion designers' excitement in the future could be expanded from the shorter to the longer term perspective and visionary thinking be targeted beyond product level and fashion specific dreams to include those concerning future lifestyles and habits. Perhaps the research process could be expanded to cross-reference ethical and environmental concerns with commercial parameters and encourage the interest in a wider range of 'fashion-opportunities'. Perhaps, as outlined above, the notion of creativity could be expanded to include wider fashion solutions than those solely product based.

Much of the designers' activities, in terms of trends, seemed based on tacit knowledge; their 'trend awareness' developed through 'living' with the fashion cycle instead of from formal education. If the trend work was elevated in education and found a methodological framework (much of the process resembles qualitative research) its role – and by association the designers, might enjoy more respect internally and externally.

Moreover, perhaps such an in-tuneness and tacit understanding that the designers evidenced, could be framed not only by commercial considerations but also by those of an

³⁵ At H&M, the designers also had to adapt their thinking to general trend guidelines that senior colleagues decided for the whole company.

³⁶ The designers represented in the study were not very vocal about this process, which to a large extent seemed to rely on intuition and tacit knowledge, but the methods that they used can more or less be found in qualitative research methodology. Tests for reliability and validity happened in

ecological context. Again, such a scenario requires design-friendly tools and goals, support of the larger organisation and the interest of the fashion designers themselves.

4.6.1.2.4 The Wild West³⁷

This last of the *Positive emergent themes* was mainly found in the corporate culture at H&M:

- At H&M the perceived “freedom with responsibility” was valued (Buyer C, 2005: 6);
- The buyer experienced the teamwork at H&M as void of prestige; there was scope for the individual to voice her opinions, and to get things done;
- The Manager of CSR started up the CSR Department after she had experienced the need for more developed such work on her visits to suppliers;
- Albeit with the restriction “although it wouldn’t be something big” the Manager of CSR claimed that if a designer showed interest in developing an environmental project within the realm of H&M, she could do so.

”H&M is an unusual organisation and that includes the environmental work. At H&M a lot is up to the individual. Obviously the environmental work is laid down by law, but beyond that it is about the individual’s interest. I meet representatives from the engineering industry and that is much more heavy going and bureaucratic, everything has to be certified. Here we put a lot of faith in the enthusiasm - everyone wants to do what is right if they are given the chance. But if there is too much control, and no risk taking, if one wants 100% guarantee, one will stop processes and impede internal forces that may have positive results. This freedom works well at H&M and is most probably one of the reasons why it is going so well.” (Manager of CSR A, 2005: 7)

The organisation of H&M displayed characteristics of a system defined by a balance of rigour and flexibility. This seemingly auspicious condition had as far as the participants’ account tell, not resulted in initiatives from fashion designers in the field of environmental improvement.

Previous emergent themes have discussed some of the barriers to fashion designers becoming more involved in environmental improvement - on practical and organisational

comparison with other actors in the market, trend-forecasting agencies, competitors and leading brands, and in hindsight in the revue of sales figures.

³⁷ Through many a good old film the Wild West has often provided inspiration for fashion. The ‘brand’ of the Wild West: young, raw-edged, dangerous, free-spirited and blue-jeaned heroes and young, pretty and (yet) determined heroines, resonates well with that of fashion. In fiction the Wild West emerges a mythical law-less country where instead the regulation of social relations and business relies on moral codes. In the Wild West individuals tried to realise their dreams by staking out their own land. They cultivated it and their new lives in a country that at first must have appeared *wild* and alien to them but which in due time came to constitute the base for a new web of those strands of social, spiritual and economic activities that form human civilisation. The pioneers of the Wild West, as we know them through the films, were not generally sensitive to and respectful of indigenous people and wisdom. Instead the cast they used to form this claimed territory to their like was distinctly based on *Western* values. Therefore with time the staked out ‘free’ land became an institution of similar make-up to the one they had left behind.

levels, and the more elusive conceptual and mental level. In the next chapter, the role of art as offering glimpses of the future is explored. It is argued that art and design through their reliance on intuitive processes may transcend a current paradigm, whereas traditional, rigorous, rational analysis (because of its intrinsic adherence to facts) may not allow such a leap. (See Chapter 5, 5.9.3) Therefore, if some of the barriers that the negative emergent themes represent could be negotiated, the opportunity of individual initiatives within a large company, and of bringing a personal value system to corporate practice, is considered very positive for the advancement of this thesis. The theme of *Wild West*, and its implied benefits of freedom of action and thought, is related to the *Big picture* theme.

4.6.1.3 Neutral emergent themes

While appreciated as neither directly positive nor negative in terms of the implementation of more sustainable practices in the fashion industry's mass-market segment, the last category of emergent themes represents aspects of the practice and organisation of the represented fashion companies deemed poignant for the advancement of the thesis.

4.6.1.3.1 Intervention points

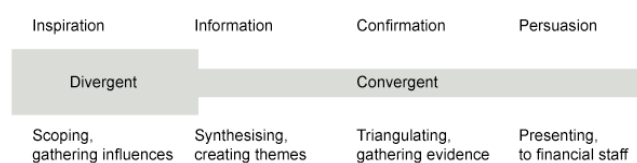
In the study a number of key trend activities, sources, points in time and actors emerged. The access and adherence to these were shared by most of the designer participants, wherefore they are considered potential intervention points.

- Most of the fashion designers visited the fabric trade fair *Première Vision*, Paris, twice a year, at points in time which approximately coincided with the start of the work on a new season;
- Most of the designers accessed catwalk reports through the Internet twice a year, at points in time which approximately coincided with final the stages of the development of a collection;
- The most frequently mentioned trend-forecasting companies were UK based online service WGSN, and presentation and book providers (French) *TrendUnion* and (Swedish) *Svenska Moderådet*;
- The designers mainly used formal trend sources at the start-up phase, but web sites and magazines were consulted continuously, and market research trips took place throughout the process.

Whereas at the time of the study (2005), sustainability concerns were virtually absent from all of the sources implicated above, environmental and ethical concerns are at the time of writing far better manifested. Yet, the scope of such actors, sites and sources championing sustainability in a nuanced, informative and proactive way is still largely unexplored.^{38 39}

³⁸ In October 2005 *Première Vision* attracted 32.000 fashion trade visitors. (*Première Vision*, 2005)

The opportunity of introducing the sustainability imperative through these channels appears large, as they have familiarity with the fashion audiences' tastes, processes and time lines, and enjoy (varying degrees) of respect and authority. As the city trips, fairs and trend-lectures constituted social occasions as well as research sources, messages placed here may spur discussions, and therefore become part of the fabric of fashion networking.⁴⁰ Moreover, the theme of self-fulfilling prophecies promises that forecasts in the domain of more sustainable fashion presented by leading actors, may become 'true' and the result financially viable for organisations. It should also be noted that even further in advance of their interaction with fashion designers, trend-casting companies yield influence over yarn and textile manufacturers, as those dominant actors form an exclusive team that forecast colours and fabric development to reach the market two or more years later.



Figures 4.12 The trend process

For environmentally and socially advantageous trend material to become successful it needs to be in synchronicity with the specific stages of the design process and follow their respective requirements, from the more conceptual to the very specific.⁴¹ Figure 4.12 above presents a schematic model of the trend process. This process was reiterated at smaller scales in the actual design process. If designers were more interested in wider future issues, information of this type would not be limited in time to the same extent that fashion specific intelligence would be.

4.6.1.3.2 Language

This theme addresses the particular language of trend material, which was similar in how it appears in the reports by trend-forecasting companies and how it surfaced in fashion designers' presentations to colleagues. This language constituted an intriguing mix of information and inspiration.

- It contained short 'slogan-type' text and seductive imagery;

³⁹ Whereas formal trend material was of limited use to the wholesaler-retailers, because formal trend sources were not generally geared to this advanced schedule, other sources were still valid. Moreover, a shift appears to be underway, from the traditional books, with high production costs, long lead-times, and short lives to the faster and more flexible medium of Internet, in terms of trend information. In addition there are developments already underway that support a more flexible information system, as the very framework of the rigorous fashion cycle is undergoing changes.

⁴⁰ Designers met up with colleagues from within their organisations, from previous workplaces and fashion education and 'talked shop' as well as exchanged social news.

⁴¹ Information trying to encourage environmental improvement by fashion designers, has therefore to operate on various different levels, from major lifestyle tendencies to fashion specifics, such as how a pair of jeans might be finished without the use of toxic chemicals.

- The presentations were often accompanied by emotive music;
- The images ranged from vague life-style shots, inspirational details, such as the close-up of a leaf, to instructive details of prints or garments, and photographs of yarns, or a piece of architecture to illustrate a colour or a silhouette.

“we make power point presentations, slide shows... [the images] are mainly from magazines. It can be patterns and fabrics and garments we photograph ourselves as well. Good garment types and it can be web images from WGSN and it can be all sorts of things... we try to make it as beautiful as Li Edelkoort, but we can't fade in and out the images because we don't have the newest version... so we do this real trend show, we have acquired this advanced stereo for the company and... we turn on the music really loud so that everyone gets the mood... And then I will pick out key words, and obviously we write words for all images so that it becomes a bit clearer, so that they know what to think.” (Designer H, 2005: 13)

The quote above illustrates both the wide range of sources and elements used to build a trend presentation and the various levels at which this type of presentation was intended to engage its audience.⁴² The language was suggestive, designed to evoke a mood, to allow multiple interpretation, supplying just ‘enough’ clues to the specifics of a season.

When attending such a presentation the audience feels part of a visionary movement, clever, well-informed, creative and inspired. If all goes well it has ‘bought’ a rather crude message; this is what to wear in the summer of 2006, or rather; this is what will sell. However, through the language with which it is conveyed, the message manages to transcend its commercial bottom line. The audience comes out uplifted from the everyday business-as-usual; emerging, at least momentarily, empowered and in-tune with the larger scheme of things and its role in them. Such a language is ingenious: although often ridiculed by fashion professionals, they mimicked it in their own presentations. Relying heavily on images, this language of fashion and trend-forecasting is also well placed within Jessel's conclusion on designers' assimilation of information. (Jessel, 1998)

In terms of the ultimate aims of this thesis: to encourage designers to become more involved in environmental improvement on a systemic level, this language appears dangerous to ignore or, more positively, helpful to adopt. It provides a stark contrast to the language that most environmental information on the topic of textiles - quantitative, unemotional, text-heavy, constraint based, and pragmatic at the exclusion of vision - offers. (See Chapter 3, **3.6**) The proposed language informed by that of fashion and trend-forecasting need not compromise the intrinsic qualities of a paradigm of sustainability, but communicate its compatibility with fashion.

⁴² It is telling that this fashion designer uses Li Edelkoort as a benchmark. Edelkoort is the director of TrendUnion, and enjoys something of a guru status in the fashion industry. At the presentations that she gives, there is a build up to the moment when she appears on stage, a ‘prophet’, clad in long white or black robes.

4.6.1.3.3 Gender

- All participants, bar one, were women, which was also expected at this level of fashion design.

The fashion industry, on an exaggerated note, constitutes a triangle where the peak is formed by male stars in fashion metropolis, and the base consists of female labourers in the Far East. There are many interesting connections between gender and fashion (as raised by e.g. McRobbie, 1999) including male/female associations such as operational/strategic, emotional/rational, craft/technology, decorator/planner, and not least consumer/provider. In terms of this study the connotations of gender constructs appear to relate to the framework of a *Constraint culture*. The scope of this study does not allow grounded conclusions in terms of:

- Whether the biased female/male ratio of designer professionals at this level may have contributed to the predominantly operational role that the fashion designers occupied;
- Whether a 'feminine' activity, such as fashion, is prioritised as target for research and development to the same extent as 'male' activities may be;
- Whether the focus, on individual expression and practical skills over critical analysis, in the educational framework of fashion has a relation to the female majority of both students and tutors;
- Why female students dominate fashion degrees.

The limitations in the scope of the data thus prevent gender from being attributed with a positive or negative label in the emergent themes. It does however merit an ambiguous neutral position since the biased gender distribution in the fashion industry, and the gendered notions of the production, consumption and very essence of fashion appear inseparable from any in-depth discussion of future fashion. In terms of the gender distribution in fashion professionals and the gendered notion of fashion, there is for obvious reasons no immediate shift underway. At this stage therefore the recommendation is that communication aimed at the reconciliation of environmental issues and practice and fashion should strike a note that embodies the concern for and empowers a variety of stakeholders.

4.6.2 Conclusion

The figure 4.13 below positions the key findings of this study in the imaginary journey, which the thesis *Lucky People Forecast* explores. This journey constitutes a proposed conceptual and practical shift of the fashion industry's mass-market segment from a commercial framework to a paradigm of sustainability.

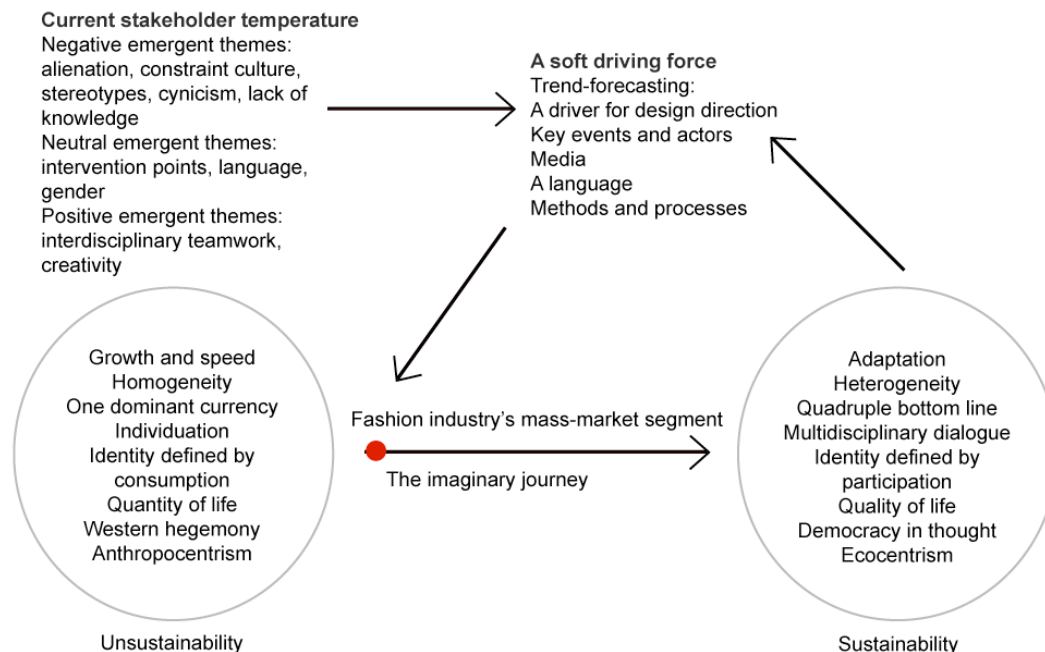


Figure 4.13 Imaginary journey and alternative fashion cycle

The tables below, informed by the findings of this study, indicate the sample's present location, in terms of practices and attitudes, on this continuum at the time of the study.⁴³ The location can be described as a current 'stakeholder temperature' and provided the starting point for the further explorations of the thesis.

	Product focus	Systems focus	Single issue focus	Lifecycle approach	Sustainability constraints	Time component
Green design	x		x			
Eco-design	x		x			
Sustainable design		x		x	x	x
Sample	x		x			

Table 4.5 Distinctions between environmentally responsible design definitions. (Fletcher, 1999: 78) and sample's current position.

Consumer steps ⁴⁴	Step 1	Step 2	Step 3	Step 4	Step 5
Design steps	Conventional design	Green design	Eco-design	Sustainable design	Sustainable design
Degree of proactive work	Harmful	Harmless	Helpful	Helpful	Helpful
Sample			x		

Table 4.6 Steps towards a paradigm of sustainability and sample's current position.

On the one hand, this study has confirmed a set of dichotomies often raised in the context of fashion and sustainability. Their juxtaposition presents an oxymoron, two seemingly parallel and irreconcilable universes, in terms of the values and operation of the two frameworks. There are significant aspects in which these two contexts diverge, such as short-termism versus long-termism and single (profit) versus multiple (sustainability) bottom lines, or assessment criteria. However the study (and the literature) also indicates possible grounds

⁴³ This is an approximate placement with variations between individuals, organisations, and the companies respective product ranges.

of reconciliation - in the celebration of creativity, visionary thinking, but also reverence of the ingenuity of the past, individual (and group) expression, and in-tuneness with time and space.

Current formal policy does not ask directly of fashion designers to be involved in environmental improvement at a systemic level, whereas such involvement, as has been argued, is required and desirable in light of the sustainability imperative. Therefore alternative driving forces are needed. This thesis suggests that trend-forecasting, which as this study has shown is already embedded in the fashion industry at high-street, mass-market level, if adjusted to meet the task, may provide such an alternative enabler: a *soft driving force* complementing the *hard driving force* that formal policy represents.

4.6.3 Recommendations

This section presents the recommendations for the further development of the thesis that emerged from the first empirical study. For the purposes of the proposal of using trend-forecasting as a soft driver for environmental improvement, it can be un-picked into several parts:

- A driver for design direction;
- Key events and actors;
- Media; such as audio-visual presentations, online reports, books, consultancy;
- A language; and
- Methods and processes.

Therefore, trend-forecasting constitutes an agent, a format for activities as well as a methodology in itself. The perceived advantages of an intervention through and with trend-forecasting include that it constitutes a format that fashion designers find inspiring, informative and relevant and presents a familiar and accessible channel. Yet, it was clear that trend-forecasting in itself must make the conceptual and practical journey to meet the task; it must embody and support a paradigm of sustainability.

The study findings provided some further direction for the development of such a new agent - how trend-forecasting might provide a helpful friend to fashion designers on their shared journey towards sustainability - some key recommendations of which are drawn out in the figure below. A full overview of how methodological approaches were considered to possibly respond to the emergent themes can be found in Appendix A, **A.4**.

⁴⁴ Welford's consumer steps were introduced in Chapter 2. (Welford, 1995: 195)

Negative	Alienation	Inviting personal and professional value systems and encouraging interdisciplinary dialogue.
	Constraint culture	Setting up an exploratory space with fewer constraints in multidisciplinary groups, exploring synergy effects. Focusing on short activities, with easy access and flexible schedule.
	Stereotypes	'Setting the record straight' through appropriate information, exploration of fashion and the fashion designer role, pilot project environmentally friendly fashion, far in look and communication from its failed predecessors.
	Cynicism	Inviting into participatory processes, with information, tools of immediate relevance and agency, offering positive examples from industry.
	Lack of knowledge	Introducing a holistic perspective on sustainability, and design for sustainability principles and tools.
Positive	Interdisciplinary teamwork	Setting up participatory mixed stakeholder groups, catering to a mix of cognitive styles.
	Creativity	Offering an extended notion of creativity introduced through strategic and playful activities, encouraging reflexivity on practice.
	The big picture	Focusing explorations on a futures and holistic perspective, including both product and systems levels, and material and symbolic dimensions of fashion.
	The wild west	Exemplifying positive impacts of individual contributions, and initiatives at a range of conceptual and practical levels.
Neutral	Intervention points	Situating activities within a range of, or relatable to trend-forecasting activities.
	Language	Appropriating the visual and emotive rhetorics of fashion and trend-forecasting. Using an opportunity focused language. Exploring experiential notions of sustainability.
	Gender	Inviting a broad range of stakeholders into democratic, reflexive processes.

Figure 4.14 Emergent themes and recommendations

From the recommendations a tentative methodological framework could be established suggesting that the intervention of trend-forecasting should draw upon:

- The presentation language of trend-forecasting and fashion which is both emotive and informative and prioritises visual material over text;
- Methodology used in the commercial framework in which trend-forecasting operates (see Chapter 5, 5.7.3);
- Creative techniques used in the fashion design process;
- Educational approaches used in the field of Eco-design (See e.g. Orr, 1992; Birkeland, 2002);
- Methodology used in the field of design research (See e.g. Gaver, 2001); and
- Methodology that supports and embodies a paradigm of sustainability. (See e.g. Heron and Reason, 2001; Macy, 1991).

4.6.4 Reflections on the research process

As stated earlier in this chapter, I am sympathetic to a paradigm of sustainability, but also firmly based in the commercial realm of fashion. As stereotypes emerged an important theme of this study, I had to contemplate and challenge my own assumptions and

prejudices. When embarking on the study my view of how environmental issues were perceived in the fashion industry was sceptical - I anticipated an even larger disregard of these issues than I found. Most participants were proud of their organisations' CSR work, although they knew little of its particulars. I was also surprised at how the participants did not try to be more politically correct in terms of environmental issues; they were candid about their short-comings: lack of knowledge, flawed practice and disinterest.

During the research process I had many informal conversations with designers, and valued the constant bouncing of ideas with people in the industry and of different value positions. For example, one designer exclaimed that she "was sick of people with sweet and naive ideas that encourage designers to ask users to make their own T-shirts". The lesson was that fashion designers are willing to listen, but that any suggestion to them must be firmly situated in their reality in order for the interest to be sustained. They have 'been around the block' too many times to be fooled.

Whereas when the study began I shared the participants' ambivalence towards the fashion designer role and fashion itself that the findings revealed, after having investigated the fashion design process, I felt more empathetic towards the fashion designers' situation, and also prouder of my profession. My own existence within the fields of fashion, sustainability and research contained less friction than it did before embarking on this study.

However, as was my assumption informed by literature before the study took place, the 'gap' between various stakeholders⁴⁵ did appear to be part of the problem of unsustainability. This alienation in turn offered clues to some ideas for steps towards proactive responses. To me these clues constituted an epiphany because I started to see opportunities at not only a conceptual but also a practical level. The research process made me acutely concerned that the complexity of the system be acknowledged; fashion and sustainability must not be polarised into camps such as commercial and moral. During this research process, the PhD emerged a project with the aim of integration.

Finally, the research process brought forward a more personal dilemma: whether a reconciliation of a personal value system with the requirements of professional fashion practice and academic rigour would be possible. Three questions emerged: Can an academic piece of research speak of love or despair?; How is it possible to bring such forces into a commercial framework and to academic research?; How can I use my own designer skills (creative, practical and instinctive) and my own 'trend-awareness' to support this 'integration project'? The tentative answer was that this piece of research, because of its systemic nature, which encompasses professional *and* personal value systems, and

because of its philosophical framework, required a wide interpretation of what constitutes epistemology. However, the taking of such 'liberties' in turn would demand keen adherence to academic rigour.

⁴⁵ A gap that was manifested within and between the companies and the factories and users, and in organisational and geographical as well as psychological terms. The 'gap' or alienation was also illustrated in the clash between personal and professional value systems in the participants.

CHAPTER 5. CHANGE AND ADAPTATION

5. CHANGE AND ADAPTATION

The previous chapters describe two conceptual frameworks for the fashion industry: unsustainability (Chapter 3) and sustainability (Chapter 2), and the mass-market segment of the fashion industry's current relation to them (Chapter 4). This chapter explores processes of change and adaptation that may facilitate a journey between the two paradigms. It explores and evaluates approaches in order to, together with the recommendations from the initial empirical study, inform the methodology of the second empirical study.



Figure 5.1 The conceptual journey between two frameworks

5.1 Introduction

The following paragraphs situate this chapter in the context of a driver for sustainability, as exemplified by systemic environmental improvement in the fashion industry's mass-market segment. They end with a series of questions that the chapter seeks to answer.

5.1.1 Informing a new driver of change

The exploratory empirical research study (Chapter 4) established that the best way to affect environmental improvement at systemic level in the fashion industry is to focus on:

- Information and knowledge transfer;
- Motivation/inspiration; and
- Futures oriented thinking.

It proposed a significant opportunity in that trend-forecasting was found to occupy an integral part of the fashion design process, and to be an important driver of fashion. It was anticipated that trend-forecasting could therefore provide an alternative *soft driver* for environmental improvement at systemic level in the fashion industry. The role of this driver would be to target lifecycle areas of the utmost scope for systemic environmental improvement – the conceptualisation and design phases, which formal drivers have failed to directly address.

Such an approach necessitated a critical evaluation of the driver (trend-forecasting) and modifying it to fit its expanded task. In brief, trend-forecasting itself would need to start

making the journey between the frameworks of unsustainability and sustainability before it could support fashion's equivalent journey.

Currently, trend-forecasting serves to support a fashion brand in its commercial endeavours, through providing information and inspiration that ascertains a timely user experience. The figure below illustrates how conventional priorities for trend-forecasting need to be expanded in order to support designers and the fashion industry in the larger context of sustainability.

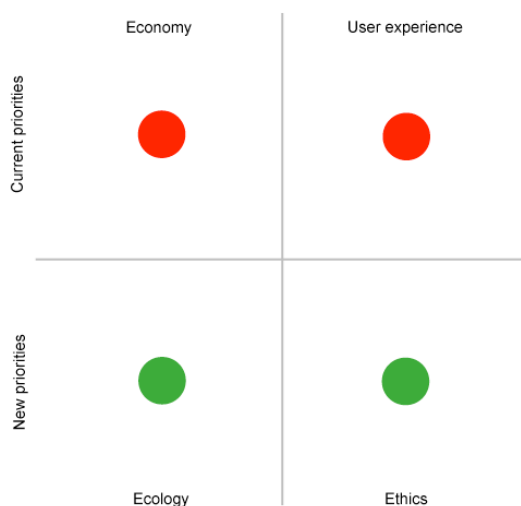


Figure 5.2 Conventional and additional priorities for the fashion industry and trend-forecasting

The findings from the first empirical study provided some guidance in terms of the requisites and desirables of the new driver's set of language, methods and processes in order to fulfil both:

- Relevance to a fashion industry audience; and
- Relevance to the understanding of a sustainable paradigm, which was derived from the literature and from personal experiences and observations.

The initial brief for this new approach was that it should be: interdisciplinary and participatory; strategic and visionary; and creative and image led. It should focus on opportunities rather than constraints and introduce fashion and sustainability as compatible instead of polarities. This tentative brief offered some direction, now it was crucial to understand how it could be fleshed out with methods, processes and tools. In order to do this, an exploration into processes of change and adaptation was required.

5.1.2 A reading of the dynamics of change and adaptation

'Change' is a considerable area of study, which encompasses a wealth of philosophical and religious perspectives, such as the concepts of serendipity, determinism, teleology, the notion of cyclical patterns (such as in nature and in Eastern spirituality), pragmatic planned

processes of change, and abrupt – revolutions. With perspectives of change follow understandings of causal relationships, degrees of predictability, and usefulness of planning.

Our understanding of the world is deeply interconnected with our views on change. Chapter 3 discussed how in the Western world, with the Scientific revolution (and key thinkers such as Bacon and Newton), a new understanding of the world as machine came to replace (or at least repress) the understanding of the world as a living organism. One result of this paradigmatic shift was reductionism, and that usage of mathematical models – calculus - came to replace some of the mysticism previously underpinning the perception of change. (See e.g. Merchant, 1982) In more recent times, the dominating philosophies of, for example, Adam Smith and Karl Marx brought additional new worldviews and understandings of change.

An exhaustive discussion of change is outside the scope of this PhD project. Here I will focus on some theories of change appreciated to bear particular relevance to the three key strands of this inquiry: trend-forecasting/Futures Studies; fashion theory and practice; and sustainability and eco-literacy.

This chapter therefore seeks to answer the questions:

- How can change processes in nature inspire transformational processes in the fashion industry?
- How can we understand change in the context of a conceptual journey between the two frameworks of unsustainability and sustainability?
- What are the most efficient ways of affecting change?
- How can we understand change targeted at the system?
- How can we understand change in the context of trend-forecasting and Futures Studies?
- How can we design or seed processes of change that embody, respect and support a paradigm of sustainability?
- What role does design and research have in processes of change and transformation?
- How can we research and envision from within a particular value position?
- How can research, envisioning processes, and design reach beyond our current paradigm?

5.1.3 Stance - specialist generalism and the design approach to information

The challenge of bringing into one methodology the areas of sustainability, fashion and trend-forecasting, strengthened my understanding that this project required retaining the perspective of a wider map, while developing a specialism. I needed to become a generalist specialist, or a specialist generalist. While producing the literature review, defining the scope

came to concern selecting ideas for their *inspirational* nature as much as for their academic rigour. While some ideas proved valuable models for the development of methodology, others were used as inspirational metaphors that invited me into 'new spaces of understanding'.¹ (Kajzer, 2004)

5.1.4 Overview of chapter

The chapter starts off by exploring change in natural systems and other complex systems. It then looks at models of cultural development inspired by theories of biological evolution. The second part explores how these theories can be applied to Futures Studies in general and fashion and trend-forecasting in particular. Finally the chapter situates the findings in methodological approaches for the second empirical study. It should be noted that many of the ideas described below occur under different names in for example social and management theory. In the main, for reasons of consistency, and for the metaphorical value in this context, I have chosen to use biological terminology or terms appropriated in the discourse on natural systems.

5.2 Change in natural systems

Ecological systems are built up by intricate and ingenious dynamics. This section introduces some key concepts that have informed and inspired: a) the understanding of an ecological paradigm, and b) methodological approaches for the purposes of this thesis.

It is generally agreed that a healthy natural system is characterised by:

- Biodiversity² - with conditions of a pluralism of species, each species can survive and fulfil its role to support other species in their particular ecological niche;
- Resource efficiency – in nature resources are used in an intricate food chain, where none come to waste;
- Interdependency - in nature, ultimately all species are interdependent, co-create and co-evolve.

(See e.g. Benyus, 1997)

5.2.1 Nature and evolution

Under healthy conditions a mature ecological system (or a climax community) has optimal biodiversity and is homeostatic; it maintains itself stable. Virgin ecologies or disturbed ecosystems evolve to climax communities through an ingenious selection process where the

¹ This approach to research seems consistent with how many designers look for and select information.

² "[Biological diversity] means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems." (UN, 1992: 146)

species can be described to develop from pioneering generalists to specialists.³ The strategy with the early species (pioneers) - generally small and with a short life-span, is to multiply and disperse rapidly as specialising these species to a particular habitat is inefficient because the conditions of the young ecology will change, and change again. There is a fast succession of these species as plagues, pests, or changes in the environment cull them. Closer to the established mature ecology, more sophisticated species evolve - generally larger and with a longer lifespan, the strategy of which constitutes creating less numerous offspring, but investing in the success of their individual reproduction and adaptation to a particular ecological niche. Ecosystems in equilibrium form communities or heterarchies where the homeostatis at one level (or holon⁴) is supported by the others levels.⁵ (See e.g. MacArthur and Wilson, 1967; Gunderson, Holling *et al.*, 1994; 2002; Meadows, 1997)

5.2.2 The regulation of systems – feedback

The strategy of the first seres and the pioneering species is termed *positive feedback*, which is a response *with* the direction of a trend.⁶ In Meadows words:

“A positive feedback loop is self-reinforcing... The more people catch the flu, the more they infect other people... Positive feedback loops drive growth, explosion, erosion, and collapse in systems. A system with an unchecked positive loop ultimately will destroy itself.” (Meadows, 1997: point 6)

The dominating strategy of the final seres of a maturing ecology is *negative feedback*, which is response in *opposite* direction to a trend, thereby stabilising the system.⁷ In order for a closed system to self-regulate and be stable, operational feedback loops are essential.⁸ Hardin’s famous essay *The Tragedy of the Commons* from 1968 illustrates the danger of a system with severed feedback loops, in its resulting disconnection from carrying capacity. (Hardin, 1968)⁹

5.2.3 Cybernetics

³ The stages of progression from virgin to mature ecology are called *sere* and the complete chain *prisere*.

⁴ From Greek holos whole, coined in the sense of simultaenously whole and part by Koestler, 1967. (Koestler, 1967)

⁵ For example, the foliage of trees in a forest allows insects to thrive by protecting them from predators.

⁶ Positive feedback can cause what is described as an echo chamber effect (a metaphor from sound bouncing and distorting in a closed space used in media discourse). If for example information conveyed in a community is popularly adopted and frequently passed on, it gradually becomes exaggerated and distorted but, because of its ubiquity still enjoys as sense of validity and reliability.

⁷ A heated fight can escalate through bystanders cheering it on - positive feedback. A bucket of water – negative feedback, might put an end to the fight.

⁸ A system can be regulated with *feed-forward* instead, or as conjunction with feedback. Feed-forward, however, demands that cause and effect relations are known, i.e. predictability, which feedback does not. (See e.g. Domjan, 2000)

⁹ According to my understanding, a simple definition of the mechanism of positive feedback is ‘the more, the more’ or ‘the less, the less’ and of negative feedback ‘the more, the less’ or ‘the less, the more.’

“In classical, Newtonian science, causes are followed by effects, in a simple, linear sequence. Cybernetics, on the other hand, is interested in processes where an effect feeds back into its very cause. Such circularity has always been difficult to handle in science, leading to deep conceptual problems such as the logical paradoxes of self-reference. Cybernetics discovered that circularity, if modelled adequately, can help us to understand fundamental phenomena, such as self-organization, goal-directedness, identity, and life, in a way that had escaped Newtonian science... Moreover, circular processes are in fact ubiquitous in complex, networked systems such as organisms, ecologies, economies, and other social structures.” (Heylighen and Joslyn, 2001: 9)

Cybernetics¹⁰ is the umbrella term for, or at least part genesis of an increasingly specialised field of study¹¹ of feedback, control and communication in complex systems and organisations. It is concerned with how systems function and the relations between, rather than characteristics of, the individual parts that make up a system. Generally, cybernetics explores both man-made systems (such as a machine), where the goal is predefined by the creators, and evolving systems in nature, which form (consciously or not) their purpose internally.¹² (Heylighen and Joslyn, 2001)

Second-order cybernetics (‘meta cybernetics’ or ‘a cybernetics of cybernetics’), seeking to distinguish itself from and to complement mechanistic, reductionist approaches, focuses on such complex natural and social systems that cannot be isolated from the researcher. The awareness that the researcher is in fact part of the system adds the important notion and requirement of self-reflexivity. Acknowledging the researcher’s involvement in the system of investigation (and that the researcher also constitutes a complex system), means recognising that any researcher, because of his or hers interests, limitations and so forth will be subjective and blind to large parts of the system of study¹³. (Heylighen and Joslyn, 2001)

5.2.4 Gaia theory – Earth as an immense self-regulating system

“On the most fundamental level, the goal of an autonomous or autopoietic system is survival, that is, maintenance of its essential organization. This goal has been built into all living systems by natural selection: those that were not focused on survival have simply been eliminated. In addition to this primary goal, the system will have various subsidiary goals, such as keeping warm or finding food, that indirectly contribute to its survival.” (Heylighen and Joslyn, 2001: 13)

In 1979, the environmentalist James Lovelock published the first of a series of texts that consider Earth as an entirety as a self-regulated, homeostatic living being. In Lovelock’s words Earth or Gaia (after the Greek Earth goddess) is:

¹⁰ The term cybernetics stems from the Greek *kybernetes*, equivalent to *steersman*, *governor*, *pilot*, *rudder*. It was coined or at least popularised by Norbert Wiener through his book *Cybernetics, or Control and Communication in the Animal and Machine*, first published in 1948. (Wiener, 1961)

¹¹ This fields include complexity theory, complex adaptive systems, information theory and artificial intelligence, the latter for which the preferred and modified term in recent time is Intelligent Agents. (Heylighen and Joslyn, 2001)

¹² See also Heidegger’s (following Aristotle) two notions of poeisis: *allopoiesis* (creation dependent on an other) and *physis* (self-creation). (Farrell Krell, 1978)

¹³ In social science this is called an observer effect.

“a complex entity involving the Earth's biosphere, atmosphere, oceans, and soil; the totality constituting a feedback or cybernetic system which seeks an optimal physical and chemical environment for life on this planet...” (Lovelock, 1979: 11)

“a system where the evolution of the organisms is tightly coupled with the evolution of their environment...” (Lovelock, 1991: 188)

The apparent teleological stance of Gaia theory - that Earth should have purpose and foresight, has been criticised and so has the notion of ‘sameness’ over time. Its proponents have clarified that Earth does not consciously plan its self-regulation and that Gaia, even under healthy circumstances, is a system in change, but that the system, just like our bodies, and under healthy conditions evolves very gradually. (Lovelock, 1991) The bewildering notion of ‘sameness’ has also been a key area of criticism of the general sustainability debate, and of the term sustainability itself. It has been argued that *to sustain* implies a reactionary stance of ‘simply’ conserving, whereas, generally, neither the environment itself, nor strategies to keep it healthy can be regarded as entities of status quo. (A clarifying discussion on growth and development can be found in Meadows *et al.*, 1992, see also Chapter 3, 3.4.2)

5.2.5 Complexity theory

Complexity theory¹⁴ (or chaos theory) explores the space between stability and instability in a system – what is sometimes called the edge of chaos or phase transition. Complexity theory observes and explains how systems under some conditions change in regular, predictable ways, while under other conditions their behaviour is irregular and unpredictable. (See e.g. Mitleton-Kelly, 1998)

“Complex systems seem to strike a balance between the need for order and the imperative to change. Complex systems tend to locate themselves at a place we call ‘the edge of chaos’. We imagine the edge of chaos as a place where there is enough innovation to keep a living system vibrant, and enough stability to keep it from collapsing into anarchy. It is a zone of conflict and upheaval, where the old and the new are constantly at war.” (Crichton, 1995: 3)

Subsystems, or holons, are always in fluctuation in a system. With positive feedback, these fluctuations can become powerful enough to render the whole system to a state of far-from-equilibrium. When a system is far-from-equilibrium, it can shatter into chaos, or it can experiment and innovate in order to reach a new order of organisation (which is higher to maintain in terms of energy and information). The outcome in such a situation depends on numerous influencing factors such as the relative strength of positive and negative feedback loops. (See e.g. Rosenhead, 1998) This creative in-between condition is called *bounded*

¹⁴ Plexes (from Latin) means braid/entwined and complexity therefore ‘the braided together’. (New Penguin English Dictionary, 2001: 281)

instability, and characterised by enough flexibility for innovation, and enough stability for operation. (Mittleton-Kelly, 1998)¹⁵

Of particular interest to this study is that, according to complexity theory, a small intervention can have an effect beyond proportion, famously illustrated in the example of the butterfly effect.¹⁶

“a butterfly stirring the air today in Peking can transform storm systems next month in New York.” (Gleick, 1988)

The explanation behind these non-linear relationships between cause and effect is (in very simple, non-mathematical terms) that because the world is a complex web of relationships, small mutations or irregularities in an initial condition can grow exponentially as they travel through the system. Although on the surface the trajectory of, for example, the butterfly effect may appear random, it actually, with many variations within, follows a general pattern. Such a pattern is called a *strange attractor*, as opposed to the *stable attractor* – the state to which a system normally returns after disturbance. A strange attractor is fractal or self-similar; it displays the same pattern at different scales. (See e.g. Gleick, 1988; Stewart, 1989) An adjacent and important aspect of complexity theory is that the whole is more than the sum of its parts; the whole displays properties that cannot be found in the components of which the system consists. This is sometimes called emergence. (See e.g. Bateson, 1979; Bohm, 1995; Capra, 1996)

5.2.6 Complexity and organisational change

“Let us summarise some of the received wisdom about how well-managed businesses (and the public sector agencies which emulate them) should proceed. There should be a Chief Executive Officer presiding over a cohesive management team with a vision or strategic intent supported by a common culture. The organisation should stick to its core business and competencies, build on its strengths, adapt to the market environment, and keep its eyes focused on the bottom line. Despite the critical hammering taken by 1970’s-style long-term planning, strategic management will nevertheless incorporate the tasks of goal formation; environmental analysis; strategy formulation, evaluation and implementation; and strategic control. All completely wrong from the perspective of management writers influenced by complexity theory. This kind of management theory and practice... bears the hallmarks of the over-rationalist thinking which has dominated since the triumphs of Newton and Descartes. The organisation, like the universe, is conceptualised as a giant piece of clockwork machinery. The latter was thought to be, in principle, entirely predictable; and good management should be able to get similarly reliable performance from the latter. Discoveries by the theorists of complexity and chaos show that even the natural world does not operate this way –

¹⁵ It should be noted that complexity and interconnectivity (or similarly biodiversity in biological terms) in a system is only healthy up to a convergence point after which the many links render it impossibly complex and unoperational. The unknown effect of increasingly more rapidly developing technologies is sometimes called singularity. After ‘black holes’, the content of which we do not know. (See e.g. Brand, 1999)

¹⁶ First presented by the meteorologist Edward Lorenz, to the American Association for the Advancement of Science in Washington, D.C., 1972. The metaphor of the butterfly was chosen to complement his model of an attractor that took the shape of a butterfly (the Lorenz attractor). (Lorenz, 2000)

and this revelation of the role of creative disorder in the universe needs to be taken to heart by managers.” (Rosenhead, 1998: 2)

Complexity theory is used in many different fields: for example biology, mathematics and physics. It has also influenced a field of management and organisational theory. (See e.g. Stacey, 1993; Mitleton, 1998) It should be noted that different systems of complexity, such as the natural and social worlds, are not seen as identical but rather as comparable in how they work. The below summarises some of the views on organisational change as seen from a complexity perspective:

- Organisations and their environment mutually inform each other;
- The success of an organisation can stem from contradiction as well as stability;
- The being part of a self-enforcing cycle is as likely to contribute to an organisation's success as is its stated vision;
- An organisation's success can be dependent on both pragmatic and paradigmatic changes.

(Rosenhead, 1998, following Stacey 1998)

“in a social co-evolving ecosystem, each organization is a fully participating agent which both influences and is influenced by the social ecosystem made up of all related businesses, consumers, and suppliers, as well as economic, cultural, and legal institutions”. (Mitleton-Kelly, 2003: 30)

Organisations, in order to thrive, must leave behind the “aim of strategic management as the realisation of prior intent. Management complexity theorists emphasise... the importance of openness to accident, coincidence, serendipity. Strategy is the emerging resultant.”

(Rosenhead, 1998: 3.1) In this vein, managers must learn with a moveable map, what is called *double-loop learning* and implies continuous self-reflexivity. (See e.g. Stacey, 1993)

Complexity management theory advocates an organisation built upon diversity rather than conformity, and (Stacey, 1993, argues) a management that seeks the edge of chaos rather than equilibrium; this will foster creativity. From such an approach new possible futures will emerge and the organisation can respond more easily to change. (See e.g. Wheatley, 1992; Kauffmann, 1993; Stacey, 1993; Mitleton-Kelly, 2003)¹⁷

Although its direct applications have been questioned, several authors agree that complexity theory, through self-reflexivity, can help us make sense of our own experiences; that it can engender processes in tune with both near and far futures, and that this field applied to

¹⁷ It is important here to note that authors such as Stacey (1993) do make a distinction between day-to-day management, which accommodates and requires conventional planning, and the longer time frame where “extraordinary management” comes into place. It is the manager's role to establish the boundaries and facilitate the co-existence of the two modes (the analytical and linear, and the tacit and the lateral). In this reading of organisational governance, the agenda consists of setting up a series of conditions that are beneficial for emergence, such as diversity, which in turn fosters creativity, instead of a cut-in-stone strategy. (Stacey, 1993)

management can at the very least “serve as a constructive provocation”. (Wheatley, 1992; Rosenhead: 1998: 7.1)¹⁸

5.3 Towards designing with natural systems and complexity

In recent years design and communication have more explicitly and strategically sought inspiration from natural systems, as evidenced in such concepts and approaches as biomimicry, metadesign and memes. (See 5.3.3, 5.3.9, 5.3.4) They range from overt agendas of sustainability to mere, ‘value neutral’ fascination with natural dynamics. It appears that the ideas of Fuller and Maturana have been especially important in providing conceptual and practical links that allow these new fields to flourish.

5.3.1 Synergetics

“Synergy means behavior of integral, aggregate, whole systems unpredicted by behaviors of any of their components or subassemblies of their components taken separately from the whole.” (Fuller, 1975: 3)

Fuller’s notions of a “synergy of synergies”¹⁹ (or *synergetics*^{20 21}) are of particular relevance to this study.²² Although explained from a geometric perspective and in theoretical terms, Fuller’s synergetics, which seeks to explain self-organising systems, can be understood to capitalise precisely on his socio-environmental ethos; that co-operation (combined energies) can generate emergence for good. (For a discussion of and distinction between different types of synergies and their collective role as a “major source of creativity in evolution” see Corning, 1983; 1995)

“In the social sciences, synergy can be found in many of the phenomena studied by economists - from market dynamics (demand-supply relationships) to economies of

¹⁸ Criticism of complexity theory in general, and as applied to organisations in particular, includes reservations as regards the transferability of dynamics of natural systems (the understanding of which is also finite) to human systems. (See e.g. Lane, 1998) Rosenhead questions the soundness of an organisation seeking to operate at the edge of chaos; in nature only an intermittent state. (Rosenhead, 1998; see also McMaster, 1995) Morgan argues that although the validity of applications remains to be proved, complexity theory can at least be used *metaphorically*, add a helpful dimension by stretching our understanding of organisation and change. (Morgan, 1986)

¹⁹ I am indebted to John Wood for pointing me in this direction, through his writings (see e.g. Wood and van Nieuwenhuijze, 2005) and in particular through the Benchmarking Synergies within Metadesign project, Goldsmiths, University of London, funded by the AHRC (2007-2009), which explores how synergistic behaviour can be harnessed and seeded to forward sustainability. I was invited to join this project as a researcher in Spring 2007, and the team’s conversations have been very helpful in further contextualising some of my methodological approaches for *Lucky People Forecast*.

²⁰ Synergetics: Explorations into the geometry of thinking, was the title of a book Fuller published in 1975.

²¹ Synergetics, as an interdisciplinary science occupied with understanding patterns and structures in self-organising instable open systems is further theorized in e.g. Haken, 1982; 1993; Mikhailov, 1994.

²² Perhaps best known for his conception of the geodesic dome, futurist, architect, engineer and writer Buckminster Fuller pioneered a systemic worldview in his early advocacy of sustainability in general and resource efficiency in architecture and design in particular. An indefatigable critic of the prevalent socio-economic system, he was simultaneously an optimist that held faith in human creativity and saw co-operation as the optimum survival strategy. His firm belief that every individual can contribute to, and matters in the functioning of the planet Earth inspired his life’s work. (Fuller, 1972; 1975; 1981; Krause, 1999; Sieden, 2000)

scale, the division of labor and, of course, the influence of technology. Psychologists also deal with synergistic effects, ranging from gestalt phenomena to social facilitation, group "syntality," mob psychology and cult behavior." (Corning, 1995: 92)

5.3.2 Autopoeisis and Linguaging

Maturana's work has been important in offering a *biology of knowledge* showing how intricately linked the concepts of reality and cognition are to our being part of a complex system. With Varela he coined and conceptualised *autopoeisis*²³, in brief a theory of what life is; self-creating, self-organising and autonomous systems. (Maturana and Varela, 1980).²⁴

"Knowledge implies interactions, and we cannot step out of our domain of interactions, which is closed. We live, therefore, in a domain of subject-dependent knowledge and subject-dependent reality... As a consequence, because the domain of descriptions is closed, the observer can make the following ontological statement: The logic of the description is isomorphic to the logic of the operation of the describing system... Since a description always implies an interaction, and since the describing systems describe their components via their interactions through their components, there is a constitutive homomorphism between descriptions, and behavior in general, and the operation of the systems that describe. Therefore, we literally create the world in which we live by living it." (Maturana and Varela, 1980: 60-61)

Maturana's theories introduce an, on the surface, ontological (i.e. how we see reality) paradox: in the closed systems that he describes as autopoeitic, there is room for determinism as well as creativity and choice. The rigour that a closed system may indicate also has flexibility through the unpredictable, synergistic or emergent results of the coupling of individual elements. (Maturana and Varela, 1980).

An adjacent theme of Maturana's is his conceptualisation of *Linguaging* and *Emotioning*. In brief, and as relevant to this study, *linguaging*²⁵ is the process by which we coordinate our behaviour with each other; *emotioning* means the process by which we respond to our physical reaction to an action, such as love or fear, and is "braided with linguaging in our history of interactions with other human beings." (Maturana, 1988: 49) Each is informed by our continuous experiences of linguaging and emotioning. We therefore experience, observe, act and communicate no objective reality, but what we can distinguish from our

²³ Poesis (from the Greek) means *bringing forth*. Heidegger describes two types of bringing forth, the first the literal practice of e.g. a craftsman or a poet of bringing forth new artefacts (in their widest sense) into the world. This poesis therefore encompasses both an agent and an object. The second bringing forth, *physis*, refers to the kind of creation that occurs in nature, such as a tree, which brings itself forth. In both of Heidegger's notions of bringing forth, something has therefore been brought into presence that previously was not there. (Heidegger, *The Question Concerning Technology*, in Farrell Krell, 1978)

²⁴ It should be pointed out that the reference to Maturana in particular for ideas that have close affinity with social constructionism is informed by a) his biological starting point being particularly helpful for this thesis, a central tenet of which is an ecological paradigm and b) the researcher's sympathy for how Maturana phrases the coming together of systems as 'love.' See e.g. Maturana and Varela (1987); Maturana, Verden-Zoller, *et al.* (1996).

²⁵ Our conventional understanding of *language*, according to Maturana is an abstraction that forms part of linguaging. (Maturana and Varela, 1980)

previous experiences of distinguishing, observing, communicating and so forth. (Maturana, 1988) Languaging therefore is “a social activity that arises from a coordination of actions that have been tuned by mutual adaptation”. (Von Glasersfeld, 1997: 3²⁶) The theories of Maturana are of particular relevance for this thesis because of their resonance with ecological systems, and reference to a circularity comparable to the self-referential nature of fashion and trend-forecasting. (See Chapter 4, 4.5.4.2, 4.6.1.3.1)

5.3.3 Biomimicry

Biomimicry (*bio* - life and *mimesis* - to imitate) is an approach to design, using nature as ‘model, mentor and measure’. Its key proponent, Janine Benyus, proposes it as an emerging field (with rich traditions in for example indigenous culture) at a convergence of natural sciences, and design and architecture. By studying nature and learning from solutions that have evolved over billions of years, Benyus argues, we can find sustainable answers, in terms of materials, processes, designs and systems, to our needs today. (Benyus, 1997) Examples of applications of what Benyus would label biomimicry include permaculture²⁷ and industrial ecology²⁸. (See e.g. Mollison and Holmgren, 1979; Holmgren, 2000; 2002 and Frosch, 1992; Graedel *et al.*, 1995.)²⁹

5.3.4 Memes

The properties of natural systems have inspired research into and interpretations of how data and information is spread in human systems.³⁰ The theory of memes addresses culturally transmitted units of information, as exemplified by “tunes, ideas, catch-phrases, clothes fashions, ways of making pots or arches.” (Dawkins, 1989: 91) It makes comparisons to genealogy, Darwin’s theories of evolution and the survival of the fittest. Just like genes, memes are not always replicated perfectly and, when combined or modified with other cultural elements can become new memes. However, in contrast to genes, memes can be transmitted in non-linear, non-hierarchical ways. (See e.g. Dawkins, 1976; Blackmore, 1999)

²⁶ Von Glasersfeld draws our attention to Giambattista Vico (1668-1744), in Von Glasersfeld’s terms “the first constructivist thinker” who argued that “the cognitive subject can know only *facts*, and *facts* are items the subject itself has made.” (Von Glasersfeld, 1997) In Latin *to make* is *facere*.

²⁷ Permaculture – the term coined by Holmgren and Mollison in the 1970s and meaning permanent agriculture or culture, lets natural rhythms and patterns inform human habitats. For example: a careful mix of crops leads to synergies found in undisturbed natural systems; as plants shield and support each other, they render agricultural chemicals used in monocrops obsolete. (See e.g. Mollison and Holmgren, 1979; Holmgren, 2000; 2002)

²⁸ Industrial ecology harnesses similar synergy effects by means of organising factories in networks inspired by ecological systems so that, for example, the excess steam of one industrial plant can heat another. (See e.g. Frosch, 1992; Graedel *et al.*, 1995)

²⁹ Ken Fairclough proposes a higher-order Eco-mimetics, a meta science, methodology and philosophy that comprises mimicry of systems, evolution and adaptation in nature. While biomimicry looks to models in nature for inspiration, ecomimetics can additionally, Fairclough proposes, when no appropriate natural model exist, evolve solutions using nature’s “evolutionary methodologies”. (Fairclough, 2007)

³⁰ The concept of the *meme* was first introduced by zoologist Richard Dawkins in his book *The Selfish Gene* from 1976.

The survival of the meme depends on its success in replicating, and in finding protective vehicles³¹ as interface to other cultural elements. While the viability of a science of memetics has been debated³² it, at the very least, offers an interesting reading of cultural development where, again, a small intervention can have a disproportionate effect. The emerging fields of guerrilla or viral marketing capitalise on these properties of memes.

5.3.5 Branding, marketing and communication - The Tipping Point

In his book *The Tipping Point*, Malcolm Gladwell makes the link between natural systems and the commercial realm even stronger when he compares the mechanism of trends with those of viri. He argues that just like the virus, the trend is slow to take off at first, before it 'suddenly' gathers momentum and reaches the masses, causing an epidemic or 'tipping point'. His explanation model includes notions of 'stickiness'³³ and 'contagiousness' which define why particular cultural elements become epidemic and others do not. 'Stickiness' adheres to properties that facilitate the trend or the cultural element's integration with its host body (such as the nicotine in a cigarette). 'Contagiousness' refers to characteristics that make its transition from one host body to another smooth (such as the *cool* associated with smokers). (Gladwell, 2000) Gladwell's book attracted interest in the domain of marketing because its argument means that an advertising campaign's success is dependent on its contagiousness rather than the size of the budget.

5.3.6 Diffusion of innovations theory

Gladwell's ideas bear close relationships with *Diffusion of innovations theory*, which purports to explain the spread of new ideas and technologies through cultures and systems and was formalised by Everett Rogers (1962). Rogers drew a bell curve, with *innovators* and *laggards* at both ends of a tipping point of the majority. While the innovators bear resemblance to the pioneers in the first series of a maturing ecology, in that their behaviour is risky and active, laggards can be compared to the late species of a prairie in the sense that they are specialised in their social setting and change slowly. According to Rogers, the spread of innovations follows five steps: 1) knowledge – learning; 2) persuasion – becoming convinced; 3) decision – committing; 4) implementation – using; and 5) confirmation – accepting or rejecting. His theory of diffusion of innovations excludes the possibility of innovation in itself adapting through its process of being adopted. (Rogers, 1962)

5.3.7 Open source

The dynamics of synergies (as introduced by e.g. Fuller, 1975), co-evolutionary processes and the viral properties of complex systems are important elements of the open source

³¹ In Hull's term 'interactors'. (Hull, 1988)

³² One problem being the difficulty of isolating units of cultural transmission.

³³ Maturana used the term "biological stickiness" to explain why systems that come in contact stay together or become unstuck, in more recent work he calls this 'love'. (See e.g. Maturana *et al.*, 1996)

phenomenon.³⁴ Open source is a free, shared system that users co-evolve. In recent years, open source principles have been applied to fields outside software, albeit heavily dependent on the connectivity that online networks afford. This group 'power' has been used for both commercial (such as consumers forcing suppliers to give discounts), anti-commercial (such as the culture jamming proposed by Canadian magazine *Adbusters*)³⁵ and other political ends.³⁶ Several authors have explored open source in the context of subversive and sustainable design practice, and in fashion specifically its role as bringing the notions of user and maker together, enabling 'mass-customisation', and subverting brand messages. (See e.g. von Busch, 2005; Fuad-Luke, 2007; Thorpe, 2007; and Fletcher, 2008)

5.3.8 Prosumers and collaborative design processes

The term prosumer - producer and consumer in one word - was coined by the futurist Alvin Toffler.³⁷ (Toffler, 1980) The merge of suppliers and users and in particular the empowerment of consumers by technological advances has also been proposed by for example Marshall McLuhan. (1972) The coming together or collaboration of these hitherto often perceived polarities has in recent years mainly been exemplified by what is sometimes called individualised mass-production, or mass-customisation, which might be described as a mass-market interpretation of bespoke tailoring.³⁸ This therefore is an extension of individuation processes in the offer of goods that are increasingly specialised, and can be argued to be a semblance of choice, very much at product level.^{39 40}

“User-centered innovation processes offer great advantages over the manufacturer-centric innovation development systems that have been the mainstay of commerce for hundreds of years. Users that innovate can develop exactly what they want, rather than relying on manufacturers to act as their (often very imperfect) agents. Moreover, individual users do not have to develop everything they need on their own: they can benefit from innovations developed and freely shared.” (Von Hippel, 2005: 1)

Participatory and collaborative design processes⁴¹ place the user earlier in the design cycle, at the research, conceptualisation and planning stages. This approach has been predominantly used in community projects targeted at urban regeneration. The argument for

³⁴ Famously popularised by the computer operating system Linux and the website wikipedia.

³⁵ In *No Logo*, Naomi Klein gives the example of how an email within a matter of days achieved a global online campaign against Nike's use of sweatshops. (Klein, 2000)

³⁶ 'Crowd sourcing' is a popular term for the application of synergetics to the realm of consumer power.

³⁷ Other interpretations and uses are professional or proactive consumer.

³⁸ For example, the consumer picks the colour and features of car or personalises phone features.

³⁹ The development of sneakers, from simple running shoes to basket, tennis, aerobic, skate shoes, often used for fashion rather than strictly functional purposes as well as how e.g. Swatch took the watch from a once in a lifetime purchase and heirloom to an easily changeable and disposable fashion accessory are examples of individuation and specialisation processes.

⁴⁰ With the aid of technology; through digital photography, video and mp3 recorders consumers are also increasingly invited to contribute to the development of products and advertising. (See e.g. Nokia, 2007)

⁴¹ As exemplified in the *SusHouse* (2000) project on sustainable households, in the *Interliving* project (Centre for User Oriented IT Design, 2003), and in Manzini's work (see e.g. 2004).

users' participation or collaboration in the problem definition and the design of solutions include that it brings a greater commitment to the final outcome, and a more cohesive community. For the designer such an approach implies deeper insight into users' needs, values and attitudes, but also the letting go of a level control of outcomes, as design is traditionally conceived. The designer's role becomes extended to that of a listener and facilitator. (Thorpe, 2007)

5.3.9 Metadesign

*Metadesign*⁴² - a higher-order level of design, or a designing of design - summarises, synthesises and develops some of the ideas introduced above. First conceptualised in the 1960s, it has evolved at a convergence between science and arts, informed and facilitated by new information technologies. Giaccardi (2005) offers a historical perspective of this emerging design field and contributes to its reading as a more general cultural development aimed at expanding human creativity and the notion of sociability. According to Giaccardi, metadesign offers a critical and reflexive perspective on the boundaries and scope of design, a mode of design, and operational design methodologies. Metadesign invites end-users into design processes where the object of design is systems or conditions for continuous adaptation, innovation and emergence rather than static objects or content. Metadesign thus meets such challenges that design faces as the change in users' needs and the inconsistency in users' interaction with designed objects. (Giaccardi, 2005)

Although not as explicitly inspired by nature as, for example, biomimicry, metadesign can be understood to draw from some key principles of ecological systems:

- Biodiversity – metadesign integrates a diversity of perspectives directly represented by arts, science and the new social spaces made possible by information technologies. Metadesign also purports to be an integrator of systems;
- Co-creation and emergence – metadesign aims to provide “relational settings that allow systems to be based on a mutual and open process of affecting and being affected” (Giaccardi, 2005: 344);
- Evolutionary processes found in ecological systems - metadesign constitutes “a shared design endeavour aimed at sustaining emergence, evolution and adaptation”, and “open-ended and infinite interactivity capable of accommodating always-new variables” (Giaccardi, 2005: 342).

For the purposes of this PhD project, metadesign's application of evolutionary processes to design is of particular interest. Soddu (as cited in Giaccardi, 2005: 344) conceptualises metadesign as design of “artificial DNA”; it designs a “species of design”, the designer generates an “executable idea” (or generative code) and the consumer chooses from infinite

⁴² Meta as a prefix derives from the Greek and has taken on meanings such as *beyond*, *change* and *transformation*. (Penguin Dictionary, 2001)

possible realisations one that meets her or his needs, values and taste. In Ascott's terms (as cited in Giaccardi, 2005) metadesign therefore constitutes a "seeding process", as opposed to top-down planning. (Giaccardi, 2005: 347)

"[Metadesign] entails a shift from the normative planning of "how things ought to be" to the poetic enterprise of "how things might be." (Giaccardi, 2005: 347)

5.4 Change, complexity and challenges for design and research

The previous sections have sought to explain how processes in natural systems can inform our understanding of patterns and processes of change in human systems, and in particular the field of design. The following paragraphs synthesise the findings so far, and prepare for their application to this particular inquiry.

- A small intervention can have a disproportionately large effect;
- Systems benefit from diversity of 'species';
- The whole is larger than the sum of its part, this is sometimes called emergence or synergy;
- Healthy feedback loops are necessary for the regulation of closed systems. Severed feedback loops can render a system dysfunctional;
- The interdependent and co-evolutionary characteristics of complex system mean that casual relationships are not simple or linear;
- Instead such systems are often characterised by circularity of cause and effect;
- Cooperative or participatory approaches can offer a richer design process but also imply a lesser degree of control of outcome.

The complexity implied by research into (and design for) complex relational systems, such as circularity, constructionism and the implied researcher bias, can lead to an impossibly relative notion of reality (and ultimately solipsism, i.e. reality as only existing in our individual minds), which renders any claims to shared and meaningful 'truths', and to viable predictions obsolete. A tempered approach suggests that although any model of the world is incomplete, and merely an attempt at a representation, meaningful research is still possible. Research under these conditions necessitates adhering to well established research principles, such as the consistency of observations (triangulation, validity and reliability), and self-reflexivity in terms of seeking to understand and articulate researcher bias or observer effect.

"Although... no model or metamodel can ever be complete, a metamodel still proposes a much richer and more flexible method to arrive at predictions or to solve problems than any specific object model." (Heylighen and Joslyn, 2001: 23)

A significant legacy of Fuller and Maturana (and of theories of complex systems in general) is the challenging of the linear, mechanistic, reductionist mode of problem defining and solving, that have long dominated sciences and design. As Skrbina (2001) points out, it is somewhat absurd that we are currently exploring environmentally benign practices through

lenses that arguably fostered environmental damage. A holistic, systemic worldview asks questions of design and research such as:

- How can we *know* in the light of an immense complex 'whole' larger than the sum of our individual understanding?
- Are truth and objectivity possible or useful concepts for design for, and research into complex systems?
- How might research and design respond to and harness the notions of co-creation and co-evolution?
- How can we best cultivate diversity (interdisciplinarity) and emergence in design and research?
- How can we develop design and research modes, methods and techniques that answer to a world in flux?
- How can we acknowledge and make use of the fact that we as designers and researchers are part (in varying degrees) of any system we purport to observe, understand, explain, transform and even help?
- How can we learn and design in a way that embodies and promotes particular values?

In combination the questions above imply modes of research and design that evolve *organically*. They also constitute some of the questions that occupy the emerging areas of design and research that I will proceed to explore.

5.4.1 Action research – an extended epistemology

"Collaborative inquiry... assumes that understanding and improving the human condition requires an approach that honors a holistic perspective of what constitutes valid knowledge." (Bray, Lee, *et al.*, 2000: 3)

The research tradition that I have found that best corresponds to my understanding of an ecological paradigm and the questions posed above is the area of action-oriented research. Key points deemed relevant to this thesis are that it addresses the complexity of systems, regards the researcher as part of these complex systems and encourages a democratic process – research *with* rather than *on* people, and understands research as both informative and transformative. (See e.g. Heron and Reason, 2001). Although co-operative inquiry, or action research, is currently mainly used in the fields of education and healthcare, its notion of an *extended epistemology* or four ways of knowing: propositional (knowing through theory), experiential, practical, and presentational (knowing through articulating), promises much wider applications. (Heron 1996; Heron and Reason 2001)

"In co-operative inquiry we say that knowing will be more valid if these four ways of knowing are congruent with each other: if our experience, expressed through our stories and images, understood through theories which make sense to us, and expressed in worthwhile actions in our lives." Reason and Heron, 2001: 186)

Acknowledging these wider spectra of learning and communication both embodies my understanding of what sustainability demands, and appears especially relevant in a design context where inspiration, intuition and tacit knowledge play an important role, and where problem solving is often non-linear and heterarchical. Co-operative inquiry suggests a research format where a group together agrees upon a question to explore. The investigation is then carried out in cycles of action and reflection. After each cycle the group decides on the direction of further exploration. The self-reflexive sense-making element of the process is significant, and often spurs transformation in both group and individuals. (Heron, 1996; Reason and Bradbury, 2001)

As conceptualised in metadesign and evidenced in the emerging fields of participatory research and design methods and processes, design both needs and benefits from closer relationships between stakeholders and the diversity of the knowing this supports.

5.4.2 Activism and design

After realising that research, as well as being informative, can also be transformative, I started reflecting on whether research might constitute a piece of activism. From my understanding and mapping of alienation processes, I came to appreciate the opposite of alienation as integration, or perhaps love. Could it follow that the opposite of cynicism, which the readings implied a close associate to alienation, is empowerment, or perhaps activism? (See Chapter 3, 3.6)

“Design, which utilizes essential aspects of cultural identity, can serve to synthesize the past with the present for the benefit of the future... The practice of design might become a critical aspect of the establishment of a sustainable condition with consideration to the history, tradition and identity of culture. The outcomes of these processes might lead to confident identities, resilient and capable of sustaining cultural norms, meanings, values and traditions.” (Blankenship, 2005: 24)

In its wide sense activism encompasses a broad range of initiatives with an aim to affect change – from the ideological to the issue focused; from the friendly to the violent; from the public to the clandestine, underground. Activism is predominantly understood to address an external opponent. However, Meyerson describe *tempered radicals* as people who successfully balance conformity and rebellion, asserting their values through small actions in the everyday life in order to affect change within, for example, the workplace. (Meyerson, 2001; for an overview of dynamics of, and tactics used in social movements see Tarrow, 1994; Tilly, 1994, 2004)

It has been argued that design in its essence inform and form the human condition. (Buchanan, 1989, Manzini, 1994, 2003; Hester, 2005; see also Chapter 3, 3.2.3) The potentially important role for design in social change has also been recognised. (See e.g.

Jordan, 2002; Mulgan, 2007) Design as activism might be conceptualised as the informed, conscious and opportunistic taking 'control' of this forming of the world for political ends, and catalyst for change.

While Klein's book *No Logo* (2000) offers a sharp critique of the design and advertising industries' cultural colonialisation and poor social and environmental credentials, it also highlights that the opposition often uses the tools of, or is reduced by, the same framework that it attacks.

Although art⁴³ and design⁴⁴ have a tradition of activism, the body of writing on design as activism is still slim. However, proposals for design as a catalyst for change exist in the work of for example Buchanan (1989); Poynor (2001); Margolin and Margolin (2002); Blankenship, (2005); Walker, (2006); Thorpe, (2007); Wood, (2007).

5.4.2.1 Brief fashion political history

The combination of fashion and politics has a long history. From a user perspective, their separation is almost impossible. Fashion – or at least clothes, along with music, has been a tool for manifesting distinction and belonging by groups as varied as mods, hippies, radical feminists, skinheads and vegans. (See e.g. Polhemus, 1994) From a producer or designer point of view the particular points of time of fashion and politics' coincidence are more easily defined. During the first half of the 20th century designers such as Coco Chanel sought to liberate women through dress that did not require corsets, and through the introduction of male clothing archetypes into women's fashion. (See e.g. de la Haye and Tobin, 2006⁴⁵) During the 1960s and 1970s there were several examples of fashion design with a political agenda, often in conjunction with a subversive music movement. The London duo Vivienne Westwood and Malcolm McLaren gave the revolt against the bourgeois establishment a look, and a place with the shop SEX in the King's Road, London. Designer Katharine Hamnett, a pioneer in T-shirt politics, has consistently used fashion as a political scene against nuclear power, poverty and Aids, to name a few causes. (See e.g. Black, 2008) In the late 1980s and early 1990s the environmental awakening resulted in an explosion of eco-fashion and slogans such as H&M's 'Nature Calling'. If the dominant fashion scene of the 1980s, from a producer perspective, was not explicitly political, earnest or angry, it reflected and arguably also drove societal notions like the "femininity in control" displayed in

⁴³ As exemplified by the situationists. (see e.g. Plant, 1992)

⁴⁴ See e.g. the First Things First Manifesto, an imperative by British graphic designer Ken Garland to correct the priorities of design towards a more responsible stance. It was signed by over 400 graphic designers and other visual communicators, and published in the Guardian and design press in 1964. It was renewed in Adbusters, 2000. See also the more recent Adbusters publication and movement. Adbusters, is a Canadian publication, and a global network with an aim to subvert or 'jam' commercial culture through e.g. subverting the language of advertising.

⁴⁵ See Arnold, 2001, for a discussion of feminism's ongoing problematic relationship to fashion. See also *The Fashion Smirk* later in this chapter.

the power dressing⁴⁶ that made office wear both sharp and sexualised, and the ostentatious wealth illustrated in glamour looks. (Arnold, 2001: 21)

Although the grunge fashion of the early 1990s was associated with the larger DIY culture⁴⁷, fashion as politics had ceased to have a clear direction, as contemporary designers with a political agenda mirror a larger political scene, and the shift from ideology based politics to issue politics. These designers take inspiration from their very local reality, and use their design to critique dominant body ideals, street crime, polluted cycle paths, CCTV cameras. (Tham, 2003⁴⁸)

5.4.2.2 Ism-looks

If the climate in society and fashion in general cooled off after the politicised 60s and 70s, the early 2000s brought *activism as fashion*. Fashion magazines used terms such as ‘activist chic’ or ‘anarchic’ and advertising was peppered with ironic references to activism.⁴⁹

When fashion adopts attributes that started out as strong political statements, such as the Palestine scarf, piercings, or military wear - a pacifist statement during the Woodstock festival and the summer of 1968 (see Arnold, 2001), they risk becoming neutralised fashion clichés to mix and match with other fashion items. Environmentalism, feminism and activism as commercialised looks are removed from the original idea capital. They are a mere aesthetic illustrating an ideology or ism – an *ism-look*.⁵⁰ Irony can be an effective political tool, but used in advertising it easily becomes a rubber wall we bounce against. Arguably, when fashion brands and advertisers use for example connotations to graffiti (see e.g. Nike) they seek credibility as independent actors that the reality of their identity as commercial corporations cannot afford. The backlash following the late 1980s and early 1990s eco-fashions – many of which lacked environmental credentials - illustrate that the ism-look can actually harm a cause. (See Chapter 2, 2.1.2 and 4, 4.6.1.1.3)

Vexed Generation’s work exemplifies activism that uses design as both a functional and illustrative tool. The design duo responded to the Criminal Justice Bill of 1994, which made it

⁴⁶ Power Dressing was the name of Katharine Hamnett’s iconic collection from 1986. (Arnold, 2001)

⁴⁷ MacKay describes DIY – do-it-yourself culture as “a youth-centred and directed cluster of interests and practices around green radicalism, direct action politics, new musical sounds and experiences... a kind of 1990s counterculture.” Several movements collated in the campaigns of the Criminal Justice Bill, UK 1994. (McKay, 1998: 2)

⁴⁸ In 2003 I conducted a small study of contemporary fashion designers with an explicit political or social agenda. The study, and the resulting exhibition was part of a retrospective of the Mah-Jong group. The interviews with the designers, including Ann-Sofie Back, I-SAW and Vexed Generation, revealed that they, just like Mah-Jong, are children of their time. (Tham, 2003, see also Chapter 2, 2.1.2)

⁴⁹ See e.g. Diesel advertisement ‘Free the Goldfish’. (Kirk, 2002)

⁵⁰ It could be argued that all fashion, to some extent are ism-looks, because fashion is a link to time and space, in this sense a type of visual journalism. See Poynor for a reading of graphic design as visual journalism. (Poynor, 2001)

more difficult to congregate and protest and radically increased the number of CCTV cameras in public space. Vexed Generation designed hooded jackets to make the identification of a protester more difficult, and used the material of the opposing force, the police, to protect against knives and teargas. (Tham, 2003)

“Our currency is creativity. It is our innovations that are competitive. The design is influenced by political and functional needs. The products have their foundation in relevant facts rather than fashion trends. If our design isn’t relevant, we can’t sell.” (Adam Thorpe, Vexed Generation, Tham, 2003)

5.4.2.3 Craftivism

In the new millennium, new activist movements and media have emerged. Through the Internet it is possible for an individual to start a global campaign that can blacklist a company within a matter of days. (Klein, 2000) It is also possible to source sympathisers for an issue to subsequently meet off-line. One example of activism closely connected to the everyday is *craftivism*, which uses craft, in particular knitting and textiles to bring about social change.⁵¹ Craftivists emphasise the force of the community, and also a degree of self-sufficiency and empowerment from having a skill, that knitting brings. (Greer, 2004)⁵²

“Knitting is a part of the same do-it-yourself ethos that spawned zines and mixed tapes. By loudly reclaiming old-fashioned skills, women are rebelling against a culture that seems to reward only the sleek, the mass-produced, the male.” (Stoller, 2003: 16)

There are several intriguing aspects that make knitting, despite or just because of its domesticity, a sophisticated activist medium. At a basic level, virtually everyone can learn to knit, and teaching somebody to do so is arguable inviting her or him into an empowering counter-alienation process. Secondly, the social scene that knitting has always created, makes for inclusive discussions on topics from the personal to the political. As explicit activism, knitting (or sewing) literally illustrates the power of joint efforts, such as in the Peace and Aids quilts⁵³ made up of squares from thousands of individuals. A ‘knit-in’ physically surrounding an important political meeting is striking in its peaceful resilience. (See e.g. Spencer, 2006)

5.4.2.4 Design research as activism

Systems theory teaches us about the interdependence, and co-evolution of all parts of a system, and that a small intervention can have a seemingly disproportionate affect. These are the foundations for research as activism. The notion of an insider-outsidership which Meyerson’s (2001) tempered radicals reflect, the creative and hands on approaches illustrated in Vexed Generation’s work, and the inclusive domesticity of craftivism are all

⁵¹ As exemplified by the Radical Knitting Circle’s presence at the G8 summit in Calgary 2002.

⁵² While not an entirely new phenomenon, guerrilla gardening, an environmentalist movement aimed at literally cultivating neglected urban and suburban space, is an example of a creative approach to non-violent direct action. (Tracey, 2007)

⁵³ The Aids blanket was started in 1987 to commemorate the victims of Aids. (See e.g. Ruskin, 1988)

inspiring for design research as activism. Used sophisticatedly, fashion, because of its access to individual and collective emotional spaces, may reach with important calls for change where rational argument does not.

5.4.3 Intervening in systems

Systems theorist and environmentalist Donella Meadows offered nine *Places to intervene in a system* and argued that the most auspicious place to intervene often appear counterintuitive to a mind looking at problems conventionally. (Meadows, 1997) Her upside-down list therefore starts with those intervention points where logical reason often tells us to go (least efficient), and ends with places which are, according to her, potentially most significant.

9. Numbers (subsidies, taxes, standards) – “Diddling with details, arranging the deck chairs on the Titanic.”
8. Material stocks and flows - buffers
7. Regulating negative feedback loops
6. Driving positive feedback loops
5. Information flows – restoring feedback loops
4. The rules of the system (incentives, punishment, constraints)
3. The power of self-organization
2. The goals of the system
1. The mindset or paradigm out of which the goals, rules, feedback structure arise (Meadows, 1997)

Meadows argues that the most powerful change is directed at how we perceive the world, its problems and their solutions, our role in the dynamics of the world. She cautions us against thinking that any paradigm is true, and urges us to leave behind the comfort of paradigms confirming what we think and to accept a level of Not Knowing. She also (following Kuhn, 1957; 1996) argues that the way to change a paradigm is to:

“keep pointing at the anomalies and failures in the old paradigm, you come yourself, loudly, with assurance, from the new one, you insert people with the new paradigm in places of public visibility and power. You don't waste time with reactionaries; rather you work with active change agents and with the vast middle ground of people who are open-minded.” (Meadows, 1997: point 1)

5.5 Designing change – design as intention

"Design can give form to a changing world and offer opportunities for new types of behaviour. 'To give form' means to operate within a more general cultural context: by amplifying and rendering visible the 'weak signs' expressed by society... proposing products and services... that 'offer opportunities'... in keeping with a new notion of social quality..." (Manzini, 1994: 40)

From my readings of evolutionary processes in natural systems and my understanding of social constructionism and circular arguments, and their application in the realm of design and communications, I gained important insights into processes of change, and how these processes have been appropriated for various ends. The tension between determinism, telos (purpose) and the intervention with a creative agenda became increasingly clearer to me. I

had gained understanding about how systems change, adapt or co-evolve, but not clearly fathomed how to change or intervene in a system responsibly and from a particular value position. While I am sympathetic to the concepts of eco-design and particularly design for sustainability, the more systemic approach, it was evident that they had not managed to intervene at a level in the system sufficient to compete with constantly increasing production and consumption. (Such a critic has been raised by e.g. Wood, 2007)

It appears that healthy evolution is normally gradual and slow, yet the predicament that the world is currently in is an imperative for rapid change. It can be argued that an unscrupulous, or hard design (wittingly or unwittingly so) has been part of disturbing the delicate balance of layers that Brand (1999) proposes, and therefore caused unsustainability. The question that emerged was therefore how design, which it has been shown can affect change with speed and scale, might gently and responsibly serve to rally forces in the system, for positive emergence.

“We have the capacity to learn and to act in our best interests. It’s just a question of figuring out what those interests are, biologically speaking.” (Marine biologist Sylvia Earle as cited in Mitchell, 2005: 239)

The discussion on natural systems earlier in the chapter showed that although Earth as a whole does not consciously plan it, its evolution strategies are ultimately for survival. It implicitly has an agenda to inform its path. Under healthy conditions this agenda need never be spoken. However now, when the healthy path has been disturbed, and (from our point of view) demands human intervention, speaking the agenda is of essence. Human beings can cognitively form agendas, and when we are not creating our own agenda we are wittingly or unwittingly, through our talk, thoughts and actions signing somebody else’s. To me an important reading of design is that of *intention*, one of its original meanings.⁵⁴ Through design we amplify an intention, spreading it into the world. In order to design responsibly I argue (along with many of the authors represented above) that we must lay bare and examine the agendas or paradigms that have informed and are informing our intentions, and also bring creativity to those intentions, as causal relationships are often circular.

5.5.1 Paradigms

The reading of design as intention and Meadow’s (1997) imperative to direct our efforts right at the very paradigm of a system, and first of all to the paradigm in our mind, merits a further reflection on what constitutes a paradigm.

According to Thomas Kuhn who popularised the term in his seminal text *The Structure of Scientific Revolutions* (1962), the paradigm is a set of beliefs shared by scientists, which inform the understanding of problems, and the methodological approaches for solving them.

⁵⁴ Design: “A particular purpose held in view”. (The New Penguin Dictionary, 2001: 377)

The paradigm is thus a dominant worldview that allows a cohesive perspective on what needs to be known and how to know it. A key contribution of Kuhn's was the argument that science as a whole is not a pragmatic cumulative acquisition of knowledge. Instead such 'normal science' is interrupted by radical burst of new intellectual capital, and one conceptual framework replaced by another - a "paradigm shift". (Kuhn, 1962: 10) It follows that the new paradigm brings new sets of agreements of how to perceive the world, knowing and problem solving, and eventually a return to 'normal science' – a period of consolidation of ideas. Kuhn's definition of a paradigm shift has affinity with complexity theory's conceptualisation of the far-from-equilibrium described earlier in this chapter.

A crisis in a paradigm (or a system) caused by the current framework's limitation in explaining a phenomenon leads to either:

- A satisfactory answer from the realm of normal science (in systems terms, the return to stability);
- An agreement to leave the problem for later; or
- The advent of a new conceptual framework – paradigm - that can handle the problem (in systems terms, a higher order of organisation).

The latter is what Kuhn defines as a scientific revolution. (Kuhn, 1962)

The theories of the mechanisms of trends or cultural elements, also described earlier in this chapter, equally resonate with this understanding of change. The cultural element, initially a cultural anomaly, invented or adopted by a small group of pioneers, gathers momentum and finally reaches a Tipping Point, a critical mass. At this point pioneers are already championing a new cultural element.

5.5.2 The basis of visions

Karl-Erik Edris's work on the rise and fall of civilisations describes how new civilisations have historically generally grown out of, or been sparked by a strong religious conviction and vision. (Edris, 1987) The role of politics, he argues, has been to legalise and formalise the vision - to organise it, and the role of economics to provide for the vision - to sustain it. According to Edris, the dire predicament of contemporary Western society is a result of how in Western affluent secularised society religion, or a spiritual imperative, is no longer the starting point for visions. In modern history political conviction came to overtake religious belief as the root of new visions. More recently politics is no longer a viable platform for visions, because in post-modernity ideologies and party politics are giving way to issue politics, and there is an overall mistrust in politicians. Therefore, and putting it in extreme terms, we are left with economics as the foundation of visions. (Edris, 1987) As mentioned before, this prominent position of economics is problematic as its primary goal is never sustainability in holistic terms. Edris's interpretations of the rise and fall of civilisations thus highlight how a flawed vision, or worldview, results in a flawed operation of the system.

5.5.3 Imagery and narratives that guide us

“[legends] are so deeply embedded within cultural consciousness that much subsequent narrative is infused with their imageries...” (Lively in Kerven, 1996: 3)

The dominant paradigm can also be described as a *meta-narrative*, a higher order legend that shapes our collective and individual thoughts and actions in the world. The notion of how we co-create our realities and co-evolve, and of circular causality, is encountered in fields such as social constructionism (see e.g. Gergen, 1999), systems theory (see e.g. Meadows, 1997) and biology (see e.g. Maturana and Varela, 1987). Coming from a design perspective, I grew particularly interested in the role of imagery and narratives in forming our understanding, and thus the reality of our worlds.

“Stories... are like good graphic; they simplify what’s being conveyed, they are easily communicated. The use of stories is about folks realising the world’s not simple. Stories are a way of conveying complexity simply, and making it portable.” (Fairtlough as cited in Lacey, 2002: 63)

According to Lessing "we value narrative because the pattern is in our brain. Our brains are patterned for story-telling, for the consecutive." (Lessing as cited in Fulford, 1999: 111) Story-telling has been a buzz-word in the world of marketing for more than a decade; because of the story’s contagious aspects and its non-confrontational way of ‘getting people to think’. Most importantly, the story gives a human face to abstract phenomena. The immediacy and pervasiveness of imagery and stories make them powerful communication tools. Lakoff and Johnson write how metaphors both enrich cognitive processes and structure our perceptions and imagination. (Lakoff and Johnson, 1980) Environmentalist and feminist Carolyn Merchant argues that the image of Earth and nature as machine, site of resources and recreation, which after the Scientific Revolution came to replace earlier perspectives of nature as a sacred living organism in close connection with humans, sanctioned the increasingly unsustainable interaction with nature that followed. (Merchant, 1982 see also Chapter 3, 3.1.2)⁵⁵

“Controlling images operate as ethical restraints or as ethical sanctions - as subtle ‘oughts’ or ‘ought-nots’. Thus as the descriptive metaphors and images change, a behavioural restraint can be changed into a sanction.” (Merchant, 1992: 4)

Mitchell looks back to the time of Darwin, and his initial reluctance to launch his theory of evolution of the species, because it conflicted with the Christian worldview of the time. (Mitchell, 2005) In hindsight, we know that in the hundred and fifty years since, people (with some significant exceptions) came to adopt his ideas and accommodate their understanding of the world to fit the new radical perspective. Mitchell argues that we face a similar challenge in terms of a change in perception today, when we must acknowledge that

⁵⁵ In concrete design terms, once the first toaster or television had been designed and had reached the market, they quickly became typologies for products meeting that particular need (or desire), and products to follow did not stray far off the early ‘cast’.

evolution includes us - human beings - and that our continuous existence as a species is by no means certain. According to Mitchell part of the challenge we face is creating new, more sustainable legends to live by. (Mitchell, 2005)

“Aren’t we in danger of shortening the shelf-life of our species – and that of many, many other species – in the name of living out this fable of inexhaustibility?”
(Mitchell, 2005: 138)

5.6 Futures Studies and trend-forecasting

The previous section posited that the most effective way of enabling systemic change is targeting the very worldview of a system, that strong visions can guide the development of human systems and that paradigms, or meta-narratives shape our understanding of, and actions in, the world. From the section a new question therefore emerges: Is it possible to generate new, more positive and proactive imagery and metaphors for shared sustainable futures?

This section seeks to understand the role of Futures Studies, one of the three core strands of this thesis, in creating and projecting visions. It starts off by a brief description of the discipline of Futures Studies, goes on to critically evaluate its foundations and applications, it further contextualises its particular role in the fashion industry, and ends by an overview of methods and processes commonly used in Futures Studies.

5.6.1 Futures Studies

“The future, of course, is still being made. It is what people can shape and design through their purposeful acts. To act intelligently, people need to know the consequences of their own actions, of others’ actions and reaction, and of forces beyond their control. These consequences can only occur in the future. Thus people try to know not only what is happening, but also what might happen, what could happen, or, under particular conditions, what will happen *in the future*. Using such conjectural knowledge, people orient themselves in the present and, pursuing their projects, navigate through time and physical and social space.” (Bell, 1996: 4)

Futures Studies⁵⁶ is an interdisciplinary field of study that seeks to draw strategic conclusions for the future by studying patterns of change in the present. The use of plural in the term emphasises a core argument of many alternative futures being possible. Futures Studies, in its various forms, has been applied to areas as diverse as national planning, environmental policy, marketing and fashion, and its practitioners include journalists, urban planners, economists and policy analysts. (Bell, 1997)

The World Future Society states reasons ranging from individual to global concerns, and from devising preventative measures to opportunistic strategies, for using Futures Studies. (World Futures Society, 2007) According to Toffler, the role of futurists is to create “new,

⁵⁶ Or e.g. futurology or futurism.

alternative images of the future – visionary explorations of the possible, systemic investigations of the probable, and moral evaluation of the preferable.” (Toffler, 1978: x)

Human beings have always been preoccupied with the individual’s or collective’s future and from ancient times there have also existed ‘professional futurists’, such as Pythia, the priestess of Apollo speaking from the Oracle at Delphi (1400 BC), palm readers and astrologists. (Halpern, 2000) List suggests four near eternal characteristics of human beings that underpin our need to anticipate: optimism, the desire to know the future, attribution of causation, and achievement motivation. (List, 2005)

5.6.2 Brief history of Futures Studies

List (2005) outlines three phases of future anticipation; an ‘intuitive, or pre-scientific phase’ which lasted until the 19th century; quantitative forecasting which began in developed countries during the 19th century; and the ‘alternative futures movement’ which started mid 20th century.^{57 58}

While existing as pockets in various academic fields before⁵⁹, Futures Studies emerged as an academic discipline in its own right after the Second World War; out of the need for cohesive strategic planning and the interest of, for example, scholars, writers and artists in conceptualising and creating a more positive future. (Slaughter, 1996)⁶⁰ By the late 1970s several international futures organisations had developed, of which the Club of Rome (behind the publication of the seminal text *The Limits to Growth*, an early report of the environmental predicament) is of particular relevance for the purposes of this PhD project. (Meadows, Meadows, *et al.*, 1972) Non-fiction future oriented best-sellers popularised the field and established it in a marketing context.⁶¹ In recent years a Critical Futures Studies movement has emerged which promotes a self-reflexive stance where the futurist is aware of his or her immersion in a system, predominant worldviews are challenged and a wealth of social realities are engaged with. (See e.g. Slaughter, 1996a; and Inayatullah, 1998⁶²)

⁵⁷ After Thomas More’s book from 1516, *utopia* - which means ‘no place’- came to represent both a genre of fiction and a conception of an ideal place. (More, 1981) A reading of Carey’s anthology *The Faber Book of Utopia*, shows that at the end of the 18th century, utopian writers shifted their focus from ‘other place’ to ‘other time’ as the site of an ideal society, or its opposite, dystopia. (Carey, 1999) Later secularised utopian thought also proposed that utopia could take place in this life (as opposed to only after life, heaven) and that human beings could create utopia. (Bell, 1996)

⁵⁸ The writings of Jules Verne, early science fiction, and H.G Wells, who famously in a BBC address from 1932 lamented the focus on history “Wanted: Professors of Foresight”, contributed in shaping the field of futures thinking. (Slaughter, 1996: x)

⁵⁹ And the systems planning approach, enjoying success in for example financial and military realms. (Slaughter, 1996)

⁶⁰ Polak’s *The Image of the Future* from 1951 and de Jouvenel’s *The Art of Conjecture* from 1964 appear to have been significant contributors in providing early focus and methodology for the discipline of Futures Studies.

⁶¹ See e.g. Toffler’s *Future Shock*, 1970 and Popcorn’s *The Popcorn Report*, 1992.

⁶² This movement is also exemplified by the method Causal Layered Analysis. (See further into this chapter.)

5.6.3 The focus of Futures Studies

Masini identifies three key strands of Futures Studies⁶³: the technologically oriented, the sociologically oriented⁶⁴ and the globalistically oriented.⁶⁵

The foci of Futures Studies vary according the strands including:

- Alternative futures, a proactive approach from the French School;
- The images of the futures approach, which, following Polak (1973), argues that understanding the future necessitates an examination of how it exists in people's minds – these images is turn are informed by history, believes and desires;
- Policy and praxis informing approach, which have dominated the field in the Netherlands and Scandinavia;
- A holistic approach, understanding relationships between individuals, societies and their environment; and
- Impact of technologies on future society.

(Masini, 1999)

Masini draws a distinction between 'prognosis', 'visions' and 'project-building' approaches to Futures Studies. The first asks what is probable and possible through extrapolating empirical data,⁶⁶ the second stems from the notion that "something *must* be changed" and "aspires to transform the present through a vision of the future." Finally, the third merges the two former in an approach where "we see the emergence of choice – the interest of the observer... based on the belief that something *can* be changed." (Masini, 1999: 40-41)

Futures Studies explores possible, probable, and preferable futures and therefore stretches from the realistic, to the speculative and even fantastic. In brief and simple terms the field therefore:

- Draws conclusions for the future from what we can and do know, by orientation in the present;
- Seeks to discover unanticipated, unintentional consequences of social actions and events beyond human control;
- Generates alternative images of the future; and
- Clarifies and evaluates the soundness of prospective futures.

(Bell, 1997)

⁶³ Her categories are based on Futures Studies in North America, but allow for broader use. (Masini, 1999)

⁶⁴ Where thinkers such as Toffler can be placed.

⁶⁵ An example of which is the Club of Rome's work on sustainability. (Meadows *et al*, 1972 and 1992)

⁶⁶ Such as the work of a metereologist.

As Futures Studies typically targets areas beyond empirically established predictability⁶⁷ and in fact studies complex systems (as described earlier in the chapter), it relies heavily on probability theory. Study of probability typically includes such events that are improbable, but the effect of which is significant if they do take place, which in futures terminology are called wild cards. (See e.g. Glenn and Gordon, 2003)⁶⁸ Future studies can operate by extrapolating and overlaying for example social, economical and technological trends. A more recent approach is to build scenarios based on extensive understanding of social systems and uncertainties. The inclusion of *preferred* futures into, for example, scenario planning, signifies an engagement with normative models. (Bell, 1997) Futures Studies can therefore encompass aspects of both rationality and value. It appears that in its expanded sense, combining analysis with 'care', a practitioner of Futures Studies, can act in an organisation as a spokesperson for the future.

Masini argues that while foci and conceptualisation vary, Futures Studies as a whole rests on the foundations of dominant Western philosophical concepts, particularly those of Locke, Leibnitz, Kant and Hegel. (Masini, 1999)

5.6.4 Methods and processes in Futures Studies

Because of its intrinsically interdisciplinary and systemic nature, and arguably its youth as a formal discipline (or set of disciplines), Futures Studies draws methodology from a variety of fields (such as economics, mathematics, sociology, anthropology and psychology) to develop theory of both present conditions and their possible change patterns. An exhaustive discussion of methodology used in Futures Studies is outside the scope of this thesis; the following paragraphs draw out some key examples of methods and processes.⁶⁹

Figure 5.3 below, maps a series of approaches in Futures Studies. These techniques are often used in conjunction with each.

⁶⁷ Celestial mechanisms exemplify an area that has been empirically explored and the predictions of which are reliable.

⁶⁸ It appears that predictability is a key area of controversy within the discipline's community of academics and practitioners, creating a division between those who argue that prediction is outside the realm of Futures Studies, and those who champion a meaningful integration of probability, prediction, possible and preferable futures. Prediction markets – in simple terms a sample selected for its reliability in confirming forecasts – is one of the emerging strategies for ensuring at least degrees of predictability when researching systems in flux. (See e.g. Glenn and Gordon, 2003)

⁶⁹ It should be noted that the terminology of these varies, not least because many actors in the field package and trademark tools. I have chosen the terminology used in a comprehensive material on Futures Research Methodology by the American Council for the United Nations University, a global participatory futures research think tank. (See e.g. Aaltonen and Barth, 2004)

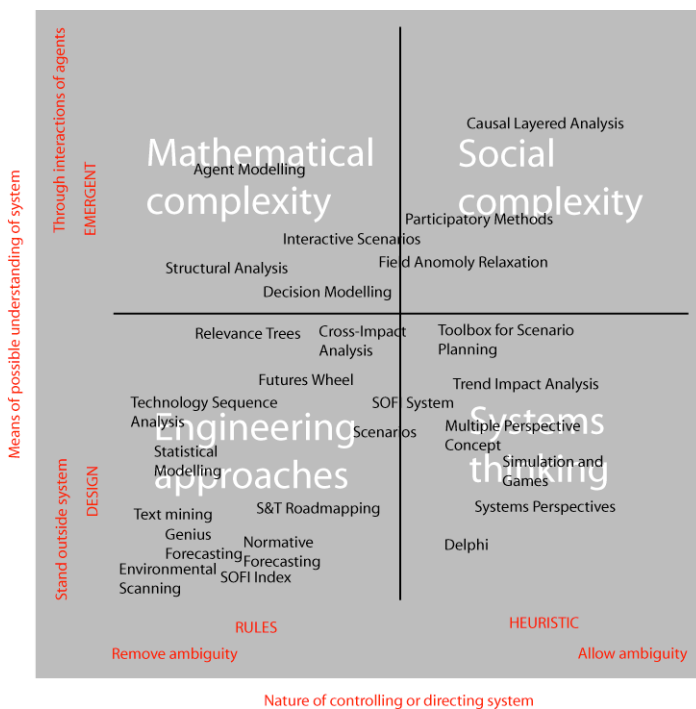


Figure 5.3 The embedded attributes of the methods in “Futures Research Methodology – V 2.0” (Aaltonen and Barth, 2004)

Figure 5.4 describes some of the most common approaches. (As informed by e.g. Glenn, 1972; Snyder, 1993; Aaltonen and Barth, 2004, Inayatullah, 1998; Bell, 1997)

<i>Method</i>	<i>Use/type</i>	<i>Description</i>
Delphi (from the oracle of Delphi)	Overview of field method	Gathering information through serial panel surveys with experts from different disciplines. From initially focusing on the individual expert's opinion of the nature and timing of developments in her or his particular field, progressively the experts are asked to reconsider their answers after having taken part of each other's estimation.
Scanning or media scanning	Overview of field method	Consistently reviewing and analysing e.g. literature, press, websites and current events.
Futures Wheel	Brainstorming technique	A process of documenting, overviewing and analysing e.g. several layers of the consequences of a trend.
Cross Impact Analysis (often used with Delphi)	Mapping tool	A technique for working through several relationships within a system in order to understand which impact they, and other factors, such as trends, may have on each other.
Causal Layered Analysis	Mapping tool	A technique for analysing the present or future through a succession of progressively deeper layers – all of which are interdependent. It therefore provides a framework for categorising and addressing influencing factors of very different type or magnitude. Inayatullah's proposed layers are: 1. Litany – the official view of reality or issue 2. Systemic – social, economic, technological, political and environmental causes 3. Discourses – stakeholders, ideologies, worldviews 4. Myths and metaphors – unconscious, emotive understanding (Inayatullah, 2004)
Relevance Trees	Normative forecasting method	A diagrammatic approach that is suitable for organisations of distinct complexity and hierarchy. From the established future needs and objectives this method uses back-casting in order to identify requirements to achieve the goal.
SWOT Analysis	Strategic planning tool	E.g. an organisation is analysed in the context of strengths, weaknesses (internal to the organisation) and opportunities and threats (external to the organisation) organised on a matrix. Once strengths, weaknesses, opportunities and threats are mapped, they can be analysed across in order to identify additional opportunities and challenges.

Figure 5.4 Common methods in Futures Studies⁷⁰

Of particular relevance for this thesis and one of the basics of Futures Studies is *Scenario Planning*, a systemic method that uses a combination of tools. Generally speaking, Scenario Planning is aimed at mapping out alternative futures. After selecting a current event, organisation or condition, it selects possible, probable or preferable consequences, and imagines (in the context of internal and external factors) a timing and sequence of events and alternative future outcomes. Scenario planning can comprise both quantitative and qualitative analysis processes. (See e.g. Huss and Honton, 1987; Ringland, 1998; Chermack *et al.*, 2001; Cornish, 2005; List, 2005) Figure 5.5 below provides an overview of scenario types. (More practical aspects of scenario work are described in Chapter 6, 6.2.6.)

⁷⁰ An adjacent tool to SWOT, *PEST Analysis* (political, economic, social, technological) or *PESTLE* (with the additional of legal and environmental) is also used for cross-referencing macroenvironmental factors. (See e.g. Armstrong, 2006)

Overarching theme	Scenario type
A. Project goal: exploration vs. decision support	1. Inclusion of norms? Descriptive vs. normative 2. Vantage point: forecasting vs. backcasting 3. Subject: issue-based, area-based, institution-based 4. Time scale: long term vs. short term 5. Spatial scale: global/supranational vs. national/local
B. Process design: intuitive vs. formal	6. Data: qualitative vs. quantitative 7. Method of data collection: participatory vs. desk research 8. Resources: extensive vs. limited 9. Institutional conditions: open vs. restrained 10. Time taken for scenario development: short vs long 11. Formality of process: rigid vs flexible 12. Method of development
C. Scenario content: complex to simple	13. Temporal nature: chain vs. snapshot 14. Variables: heterogeneous vs. homogeneous 15. Dynamics: peripheral vs. trend 16. Level of deviation: alternative vs. conventional 17. Level of integration: high vs. low 18. Number of scenarios: few vs. many 19. Detail in each scenario: little vs. much 20. Number of scenario iterations: 1 vs. 2 21. Shared content: standard vs. unique
D. Scenario usage: internalized vs. externalized	22. Promulgation: internal secret vs. wide publication 23. Use: direct input into planning vs. better understanding 24. Timescale: immediate use vs. kept for reference

Figure 5.5 Scenario typology (List, 2005: 29) following Van Notten *et al.*, 2003)

Forecasting is a field in itself, comprising a set of approaches and methods. Forecasting uses both quantitative and qualitative data, and is often occupied with time-series (a process of extrapolation from data points in the past), cross-sectional (data collection across subjects) or longitudinal data. (See e.g. Rescher, 1998; Armstrong, 2001)

“Decision makers need forecasts only if there is uncertainty about the future. Thus we have no need to forecast whether the sun will rise tomorrow. There is also no uncertainty when events can be controlled; for example, you do not need to predict the temperature in your home... Forecasting is often confused with planning. Planning concerns what the world *should* look like, while forecasting is about what is *will* look like.” (Armstrong, 2001: 2)

5.6.5 Futures Studies and epistemology

According to Popper, “the refutability of scientific theories is what demarcates real science from... pseudosciences.” (Popper as paraphrased in Lazar, 1999: 9) As a science, Futures Studies poses epistemological concerns. In reality, its practice encompasses a broad range from methodologically deemed sound approaches to reliance on inspiration. Even at the more rigorous end of the scale, for obvious reasons, strict scientific method, such as refuting or confirming hypotheses through repeated experiments is not possible. In formal schemes, increasingly cycles of planning, implementation, evaluation and feedback to planners and so forth are put into place in order to secure more robust programmes. (Bell, 1996) However, even so withstanding, the very intricate dynamics of complex systems make the viability of replications questionable. Additionally, if we accept the circularity argued by, for example, complexity theory and social constructivism, self-fulfilling prophecies make it impossible to verify or refute forecasts even at the point of time they target. Such epistemological

conundrums, and the frequent inadequacy of the timing and scaling of predictions, have given Futures Studies an ambiguous reputation.

“With prediction, as elsewhere in the cognitive domain, we must always balance the negativity of possible error against that of vacuous ignorance.” (Rescher, 1998: 53)

Nevertheless, the extreme alternative to engaging with Futures Studies; to accept the future as unpredictable and outside the realm of our individual and collective control, both seems to be against human nature in general, and a cynical and dangerous approach in the light of the current environmental challenge that we face. To this end I embrace an emergent area of Futures Studies that uses a broad set of methods and processes, that seeks to lay bare our assumptions about the world and thus the foundations of our visions, and that invites multiple perspectives into the shaping of futures.

5.6.6 Images of the future

The methods used in Futures Studies, and the field in general, constitute an intricate mix of rational, creative and intuitive thinking and yet another spectra from the detached prognosis to the explicitly value based vision. Polak’s pioneering work introduced the importance of studying society’s *images* (in the widest sense) of *the future* as these images could affect the course a society would take. (Polak, 1951) Lasswell theorised the role of images of the future as *developmental constructs* or aspirational models that outline a path for social change and are a key aspect of political propaganda. (Lasswell, 1977) Beach and Mitchell distinguished between the projective image (the goal) and trajectory images (the steps on the way) and argued their usefulness in planning and decision making processes. (Beach and Mitchell, 1987)

The circularity of images of the future, and of *metanarratives* (described earlier in the chapter), constitutes a central tenet of this thesis and makes necessary a further exploration into the ethical aspects of Futures Studies. The following introduces a critical discourse of Futures Studies in general, and of forecasting in particular.

5.6.7 Trend-forecasting – fore cast, pre dict, pre scribe = shaping the future

Slaughter stresses that although Futures Studies by many is associated primarily with socio-economical planning, its socio-ethical potential is significant. Thus, he describes Futures Studies as “the identification of viable human futures and the pathways toward them.” (Slaughter, 1996: xi) Sardar critiques the bias towards Western, predominantly traditional male values in Futures Studies. He argues that the use of the Western industrialised society as a model, and thereby its scientific and economic domination over issues such as health, parenting and education, do not allow for pluralistic, sustainable futures. (Slaughter, 1996)

“forecasting is one of the major tools by which the future is colonised. No matter how sophisticated the technique – and techniques are becoming more and more refined and complex – forecasting simply ends up by projecting (the selected) past and the (often-privileged) present on to a linear future.” (Sardar, 1999: 9)

If we accept the circularity of forecasting and that the 'cast' used when shaping the future comes from biased observations and is used for biased ends, we should be very concerned with how this perceived or actual power to create or influence the future is managed. However, once we realise the force of *casting beforehand*, it offers opportunity for creative, reflexive involvement with the future for sustainable instead of purely commercial ends. I suggest that the role of forecasting in the domain of fashion is no less sinister, or hopeful, although its immediate repercussions may appear slighter.

5.6.8 Futures Studies in areas of lifestyle

"Trends are not about predicting the future, but about relating to near-future consumer mindsets. Trends can arm designers with the knowledge to create the future." (Jeremy Brown of Sense Worldwide, 2004)

"Look-Look.com is the best on-line, real-time research and information service focused on global youth culture... Look-Look.com gives a powerful collective voice to youth and allows them to speak honestly about topics important to them... Look-Look.com is a bridge that connects youth culture to the professional who wants to understand it." (Dee Dee Gordon of Look Look, 2004)

Whereas Futures Studies is primarily oriented towards the 'larger' questions and longer-term, not exclusively commercial goals, aspects of it, such as forecasting is increasingly used in areas, such as advertising, that are heavily influenced by trends in for example consumer mindsets and technology. Here the mix of quantitative and qualitative data use seen in Futures Studies is reflected, but approaches in these areas appear more ad hoc. In terms of the consumer insights that these organisations seek, there appears in recent years to be a shift from a focus on demographics to attitudes, opinions and beliefs. This is, from a Western perspective, the result of society increasingly becoming individualised and negotiating belonging beyond such previous criteria as for example class, age, religion and locality. (See e.g. Polhemus, 1994; Shah, 2002)

Whereas academic research is guided by ethical codes, commercial research (and its end-use) is not ruled by such control mechanisms. Additionally, a survey of companies in the field showed that most researchers have a background in design or marketing and therefore often no formal research training.⁷¹ Arguably it follows that commercial futures research is not generally underpinned and informed by a sound understanding of the philosophy behind

⁷¹ A survey of prominent actors in the field of providing foresight to companies in the areas of *lifestyle*, reveal the use of anthropological approaches and networks of informers (deemed to be in the pioneer or early adopter category) to gather data. This survey, conducted in 2006, encompassed ten organisations' websites and covered employee profiles, methodological approaches and ethical statements. It included the websites of Seymour Powell, WGSN, Sense Worldwide, The Future Laboratory, Look Look, TrendUnion, Svenska Moderådet.

research methodology and the very objectives of research. None of the organisations' websites studied in the survey included an ethical statement. There is of course a significant difference between academic and commercial research. Whereas the latter's role is to increase profits (by e.g. improving consumer experience), research within the realm of academia claims to further the human condition. Nevertheless, however explicit the ultimate objectives of commercial research might be, we should be concerned with the perceived or actual power of their casts.

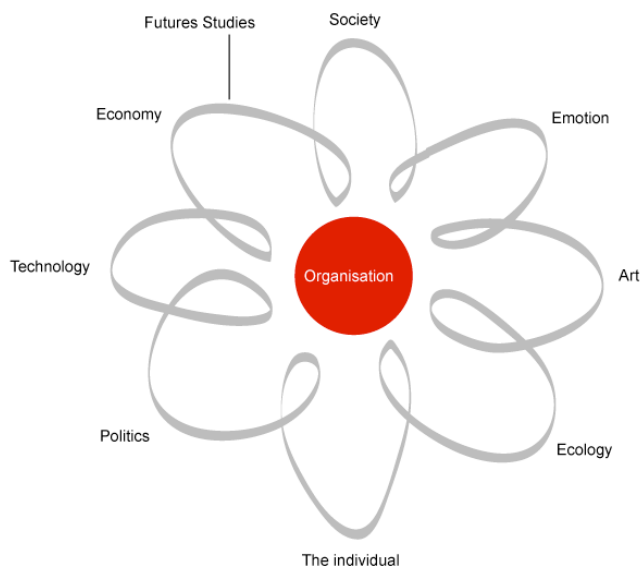


Figure 5.6 Futures Studies links an organisation with zeitgeist

5.7 Futures Studies in fashion

Futures Studies as applied to the fashion industry is called fashion prediction, fashion forecasting or trend-forecasting. I use the latter term to include both fashion clothing specific trends and more general lifestyle trends. The body of literature focusing on fashion forecasting in particular is slim and dominated by practical guides to the field. (Perna, 1987; Brannon, 2005; Diane and Cassidy, 2005⁷²; Jackson and Shaw, 2006) That very little research exists in this area may be explained by the innate secrecy of the industry, and by the tendency to view fashion in general as superficial, which in turn may depend on its dominance by women and gay men. The following critical perspective, specifically targeting fashion forecasting is informed by Crane (2000) and Giertz-Mårtenson (2006), findings from the first empirical study of this thesis, and my professional experience in trend-forecasting. I have found no critical discourse of trend-forecasting and fashion forecasting in the context of sustainability.

⁷² This text focuses on colour forecasting.

5.7.1 A brief history of fashion forecasting

Trend-forecasting as an organised phenomenon appeared in the 1960s Paris where *agences de style* such as MAFIA, Promostyle and Precler (founded 1970) started developing and selling seasonal advice to fashion companies.⁷³ The advent of these services has been explained by the time's ideological and political movements, and the quick expansion of the fashion and advertising industries. (See e.g. Hebdige, 1979 and Crane, 2000) Giertz-Mårtenson (following Giddens, 1991) views the development as part of the post-modern condition:

“when the institutional thinking with firmly established authorities gradually disappeared from fashion, the risk element of fashion design became much more significant. There was no longer a given institution (the *haute couture* of Paris) or a clear manifest (the for every season declared and approved new fashion) to rely upon. The fashion press' accelerating reports on constantly new styles and the sub cultures' expression emphasised this even further.” (Giertz-Mårtenson, 2006: 17, *my translation*)

It should be noted that the first establishment of trend-forecasting in the domain of fashion coincided with the general early development of Futures Studies as a discipline.⁷⁴ Lidewij Edelkoort, one of the major actors in the field of fashion forecasting describes her early professional experience with MAFIA, and how the then idealist zeitgeist was reflected in the work: “a political-ideological aspect to the message... we were true pioneers... today it has become very mainstream and the ideological aspect that was part of the work in the beginning has disappeared... but I have kept some of it, I am more militant than the others.” (Edelkoort, as cited in Giertz-Mårtenson, 2006: 18, *my translation*)

5.7.2 The scope of fashion forecasting

As described in the first empirical study (Chapter 4), trend-forecasting in fashion comprises:

- A driver for design direction;
- Key events and actors;
- Media - such as audio-visual presentations, online reports, books, consultancy;
- A language (seductive and image-led); and
- Methods and processes.

Trend-forecasting is an integral part of the fashion design process at mass-market level (see Chapter 4). Designers conduct their own research, and access trend-reports through

⁷³ It should be noted that the Color Association of the United States started providing an early equivalent to colour forecasting services already in 1915 when the war had cut off America's access to colour cards and general fashion trends from Paris. (CAOS, 2007)

⁷⁴ A key difference from the larger Futures Studies area is that fashion forecasting from its very start has been dominated by women, just as both then and now the celebrated fashion designers are predominantly men. Giertz-Mårtenson makes the reflections that, again, the perception of the area as superficial may have deterred men; that those women that pioneered the field perhaps were visionaries that identified its opportunities before the men; and that there was also, very much in accordance with the zeitgeist, a genuine wish to promote good and accessible design. (Giertz-Mårtenson, 2006)

seminars, trend-books and magazines⁷⁵ and designated websites. These reports range from directions on style (as specific as the positioning of a pocket) to directions on lifestyle and socio/cultural/economic trends. The initial empirical study showed that alongside the sales figures of current and previous seasons, trend-forecasting constitutes the most important driver of fashion in the mass-market domain. With many and very quick decisions to make, and a highly competitive market, such ‘evidence’ serves an important role in the dialogue between designer, buyer and the sales organisation. Depending on the role of the fashion professional, the context and point in the design process, this evidence is used for *inspiration, information and confirmation*. In comparison with the concerns of the general field of Futures Studies, trend-forecasting for fashion studies near futures and is mainly concerned with visual trends.

5.7.3 Methodology in fashion forecasting

The methodology of fashion forecasting is not formalised but can be described as relying heavily on ‘scanning’ (of e.g. fashion shows, magazines and shops). In this scanning process, judgements are made of:

- ‘rightness’ (e.g. aesthetic interest, correlation with zeitgeist);
- relevance/appropriateness (e.g. for a particular market and target group, and time); and
- timing (at which point a specific set of fashion elements is relevant for a particular audience and market).

Initial, divergent exploration is followed by a mapping process where selected fashion or cultural elements are organised into coherent themes – fashion stories, usually presented as mood boards. This process is reiterated until a balanced collection of themes is achieved. Again, this balance is evaluated from the above criteria. The mood boards, and narratives are examples of fashion’s equivalent to images of the future. Fashion forecasting, just like fashion itself, is therefore reliant upon a series of selection processes, which to a large extent are *tacit*.

Giertz-Mårtenson describes one of the tools of the trade as the “trend pitch”⁷⁶. Its makeup is comparable to Bourdieu’s concept of habitus⁷⁷, a combination of the individual’s disposition (from genes, background, experiences and memories), and ability developed through

⁷⁵ See e.g. the publications *View on Textiles* and *View Point* (Metropolitan Publishing BV, Amsterdam); the UK based online trend resource WGSN; and Paris based organisation TrendUnion’s material and seminars.

⁷⁶ My translation from the Swedish *trendgehör*. *Gehör* (from the German hearing) is used to describe the the particular musical ability of perfect pitch.

⁷⁷ Bourdieu’s notion of habitus can be understood as a system of dispositions made up of perceptions and actions. (Bourdieu, 1993)

practice (Giertz-Mårtenson, 2006: 32, following Bordieu, 1993).^{78 79} The trend pitch includes aesthetical judgements and estimations of 'rightness' and timing. For both designers and those specialising in creating trend-reports for the lifestyle segment, intuition (gut-feeling) and creativity play important roles. (See also Chapter 4, 4.5.5.1)

5.7.4 The role of forecasting in fashion

According to Giertz-Mårtenson, although the fashion forecaster presents ideas that the fashion industry turns into clothing, it is ultimately the end-user who, through her choices, decides what becomes fashion, "the trend analyst does not create fashion, but constitutes a not negligible factor in the process behind it. The ability to interpret those signals that she picks up, can be described as a creative process. Here, the trend pitch and the creative capital are important aspects in generating credibility and recognition." (Giertz-Mårtenson, 2006: 33, *my translation*) I would add the significance of fashion stylists and media in this accreditation process. (As does Crane, 1999a) The *becoming* of fashion thus constitutes the product of an intricate collaboration between forecasters, designers, media and users. Edelkoort claims that fashion forecasters are not creative in the sense of generating anything new, and that it is impossible to create new trends, for fashion or lifestyle, as their adoption is dependent on a fertile ground in society. (Edelkoort as cited in Giertz-Mårtenson, 2006)⁸⁰

5.7.5 Trend and fashion forecasting, and notions of creativity and newness

This section argues that trend and fashion forecasting are creative fields in their own rights, and that their definition as such is important from a sustainability perspective. An exhaustive exploration of what criteria define a genuine creation is outside the scope of this PhD. However, some reflections are necessary to situate the area of trend/fashion forecasting within the overall thesis.

I argue that trend forecasting is one of a series of creative disciplines specialised in the collating, filtering, packaging and dissemination of cultural elements. Other examples are the emerging fields of sampling (in the music area), curating (in the arts) and styling (in the fashion and lifestyle areas). The practitioners of these collative fields are enjoying considerable recognition for their creative ability and, in the case of at least fashion stylists, are often considered as influential as the designers supplying the discrete parts. (See e.g. stylist Katie Grand, *The Observer*, 2003) This tendency for the collecting of cultural elements can be seen as part of the post-modern propensity for fragmentation and relativity. (See e.g. Giddens, 1991) It is reflected in how construction of personal identity and group belonging

⁷⁸ Through my own professional practice I have observed how an initial curiosity and imagination grows into professional skill through constantly being exposed to fashion cycles, time away from these cycles results in a decline in trend pitch.

⁷⁹ See also Blumer's notion of collective taste and intense immersion. (Blumer, 1969)

⁸⁰ See also e.g. the work on memes by Dawkins (1976); Blackmore (1999); and Gladwell's concepts of stickiness and contagiousness (2000) described earlier in this chapter.

has shifted from demographics to criteria of values, opinions and beliefs, and the development of the concept of lifestyle. Polhemus' work on fashion and subcultures makes evident that collections⁸¹ of fashion elements - stylistic themes, from a historical perspective have left a stronger imprint in the cultural consciousness than the discrete fashion objects. (Polhemus, 1994) The isolated fashion garment is a collection of cultural elements in itself, be it references to a vintage cut or the motives of modernist painting.

Design as *collecting* evidently is far from the myth of the lone artist genius spurred by divine inspiration.⁸² However, arguably the collator-designer requires and uses capital (such as creativity and tacit knowing) shared by bona fide designers. To include such collative approaches that the fields of trend and fashion forecasting represent in creative design practice is important for (at least) three reasons.

Firstly: it is appropriate to return to Heidegger's notion of *bringing forth*. "Bringing-forth brings out of concealment into unconcealment". Heidegger distinguishes between man-made and natural creation; design would of course fall in the former category. (Farrell Krell, 1978: 321) I would argue that the collating of cultural elements can be identified as *bringing forth* in the sense that the collection is meaningful in a different way to the parts of which it constitutes.⁸³ In Heidegger's (following the Greek) conceptualisation of *bringing forth*, design is inseparable from responsibility. (See e.g. Farrell Krell, 1978) I argue that an understanding of a field as creative in the sense of bringing into the world new propositions (albeit constructed from elements that have existed before), places considerably more emphasis on the usefulness and purpose of the object of creation than does its interpretation as a set of scattered elements. It draws a line between unborn and born.⁸⁴ Just as rites of passage in human social systems demarcate important changes in an individual's status, the conception and delivery of designed objects should be recognised as remarkable events and a cause for reflexivity as well as celebration. Therefore the conceptualisation of fashion and trend-forecasters as deliverers of scattered cultural elements can be understood as yet another example of controlling imagery or legends that defers engagement with sustainability.

Secondly: the understanding of trend/fashion forecasting as a design field should make it more visible, and lend it more kudos – both as practice and research area. An increased internal and external recognition of this field, may spur more, much needed, critical evaluation of it. (The problematic nature of the perception of fashion in general as superficial and lightweight is elaborated later in this chapter, **5.8.6**)

⁸¹ Note that the use of *collection* in this context is different from the collection that describes the a sum of a designer's work with a particular season.

⁸² See e.g. Birkeland, 2002; McRobbie, 1999.

⁸³ Compare with complexity theory's notion of emergence described earlier in this chapter.

⁸⁴ Kajzer uses the metaphor of objects as living to challenge the antropocentric framework of producerism and consumerism and the resulting unsustainability. (Kajzer, 2004)

Thirdly: the recognition of the collation and dissemination of cultural elements as design practice highlights the collaborative efforts that virtually all design depends upon. The perception of design as a collative and collaborative practice (within the design community, with other disciplines and with users) offers an alternative to the reading of the designer as a self-sufficient star. This thesis argues that the specialisation of the fashion industry, seen as a product of more general processes of alienation, is a significant contributor to unsustainability. (Chapters 3, 3.6 and 4, 4.6.1.1.1) The usefulness of broadening design, in terms of the range of its outcomes, and the roles that it invites into the process, was discussed in the context of *metadesign* earlier in this chapter.

5.7.6 Powerful propositions of fashion

Trend and fashion forecasts are images of the future, invested with aspiration. These forecasts use highly seductive language designed to touch an audience at both emotional and cognitive levels. They currently serve a commercial framework, exemplified by the fashion industry at mass-market level. Jointly these characteristics enable the conceptualisation of trend and fashion forecasts as embodied propaganda.⁸⁵

Giertz-Mårtenson uses Bourdieu's theories of symbolical capital to explain the authority of key trend-forecasting agencies, and (following Giddens, 1991) the notion of increased risk to explain the advent of fashion forecasting in the first place. (Giertz-Mårtenson, 2006) In the report of the first empirical study 'fear', and resulting circularity were highlighted as factors that bind fashion companies to trend-forecasting agencies. (Chapter 4, 4.5.4.2) I argue that the success (in terms of reliable predictions and ultimate financial profit) of trend-forecasting is an example of an intricate circular argument. The more charismatic and authoritative the messengers, and (in Gladwell's, 1999, terms) the more sticky and contagious the message, the more keenly fashion companies listen, and in turn, the more likely it is that the predictions become true. And - an even bigger number of fashion companies dare not ignore the trend reports. It is a case of a self-fulfilling prophecy.

I agree with the notion that the *becoming* of fashion is dependent on a fashion proposition's acceptance amongst users. (See e.g. Vinken, 2005) However, to what extent is the user's acceptance of a proposition conscious and reflexive? The fashion proposition is highly skillfully crafted in terms of the suggestive nature of the language with which it is communicated, and targets such fragile spheres as a human being's estimation of self and belonging. Arguably we are never as vulnerable to the fashion proposition as in our most formative, adolescent years. A walk through any Western high-street or a browse through any fashion magazine evidences that the fashion market and offer is enormous. However,

⁸⁵ Advertising is an area in which projections of consumerist ideals has been the target of critical discourse. (See e.g. Lasn, 1999, and Poynor, 2001)

such activities make equally evident that supply does not equal choice.⁸⁶ Especially in the mass-market segment, the fashion propositions of different companies are remarkably similar. A well-rehearsed argument within the industry is that cultural elements are quick to disperse and that the homogeneity in the fashion offer therefore to an extent is a result of living in a global network. I subscribe to this to a degree. However, if enough influential actors promote the poncho as the next 'big thing', it is indeed very likely that it will be. The interdependence of fashion forecasting and fashion design creates powerful propositions for the future.⁸⁷

In comparison to Sardar's concerns about biased casts in Futures Studies, the possible repercussions of fashion forecasting, because of its object – fashion clothing, and timeline - short-term, may seem innocent and negligible. However, these forecasts can be viewed as accumulative in their power as the propositions are frequent and widely dispersed and the field's communication highly seductive.⁸⁸ The speed and scale of contemporary fashion production and consumption is astounding, which should in itself (e.g. because of its importance as an economic area, its effects on the environment, its role as site of cultural exchange) be a reason for the critical investigation of all of its rationales and drivers. Currently trend-forecasting operates from within and for a commercial framework. Sustainability, on the other hand, means the careful balancing of a complex web of ecology, ethics and economy. I argue that we must lay bare, critically evaluate and take responsibility

⁸⁶ For a critical discourse of to what extent women adopt the fashion proposition see Guy, Green, *et al.*, 2001.

⁸⁷ In November 2006 the lecture theatre at London College of Fashion is buzzing with excitement, we are all waiting for Li Edelkoort's presentation of spring summer 2008.

As usual, Edelkoort makes entrance fabulously and guru-like dressed in a full-length robe. For an hour we remain enthralled or entranced, or at least entertained by an audiovisual and Edelkoort's reflections on fashion and zeitgeist. Since fashion and environmental issues by this time has gathered some real momentum in the media, I am certain at least part of the presentation will be dedicated to this subject. I am to be disappointed, not a word, and after the lecture at question time I ask:

- "What about sustainability?"

Edelkoort – "Sustainability?"

- "Yes, where does it sit within all this?"

Edelkoort:

"Sustainability is everywhere... it is the basis for everything it is no longer a trend... it should be embedded in all things we do. If it's not, I think maybe this is where this middle market comes in. If they do sustainable and humanitarian things they will be very much more successful. Like American Apparel, although it is in the volume market, I think it speaks loud about how to do things different. So it is a big question today and I think it is something that cannot be a trend. It is part of the production process and philosophy..." (Edelkoort, 2006)

I wholly agree with Edelkoort that sustainability is not a trend, it is forever, and with its necessary integration into all that we do. It should be noted that Edelkoort, just as she claims in the quote earlier in this section, is probably more 'militant' than most of her colleague fashion forecasters, she has for example continuously supported local craft. However, Edelkoort's influence on fashion is significant. Besides frequent presentations and the sales of trend books, she and her team is also behind and involved in several trend magazines (see e.g. Bloom and View on Colour). In 2003 she landed a place on Time's 25 most influential people on fashion. Her explicit and creative support of not a trend, but continuous sustainability work in fashion, could arguably be very important.

⁸⁸ Fashion forecasting is also supported by a larger system of commercially embodied projections.

for the visions we construct and project onto the future in the domain of fashion forecasting, just as elsewhere.

5.8 Fashion⁸⁹ and change – a reading of fashion as change

Chapters 2 and 3 offered a reading of fashion as industrial activity and of fashion in the context of sustainability. Here I would like to draw out how fashion can be understood as processes and agency of change. The quote below illustrates that fashion covers a range of activities and discourses, and that there is a problematic lack of clarity in definitions. The section therefore starts with some definitions deemed useful for this thesis.

”From looking at the different contexts where fashion is talked and written about and shown... the conclusion that the term is very open is easy to make. Shopping, ‘to dress up’ and ‘make oneself look nice’, the development within various consumer goods, stories around certain garments, a retrospective exhibition or the journalistic coverage of a particular fashion company – all of this is regularly described as fashion. It is called fashion although it can be about such different things as consumerism, the quest for beauty, artistic activity, technological development, cultural history, marketing or the general textile production. Therefore it is not unusual for discussions about fashion to find themselves lost between the different subjects, and that the participants have parallel discussions about different things. It is probable that this lack of definitions puts obstacles in the way of finding clarity in various contexts...” (Sundberg, 2006: 9-10, *my translation*)

5.8.1 The scope of the fashion discourse

From having long been preoccupied mainly with the history of dress, there is a rapidly growing critical discourse on fashion, the key influencing texts of which come from a cultural or sociological perspective. (See e.g. Barthes, 1983; Blumer, 1969; Bourdieu, e.g. 1984; Simmel, 1904; and Veblen, 1899) Recurrent themes include: gender, fashion’s role in the construction of identity, fashioning the body (e.g. tattoos), the relationship between fashion and art, fashion in the context of technology, fashion as spectacle, notions of taste. Themes of particular ethical content include: fashion and sizeism (note the recent size zero debate), fashion and cultural diaspora and colonialism, and fashion and race. The texts address both producer and user perspectives on fashion, with a possible bias on the latter. Despite this rich and varied discourse on fashion, almost no literature addresses fashion in the context of sustainability, or fashion forecasting.^{90 91}

⁸⁹ *noun* **1a** a prevailing and often short-lived custom or style. **b** the prevailing style or custom... **2** a manner or way... *verb trans* to give shape or form to (something) *esp* with ingenuity. (The New Penguin English Dictionary, 2001: 503)

⁹⁰ A survey (July, 2007) of all volumes of Fashion Theory: The Journal of Dress, Body & Culture reveals that not one single paper (nor reviews of books and exhibitions) since its inception in 1997 is dedicated to the field of fashion in the context of a) the environmental imperative; and b) fashion forecasting.

⁹¹ Chapter 2 introduced the scope of the literature on fashion and environmental issues and established that although there is a growing body of scholarship in this field, it almost exclusively addresses the conundrum from a material point of view, i.e. it does not take into account that fashion operates mainly on a symbolic level.

According to Vinken the fashion discourse (whether philosophical or ethical) constitutes the relationships between three conceptualisations:

- The division of being and mere appearance;
- The division of sexes; and
- The division of the classes.

(Vinken, 2005)

Vinken advocates a discourse that goes beyond fashion's representation of the above constructs; a discourse that acknowledges that fashion not only represents but also forms.

"...I would like to analyze fashion as a poetological activity, that, like any poetological discourse, thematizes itself and has performative power. Fashion not only performs and economically functionalizes the division of gender and class; it constructs and subverts them by stripping them bare... and reveals them as an effect of construction." (Vinken, 2005: 4)

I agree with Vinken that fashion deserves a discourse in its own right, and that it shapes as much as it mirrors. In the text that follow I will argue that this reading of fashion is fundamental for, firstly understanding the field's complex relationship with sustainability and, secondly – and most importantly - for their successful integration.

5.8.2 Fashion and clothes

For Kawamura (2005) the creators of fashion are cultural producers that generate and communicate symbolic meaning via the vehicles, or vessels of clothing. According to one of Blumer's criteria of fashion, the creations are not primarily to be evaluated in terms of rationality and utility – only when these are superfluous can the fashion process begin. (Blumer, 1969) In Chapter 2 (2.2.1.3) the importance of distinguishing between fashion and clothing in an environmental context was made. (See also Tham, 2001; and Fletcher and Tham 2004) While fashion often coincides with clothing, they are not identical. Clothes operate primarily in fulfilling the material or biological need of protection, the social need of shielding, and the cultural need of adornment. (Following Broby-Johanssen, 1968) Fashion, on the other hand, links a garment, and by association its wearer, to time and space. It carries symbolical capital (following Bourdieu, 1984) that the individual uses in negotiations with the self and other individuals in order to manifest individuality and group belonging. A memetic perspective makes clear the immaterial level at which fashion operates, and how the cultural elements brought into a vessel that is clothing will only momentarily stay, although the garment endures. A second-hand garment is not invested with the same symbolical capital, or allure, today, as it was when it was first worn, whether five or thirty years ago.

5.8.3 Drivers of fashion

As discussed in the previous section, the degree to which the *becoming* of fashion is a result of a collaborative process between designer, media and user has increased in post-modernity or, in Vinken's term *postfashion*. (Vinken, 2005)⁹²

“If, for a hundred years, fashion has invented and reinvented ‘woman,’ postfashion has begun to deconstruct this ‘woman.’ Where fashion used to disguise its art, it now exhibits its artificiality. In the sign of the old, the used, it prescribes itself an aesthetic of poverty and ugliness, of sentimentality and out-modedness, of kitsch and bad taste, in which elements of the petit bourgeois enter into competition with the outsiders of society... *La mode de cent ans* now becomes the epitome of the unmodern, its class and gender stereotypes the ceaseless target of the citations and displacements of its successors.”⁹³ (Vinken, 2005: 35-36)

In the same vein, it is generally agreed that the conventional notion of social class is replaced by other belonging and distinction demarcations closer to symbolic than financial capital. (See Bourdieu, 1984) According to Veblen's concept *conspicuous consumption*, which grew out of his critique of the late 19th century *leisure classes*, fashion exists out of a quest for prestige, which is acquired through ostentatious and wasteful displays of wealth. (Veblen, 1999) Veblen's explanation of fashion only continues to hold if we allow for 'wealth' not exclusively to be seen as financial capital (but e.g. creative kudos⁹⁴, taste, moral superiority) and that the luxury concept is elastic (i.e. can include displays of for example abstention or minimalism).⁹⁵

Equally, the earlier hierarchical notions informing 'trickle down' cycles (Veblen, 1999; Simmel, 1904), with which diffusions of innovations theory have a strong affinity (described earlier in this chapter), are not sufficient to understand fashion cycles today. While Blumer agreed with Simmel that fashion is a social form and that it necessitates a society with a focus on prestige⁹⁶, he diverged in his acknowledgement of fashion as a social phenomenon in its own right, and consequently saw the elite, in the context of fashion, as those who first recognise the direction of fashion. (Blumer, 1969) If fashion used to trickle down from the European courts (and later haute couturiers) to an aspirational lower class (at which point the elite had sought new expressions), the fashion elite can no longer be defined by conventional class parameters. Additionally, contemporary fashion has turned dispersal up

⁹² “It is not the elite which makes the design fashionable but, instead, it is the suitability or potential fashionableness of the design which allows the prestige of the elite to be attached to it. The design has to correspond to the direction of incipient taste of the fashion consuming public. The prestige of the elite affects but does not control the direction of this incipient taste. We have here a case of fashion mechanism transcending and embracing the prestige of the elite group rather than stemming from that prestige.” (Blumer, 1969: 280-281)

⁹³ With *la mode de cent ans* Vinken refers to the hundred years of fashion since Charles Worth opened his fashion house in 1858 and brought into the same house cut, material and print of a garment into one cohesive product, and thus separated it from the individual woman and made it mass-producible. (Vinken, 2005; Hollander, 1995)

⁹⁴ For a recent reading of creativity as social capital see Brooks, 2000; and Florida, 2002.

⁹⁵ For a discussion on voluntary simplicity see Jonsson, 2006.

⁹⁶ For a discussion of the role of prestige in contemporary society see de Botton, 2005.

side down, as it tends to 'bubble up' from street culture to catwalk. (Polhemus, 1994) Finally, modern information technology allows fashion shows to be accessible to users virtually at the same time as they are shown to press, buyers and celebrities.

5.8.4 Fashion as change

According to Davis (following Blumer, 1969) the process of change is at the very core of fashion, a "continuing pattern of change in which certain social forms enjoy temporary acceptance and respectability only to be replaced by others more abreast of the times." (Blumer, 1969: 341-342)

Barthes characterises fashion by the discrepancy between two rhythms: that of natural replacement time and that of purchase. (Barthes, 1983) Although this description excludes a wealth of nuances and criteria of fashion, the notion of rhythm is helpful in reminding us of the layers of pace of a system, the mutual respect of which defines sustainability, that Brand (1999) puts forward. (See Chapter 3, 3.1.3) I have already argued that Western society as a whole suffers from disjointed rhythms, which metaphorically (and as exemplified in their commonness amongst young women and men) can be described as anorexic or bulimic. (See Chapter 3)⁹⁷

"Fashion can in fact be defined by the relation of two rhythms: a rhythm of dilapidation (d), constituted by the natural replacement time of a garment or wardrobe, on the exclusive level of material needs; and a rhythm of purchase (p), constituted by the time which separates two purchases of the same garment or wardrobe. (Real) Fashion, we might say, is p/d . If $d=p$, if the garment is replaced as soon as it is worn out, there is no Fashion; if $d>p$, if the garment is worn beyond its natural replacement time, there is pauperisation, if $p>d$, if a person buys more than he wears there is Fashion, and the more the rhythm of dilapidation, the stronger the submission to Fashion." (Barthes, 1983: 297-298)

Fashion both *mirrors* and *forms*. Fashion is not only intricately bound to societal change, it is also a *driver* of change, in terms of values and norms, the structure of social distinction and integration and economic structures, and practice. This reading further emphasises the intrinsic responsibilities - and opportunities - of fashion.

5.8.5 Fashion as practical Futures Studies

"Why brilliant fashion-designers, a notoriously non-analytical breed, sometimes succeed in anticipating the shape of things to come better than professional predictors, is one of the most obscure questions in history; and, for the historian of culture, one of the most central. It is certainly crucial to anyone who wants to understand the importance of the age of cataclysms on the world of high culture, the elite art, and above all, avant-garde." (Marxist historian Eric Hobsbawm as cited in Lehmann, 2000: xviii)

⁹⁷ See also Fletcher and Tham, 2004.

Earlier in this chapter, I argued that trend and fashion forecasting, in its bringing forth of new collections of cultural elements can be understood as design. In this section I will suggest that fashion design can be understood as practical Futures Studies.

An element of fashion designers' work is what we formally understand as trend analysis or forecasting. However, the very practice of fashion design also constitutes a cognitive and tacit processing of possible, probable and desirable futures. Lehmann suggests that the creators of cutting edge fashion can "anticipate things to come... exactly because they do not anticipate at all." (Lehmann, 2000: xviii) Instead they are able to capitalise on expressions of a zeitgeist as it is in the process of becoming, and before it is generally realised. They can do this because of the:

"absolute proximity of their work to the human body and its emotive responses. Clothes are closer to the spirit than intellectual contemplation or analysis is; and in the hands of a truly progressive designer, they can operate on an equally fundamental level. Therefore they provide a veritable embodiment of a cultural concept, whose brief existence is in itself a sign of fashion's growing dominance – it appears first reflected in a new dress or suit of a particular season, before it is disseminated in the media." (Lehmann, 2000: xx)

I would suggest that fashion design is not merely anticipatory - concerned with prognosis, but also visionary. Junker proposes that new media arts constitute a kind of practical Futures Studies. As such it has the strength of openness, being a young field, in the processes of defining itself. (Junker, 1999) Fashion is of course, at least in practice, more established, but has the force of its innate curiosity. Fashion design takes inspiration very seriously. It is a field that dedicates huge amounts of resources in terms of money and time to seek inspiration. (See Chapter 4) On both individual and collective levels, fashion offers a space for 'affordable' and playful experimentation into identity. What if this 'safe zone' of experimentation could also stretch our imagination into further away, inclusive alternative futures?

5.8.6 The fashion smirk

"Fashion has rarely enjoyed a very good reputation. Despite its undeniable success as a social and commercial phenomenon, it remains the very exemplum of superficiality, frivolity and vanity... The discourse of fashion assumes the philosophical form of a critique of mere appearances, the cultural-theoretical critique form of a critique of the market-economy, or the traditional form of a critique of sexual morality; but there seems to be no possibility of a serious concern with the subject that would proceed otherwise than in the mode of critique... The philosophers and the sociologists take it up only in order to denounce it, or, at best, contemplate it with a wry and distanced amusement." (Vinken, 2005: 3-4)

The fashion smirk is a term that Dr. Fletcher and I invented to describe an experience at the conference Time in Design, Eternally Yours, Eindhoven, October 2003.⁹⁸ While developing my thesis, I started realising its omnipresence and significance as an obstacle to sustainability. I began to see as an important aim of this thesis to erase the fashion smirk and replace it with proactively laughing together.

Vinken offers a comprehensive context to the tendency to treat fashion flippantly.⁹⁹ She writes that a “categorical rejection of fashion... span the whole history of the topic, from the Old Testament¹⁰⁰ up until late modernity.” (Vinken, 2005: 8) In brief, an existing moral objection to fashion gathered momentum with the French Revolution, whose protagonists annotated fashion to the idleness, debauchery and conspicuous wealth of the aristocracy that they travestied. Male sensuality, just as female sensuality, expressed through finery, is associated with the general weakness, moral corruption and political impotence – femininity - of the monarchy. Therefore a political objection to fashion is born. The new, virtuous political system is decidedly male and it follows that in the republican era, a new, horizontal dichotomy – man or woman – replaces the previous, vertical - noble or not noble. Fashion becomes firmly linked with femininity.¹⁰¹ In the meritocracy, and emerging bourgeoisie that subseeds aristocracy, men produce while women consume and “cultivate idleness and social amusement”. (Vinken, 2005: 13-14) Vinken writes how this “sociological discourse has

⁹⁸ In October 2003, three design lecturers from Goldsmiths and I travel to Eindhoven for the conference “Time in Design” organised by Eternally Yours. We are excited by the prospect of being challenged by new ideas, talking to colleagues who share our concern for sustainability and passion for design. The conference takes place over 24 hours in a beautiful space designed for creative activities. The general mood is friendly and excited. Between lectures by prominent names such as Manzini, van Hinte and Thackara, we are handed hot chocolates in one of the ‘magic rooms’. Some of us sleep in the lovingly arranged sleeping halls with odd lamps, Red Cross blankets, straw pillows and torches, all provided by a wonderfully strange ‘nurse’. Despite all of this, we leave strangely dissatisfied, or rather with different learning outcomes than we had hoped for. Most of all we lack a sense of integration. Midnight, and several hours into the conference, I am excitedly waiting for Gustav Beumer to start his talk, the only one dedicated to fashion on centre stage. Half-way through his lecture I am so enraged that I can hardly stay seated. Beumer bases his talk on how fashion since the 80s is no longer innovative, but repetitive - perhaps this is supposed to link the talk with the prominent prescription of longevity as a strategy for sustainability. The imagery he has selected is all from well-established brands, such as Gucci and Versace. There is no mention of the positive developments in the 90s and recent years, where the second hand market for clothing has exploded, the concepts of personal styling and customising are as status loaded, if not more so, than buying into brands. Worst of all his presentation is conducted with a wry amusement and detachment. His talk generates amused giggles, and I feel that, again, the hope for integration is lost. The following morning, conference delegates are gathered for a final plenary, facilitated by John Thackara. The impressions and outcomes of the conference are discussed. Scared but fuelled by an anger that won’t subside, cheered on by my colleagues, I raise my opinion that more interdisciplinary spaces may be fruitful and that it is important to integrate fashion into the design and sustainability debate. After a preamble, I receive the comment “Oh, you fashion people always take yourselves so seriously”.

⁹⁹ See also Hollander, whose work has sought to free fashion of the ‘stigma’ of femininity. (Hollander, 1995) Lehmann also alludes to the perception of fashion as superficial both as artistic activity and metaphysics. (Lehmann, 2000)

¹⁰⁰ It is fascinating to reflect upon that fashion, represented by fig leaves, has such an important role in the myth of the “fall”.

¹⁰¹ With the notable exception of resplendent military uniforms.

produced ever new variations on the deep-rooted moral condemnation of fashion, a reaction repeated in the existentialist and later in a certain part of the feminist discourse of fashion.” (Vinken, 2005: 7-8) The environmental objection to fashion is therefore just one of a series of dichotomies, which were perhaps first conceptualised in Socrates’ hierarchy valuing mind over matter. There appears to be no liberal economical objections to fashion.

The fashion smirk can be understood as one of many stagings of the alienation between nature and man that Merchant describes. According to her, nature, mother Earth, came to be viewed as the capricious and dangerous ‘other’, a threat to the logic and control of a male worldview. (Merchant, 1982, see also Chapter 3, **3.1.2** and 5, **5.5.3**) In his book *Chromophobia*, the artist and writer David Batchelor draws our attention to an adjacent theme of ‘otherness’ in the dominant approach, or rather non-approach to colour in architecture and traditionally male design fields.¹⁰²

“colour is made out to be the property of some ‘foreign’ body – usually the feminine, the oriental, the primitive, the infantile, the vulgar, the queer or the pathological... colour is relegated to the realm of the superficial, the supplementary, the inessential or the cosmetic... [it is] regarded as alien and therefore dangerous... [but also] as a secondary quality of experience, and thus unworthy of serious consideration. Colour is dangerous, or it is trivial, or it is both... colour is routinely excluded from the higher concerns of the Mind. It is other to the higher values of Western culture. Or perhaps culture is other to the higher values of colour, or colour is the corruption of culture.” (Batchelor, 2000: 22-23)

The above may illustrate how fashion (and by association its professionals) is often regarded with a smirk; as an immoral, self-indulgent industry, a fickle and narcissistic bird supported by those with too much money to spend and too little worthwhile content with which to fill their lives. (See also *A high status/low status job*, Chapter 4, **4.5.5.3**). From a design perspective, fashion as a discipline is seen to lack gravitas, perhaps because as a theoretical field it is young¹⁰³ and its physical manifestations are short-lived.

Everybody knows that Chalayan¹⁰⁴ is a genius but nobody knows why. (After McRobbie, 1999)

Additionally, fashion education is founded in a fine arts tradition, and came to develop an emphasis on personal creativity, crafts skills and intuition rather than rational analysis. Fashion designers have conventionally lacked a conceptual framework and a language to stand up for themselves with. McRobbie argues that the theoretical framework – from fine

¹⁰² It is interesting that its intrinsic use of colour separates fashion from other design fields, and also creates a demarcation within fashion itself, between a minimalist ‘cooler’ strand, exemplified by e.g. Jil Sander, and the exuberance of designers such as Zandra Rhodes and the less exuberant, but still heavily dependent on colour charts that are actually colourful but yet ‘accessible’, mass-market segment.

¹⁰³ Which may be a consequence of the historical construct of fashion as a feminine field.

¹⁰⁴ Hussein Chalayan, British/Turkish Cypriot celebrated avant-garde designer.

arts - that is introduced to fashion students, is insufficient in its relevance for their adopting it. (See e.g. McRobbie, 1999, and Chapter 4, **4.5.5.3**)

It is clear that fashion provokes strong emotions, whether it be for or against it. Through its ubiquity, fashion touches virtually all of us, it finds its way into our lives whether we consciously invite it or not. Fashion is here to stay (in one or other guise). It evidently has many problematic aspects – environmental degradation, certain appalling working conditions, social and individual anxiety to name a few - some of which are symptoms of society at large, and some of which are peculiar to fashion. I argue that rather than taking ourselves too seriously, the fashion community (and its surrounding) does not take fashion seriously enough. Fashion sits uneasily within the design and sustainability debate. I believe this is one of the reasons why environmental improvement by design in fashion arguably is lagging behind disciplines such as architecture and product design. The fashion smirk constitutes one of the legends that hinder environmental improvement in fashion. Let us let go of this image so that the integration project of fashion and sustainability can truly begin.



A



B



C



E



D

Image 5.1 The fashion moment. A) Bianca experiments (Courtesy of Stefan Ljungberg, 2008); B) Rosie and Zelda at Newington Green (author's photograph); C) Line-up, spring/summer 2007; D) Backstage, autumn/winter 2007; E) Catwalk, autumn/winter 2008 (Courtesy of Ann-Sofie Back, 2008, photography by Tim Griffith)

5.8.7 A case for fashion

The discourse on fashion and sustainability to date has described them as anathema. I suggest that in fashion we can find qualities that are intrinsic to sustainability, such as in-tuneness, connectedness, creativity, empowerment, the celebration of life, connection to the past and foresight.¹⁰⁵ Fashion, albeit restless, constantly referencing the past, and making propositions for the future is ultimately about a moment of extreme presence.

In the fashion moment an individual – through her clothing - finds herself in perfect synchronicity with time, space and other individuals. The fashion moment occurs through the glorious spectacle that is the fashion show, when in fourteen minutes a series of propositions are brought before our eyes, with music stressing their future socio-cultural relevance and adding to the suggestive atmosphere. Back-stage, yet another fashion moment takes place as six months of hard work reaches a crescendo. It is a moment of almost super real clarity and focus, yet frantic energy, when a nervous designer, alternating between hope and dread, watches blossom cheeked assistants run around, and finally giggly young men and women become larger than themselves just as they enter the catwalk and are met by a cascade of flashes. The fashion moment occurs when a fashion student suddenly finds expression where there were previously mere scraps of paper and a rugged mannequin. It happens when a designer and a pattern-cutter, tired after a long session, in a moment of collective ingenuity synergise their respective skills into a solution. The fashion moment takes place when a teenager carefully reflects and constructs and reconstructs her identity through clothing and suddenly sees herself in the mirror. The fashion moment is there when a researcher in a seemingly magical instant can connect her formative experiences with clothing to a new understanding of the world. The fashion moment elevates us from everyday routines. It provides work for a huge and global community and a way of making a living for small designers, and profits for big brands. The fashion moment offers a promise of the future; in its tantalising hints that change is under way, it can broaden our joy in being, stretch us beyond ourselves in time and space and give us glimpses of alternative futures.

5.9 Discussion

This chapter has offered a reading of change from an ecological perspective and as manifested in systems theories, Futures Studies, research, design and fashion.

Key themes that the chapter draws out are:

- Diversity as a requisite for healthy systems;
- Circularity;
- Images of the future or metanarratives;
- The importance of both prognosis and vision led Futures Studies;

The following paragraphs offer a discussion of how these themes might inform a systemic futures perspective on fashion and sustainability.

¹⁰⁵ See also Fletcher and Tham, 2004.

5.9.1 A fashion organism

“The whole history of society is reflected in the conflict, the compromise, the reconciliations... that appear between adaptation to our social group and individual elevation from it.” (Simmel, 1997: 187)

Bourdieu's analysis of haute couture is important in its definition of the currencies and stakes in fashion. He finds the area comparable to fields of cultural production in general.

Bourdieu's social field is characterised by a dynamic between the dominating and the dominated, the driver of the field being to dominate. The field remains functional because of all the actors' collective faith in the field and acceptance of the rules of the game.¹⁰⁶

(Bourdieu, 1984) Blumer offers a sharp critique of the negligent treatment of fashion as, he argues, fashion is central in creating order in modern society. (Blumer, 1969) Already in Simmel's (1904) definitions of fashion, the themes of social integration and distinction appear. In conjunction they provide both the comfort and safety that adaptation affords and an element of risk. (Simmel, 1957) This mechanism is independent to the discrete fashion content and is the result of a plurality of social facts.¹⁰⁷ Both Simmel and Bourdieu theorise fashion as a keeper of balance. Simmel, through an elite keeping control, Bourdieu in that the actors, although competing for dominance, adhere to a set of rules because they *believe in the larger whole*. (Simmel, 1904; Bourdieu, 1984) Kawamura conceptualises fashion as ideology, in the sense of a myth that holds a collective together. (Kawamura, 2005)

“Fashion as a myth has no scientific and concrete substance. The function of myth is essentially cognitive, namely to account for the fundamental conceptual categories of the mind. It embodies collective experiences and represents the collective conscience, and this is how the myth continues.” (Kawamura, 2005: 43)

The stability that fashion maintains, within its system, and, as it is argued, in the wider context of society, is by no means in opposition to change - it is not a status quo. Instead fashion can be described as a complex dynamic system, with many subsystems, and with an elaborate web of feed-back loops. This system is constantly in flux, sometimes entering the edge of chaos, after which it either returns to the previous configurations ('normal science'¹⁰⁸), or morphs itself into a new order of organisation.

Fashion is built on the intricate interrelationships between – on a micro level - avant-garde and mass-market designers, buyers, pattern-makers, marketers, PR people and CSR experts, fashion forecasters, producers, stylists, journalists, photographers, media, retailers, users, educators and students, and – on a macro level - economic, technological, social, cultural and political zeitgeist and the environment.¹⁰⁹

¹⁰⁶ Compare with H.C Andersen's tale, The Emperor's New Clothes, from 1837. (Andersen, 1973)

¹⁰⁷ Compare with biodiversity, described in the beginning of this chapter.

¹⁰⁸ See Kuhn's (1962) conceptualisation of paradigm shifts earlier in this chapter.

¹⁰⁹ See Figure 6.9 Fashion organism stakeholders, Chapter 6.

Fashion is an organism. This reading is important when we try to understand the sustainable imperative for fashion. It poses questions such as:

- Is there a healthy diversity in the actors that make up fashion?;
- Are the feedback loops working?; and
- Is the system resource efficient?

A collective of intentions that meet in a larger vision forms this organism. Additional questions therefore follow:

- Are these intentions reflexively evaluated?
- Is the vision of the kind that can inform the system's sustainability?

Fashion as belief, myth or ideology¹¹⁰ also brings it into the precarious area of mob syntality, and a "tragedy of the commons".¹¹¹ A shared belief can bring comfort and cohesiveness to a unit, and the associated risk that shared responsibility becomes no one's responsibility.¹¹²

Yet another question is therefore crucial:

- Are the individual parts of the system aware of their role in the whole?

5.9.2 Legends in the context of fashion and sustainability

Returning to controlling imagery or metanarratives, our immersion in a current, dominant understanding of the world is of such magnitude that we risk not grasping 'inconvenient truths'. Meadows and Mitchell argue that in the process of adaptation and change, we must try to uncover the legends we live by and invite new, more helpful narratives. (Meadows, 1997; Mitchell, 2005, 5.5.3) From the previous discussion on feedback it can be understood that 'successful' paradigms are self-reinforcing, the more they are seen as true the more they become true and onwards – the echo chamber effect.

The literature review on unsustainability (Chapter 3) and the initial empirical study (Chapter 4) stated that alienation – such as dualism between mankind and nature – was staged in the fashion industry at mass-market level and constitutes a significant obstacle to sustainable practices being fully implemented. This alienation can be viewed as a legend of a main dichotomy between fashion (and contemporary commercial culture) on the one hand, and sustainability on the other. This legend, informed by the general predominant dualistic worldview (see e.g. Birkeland, 2002), comprises a series of sub-dichotomies that has permeated communication surrounding environmental issues.¹¹³

¹¹⁰ See Kawamura, 2005.

¹¹¹ The tragedy of the commons is a concept of Hardin and referred to earlier in this chapter. (Hardin, 1968)

¹¹² Gladwell exemplifies this with a tragic example, a girl was attacked and raped in a street, not because no neighbours were present and aware, but because all of them were. (Gladwell, 2000)

¹¹³ Studying contemporary fashion imagery offers an illuminating perspective on fashion's (and contemporary zeitgeist's) relationship with nature. The environment is predominantly portrayed as an either exotic – aspirational, but 'other'; pastoral – tame; or apocalyptic – threatening, 'other'

Fashion	Sustainability
Fast	Slow
Sexy	Boring
(Deliciously) bad	(Goody) good
Superficial	Serious
Risky	Safe
Innovative	Reactionary
Lucrative	Costly
Egocentric	Altruistic

Table 5.1 Fashion and sustainability dichotomy – operation, culture and values

It is clear that contemporary imagery and narratives associated with sustainability have not been helpful in generating enthusiasm for environmental improvement in the fashion industry, and probably constrained the visions of possible future strategies. Equally, legends about fashion have not been helpful for its serious inclusion in the sustainability debate. Proponents of systems theory and metadesign would argue that integrating the systems, or reformatting our outlook on them for a cohesive perspective may be a constructive approach. Rather than drawing out differences, it might be useful to look for and emphasise commonalities. Thus, we might set in motion positive feedback and a virtuous cycle. Might it even be possible to generate new, more positive and proactive imagery and metaphors for shared fashion and sustainability futures? Below two challenges for fashion are proposed:

- How can we take responsibility for the ‘casts’ we project onto the future? How can ethical and environmental concerns become integral to the framework of the conceptualisation and design processes?
- How can we replace unhelpful legends with proactive visions? How can we let go of stale stereotypes of an eco-look, and start looking for opportunities rather than constraints in a new design paradigm of sustainability?

5.9.3 Envisioning – the core of Futures Studies

Sardar and Masini propose that envisioning should be the core of Futures Studies. They also stress the importance of listening to and accommodating multiple voices whilst envisioning.

“The seeds of change... are almost always to be found on the periphery: in the non-Western cultures, among women and children, and ‘outsiders’, such as poets, artists and philosophers.” (Masini as cited in Sardar, 1999: 2)¹¹⁴

“The best listeners, capturers of seeds of change, are those who do not fit the existing social order in its totality. The capturers, the listeners, are those who for

backdrop. Models’ interaction with nature is scarce and there is little allusion to natural cycles and processes.

¹¹⁴ Sardar also highlights that having visions is in a sense a luxury. (Sardar, 1999) (See also the work on human needs by Maslow, 1943; and Max-Neef, 1991.)

some reason are outside the logic of that specific system... Of course, if they are simply talked to in terms of the social system of which they are part, with its vocabulary and its frame of reference, they also seem to confirm... [but] when the methods of listening to children are identified – even in a tentative way – visions emerge.” (Masini, 1997: 42)

The above quotes make two important points; that we must seek to expand the range of voices we let inform our visions, and that visions must be freed from a biased dominant paradigm. Skrbina also writes of the ridiculousness of trying to solve a crisis with the framework that put it into place. (Skrbina, 2001) Kuhn, argued that a paradigmatic shift forwards knowledge when ‘normal science’ fails to address a major scientific problem. (Kuhn, 1962) For Feyerabend, proceeding against the dominant paradigm of science is necessary in order to gain truly new insights. (Feyerabend, 1978)

Envisioning from a different paradigm poses obvious problems of bias and limited reference frames. What is proposed is a search for possible futures, rather than the re-research of a dominant paradigm. However, here perhaps the arts and design by their intrinsic imagination, intuition and their non-linear approaches can offer glimpses of possible futures and reach where traditional and linear strategic work can not.

“Art offers a third way. Art escapes the ‘yes’ and ‘no’ of binary linguistic coding by functioning in terms of perception. Art makes the environment ‘outside’ language available without reducing it to language.” (Ryan, 2001: 8)

The final section of this chapter introduces some research tools or ‘research spaces’ that appear especially relevant for this particular search in reaching beyond a current dominant framework. With the selection of these tools I have sought to address Heron and Reason’s notion of an extended epistemology introduced earlier in the chapter, which is of particular relevance for designers, who according to Jessel favour image led information. (e.g. Heron and Reason, 2001; Jessel, 1998) The overview of environmental literature (see Chapter 2) suggested that it is not, to date, easily accessible to fashion designers, and therefore I have especially looked for approaches that represent cognitive styles beyond the conventional understanding of rationality.¹¹⁵ I have also sought to address the need to integrate personal and professional value systems, exemplified in Meyer’s (2001) tempered radicals and the interdisciplinarity proposed in, for example, meta-design. It is outside the scope of this thesis to provide an exhaustive discussion of these tools, instead I shall point out some aspects of special interest for the forwarding of the inquiry.

¹¹⁵ Cognitive style refers to the way we learn and not learning ability. Theorists propose a spectra of learning approaches such as from the whole to the part, and from the visual to the verbal. (See e.g. Allinson and Hayes, 1996; Kirton, 2003)

5.9.3.1 Cultural probes

“[cultural probes] act as a design intervention that elicits inspirational material while avoiding the understood social roles of researchers and researched.” (Gaver, 2001: 2)

The cultural probe offers an alternative to directly observing a person or a situation by enabling people to document their own reality. The application of the ‘cultural probes’ has been successful in ethnographic studies into the domains of domestic and technology centred futures scenarios. Of particular interest for this inquiry is that the probes seem to draw out both informative and inspirational material. (Gaver, 2001)

In projects running parallel to the thesis, I have had the opportunity to try out both ‘conventional’ cultural probes – in this case particular garments accompanied by cameras and diaries¹¹⁶, and approaches where everyday objects were used as probes in direct discussion.¹¹⁷ The latter experience was especially helpful because I could see the potential of using everyday artefacts to bridge personal and professional value systems, and different professional roles.¹¹⁸ The objects spurred rich narratives and made it possible for a group to quickly establish communal interests. The conclusion was that this use of artefacts “[offered] potential as a context for ‘safe’ discussion into territories that are otherwise perceived as ‘risky’.” (Sadowska and Tham, 2004) In yet another project, objects were used in a diagnostic and creative task, in order to contextualise sustainability principles. (Tham and Sundberg, 2004)¹¹⁹

5.9.3.2 Story-telling

The power of narratives and storytelling was described earlier in this chapter. It appears they serve an important tool both in conjunction with cultural probes and beyond. Below are some characteristics of stories that seem particularly relevant for this inquiry.

Stories are:

- Contagious;
- A useful way of bringing up difficult issues;
- A non-confrontational way of getting people to think;
- A way of giving a human face to, and simplify abstract and complex issues;

¹¹⁶ In the Lifetimes project participants were asked to document both experiential aspects and daily use and wash patterns through verbal and visual diaries which led to an increased understanding of the metabolism of clothes. (Fletcher and Tham, 2004)

¹¹⁷ In the Stored Wisdom project, artefacts were used to unlock memories and narratives on the themes of gender and sustainability, where the researchers had noticed that direct questions can sometimes be difficult since they stir feelings of guilt. (Sadowska and Tham, 2004 and 2005)

¹¹⁸ See Krippendorff for a discussion on objects’ role in human sense making processes. (Krippendorff, 1995)

¹¹⁹ The use of everyday objects as starting points for personal and shared narratives has been further developed in the Benchmarking Synergy Levels within Metadesign project, where we termed the approach *Cultural Props*. (Tham and Jones, 2008)

- Good for starting dialogue;
- Enjoyable.

(Adapted from Allan *et al.*, 2002)

In Futures Studies and in science fiction, stories are used to imagine with texture both utopias and dystopias. In my teaching I have experienced the generative potential of stories or metaphors. Through the metaphor we can understand a problem from a new angle, which in turn can offer previously inaccessible solutions.¹²⁰

5.9.3.3 Play

Part of the allure of story-telling is its playful aspect. Earlier in the chapter it was argued that fashion offers a space for relatively risk-free play with identity. Play¹²¹ is both research and search. Through play the child forms an understanding of the world, practices living and relating in it, and develops the imagination. The National Institute for Play, US, distinguishes between seven types of play, roughly corresponding to a set of needs:

- Attunement play - emotional organisation, such as the eye contact between mother and child;
- Body play and movement – explorations of body and space;
- Object play – understanding tools and extended reach;
- Social play – human interaction, empathy and signals;
- Imaginative and pretend play – developing imagination, trust and "coping skills";
- Storytelling-narrative play – making sense of self, and interactions with others and the world;
- Transformative-Integrative and Creative play – practicing creativity and innovation.

(Brown, 2006)

Play is both activity and approach. Stables (following Coghill, 1989) draws out the particular learning synergy of making and playing in the teaching of design and technology. (Stables, 1997) In his book *Homo Ludens*, Huizinga, an early play theoretician, used the term 'play theory' to explain the conceptual space of play. (Originally published in 1938, Huizinga, 1970) Although in recent years, play as applied to game design is an increasing area of

¹²⁰ The proposition 'what if objects were reincarnated?' to a student led to a discussion about whether objects could emerge as humble beginnings and grow wise with time. (BA Design, Goldsmiths College, Spring 2007)

¹²¹ On a Friday night in a venue off Spitalfields market, London, my partner and I go to see some bands. At the later end of the programme Seasick Steve comes on stage - in his seventies, in dungarees, singing, playing the guitar and midst singing and guitar playing, walking round the venue, talking to an electrified audience. What we experience - not hear *or* see *or* feel; they are inseparable - is *play*. A virtuoso musician is being in the moment, using all his skills, experience and practice, and playing, with the music and with the audience; he is engaged in a *search*. For the audience being *with* this search is extremely alluring and contagious. We are suddenly searching; being-in and being-with the rhythm, a universal connectedness, an access to a unique opening or clearing where everything is possible.

research (see e.g. Salen and Zimmerman, 2003) and computer games have an increasing presence in adult life, its consideration for the design and envisioning process seems to have been neglected.¹²² It is my opinion that play through its elastic notion of reality, and not least because of its intrinsic positive qualities, has potential as a design tool or space through which we can practice, manifest and stretch our visions.

5.9.3.4 Vacuum design¹²³

“In the midst of beings as a whole an open place occurs. There is a clearing... this clearing grants and guarantees to us humans a passage to those beings that we ourselves are not, and access to the being that we ourselves are.” (Heidegger, in Farrell Krell, 1978: 178)

Heidegger’s metaphorical clearing, which is at the core of his conceptualisation of being, is a space for unconcealment. (Heidegger, 1971) The clearing is an opening for transformation of consciousness and action.

“Whatever withdraws, refuses arrival... What withdraws from us, draws us along by its very withdrawal, whether or not we become aware of it immediately, or at all. Once we are drawn into the withdrawal, we are – albeit in a way quite different from that of migratory birds – caught in the draft of what draws, attracts us by its withdrawal. And once we, being so attracted, are drawing towards what draws us, our essential being already bears the stamp of this “draft”.” (Heidegger, in Farrell Krell, 1978: 374)

Heidegger speaks of how through sensing the draft, we are already pointing in that direction, and we in fact become pointers, through for example design. The dancer and writer Olu Taiwo introduces through the return-beat another draft, a notion of home-coming. (Taiwo, 1998; 2006) Both can be interpreted as a search, conscious or not, for something eternal or true.

“The return beat is the root pulse. It is the existential centre of the physical journal's human frame as well as a corporeal sensation of African rhythm. Around the return beat is a sphere whose edge takes in the abdomen and both hips. Within this sphere are embodied reference points radiating from the centre for the performer to retain core stability in motion. It also deals with an experience of a tempo within any given rhythm, where the spaces between the beats are personally experienced as a cycle that leads back to the person. The 'feeling' of returning is fundamental to the artistic and experiential viewpoint in cultural traditions of West Africa and the African Diaspora, the notion of the 'return beat' explores the practice of returning to the 'self' in the 'here and now.'” (Taiwo, 2006)

¹²² Perhaps because play, just like fashion and colour, has a pejorative, infantile notion which is clear in the word ludicrous.

¹²³ Vacuum design started out as metaphorical play – ‘what if we, instead of constantly adding products, could see design, through a gigantic Hover or Dyson, as a process of removing the superfluous?’. This notion of design as hygien, has some sinister undertones and is possibly already reflected in the minimalist design tradition. Later vacuum design took on a new meaning for me as I begun to realise the force of absence, black holes, suction or wicked problems (see e.g. Rittel and Webber, 1984) for creativity.

A central aspect of play is the open curiosity and wonder that draws us into new modes of being and doing. In play and beyond, what we do not as yet know draws us towards processes of discovery of self and the world around us. In adult life this void or space for a true search (as opposed to research) is often shut, by habit, stress, demands of everyday life and, arguably, by a dominant paradigm. The anarchist and writer Hakim Bey commented that our present time is the first without unmapped land, without “terra incognita”. However, he also pointed to open spaces that can, at least temporarily, escape organisation and control. (Bey, 1985)

”the map is closed, but the autonomous zone is open. Metaphorically it enfolds within the fractal dimension invisible to the cartography of control... We are looking for spaces (geographical, social, cultural, imaginal) with potential to flower as autonomous zones - and we are looking for times in which these spaces are relatively open, either through neglect on the part of the state or because they have somehow escaped notice by the mapmakers, or for whatever reason.” (Bey, 1985: 2-3)

From my understanding of the sustainability imperative in the context of the fashion industry, new visions to guide our work are of essence. These visions need to build upon our knowledge and experience, but also be uncontaminated in the sense of freedom from stereotypes or controlling imagery. From the readings of play and Heidegger’s draft, the concept of a creative zone, an opening or a void to fill with possibilities and desirabilities emerged. I propose a *vacuum design* for the creation of spaces that through their draft can invite us into new ways of understanding.

“Cultural resistance creates a “free space”: *ideologically*: space to create new language, meanings, and visions of the future; *materially*: place to build community, networks, and organizational models... Cultural resistance provides a stepping stone, providing a language, practice, and community to ease the way into political activity. Cultural resistance *is* political activity: writing or rewriting political discourse and thus political practice. Cultural resistance is a “haven in the heartless world,” an escape from the world of politics and problems...” (Duncombe, 2002: 8)

5.9.3.5 Serendipity and luck

A key theme throughout this chapter, and the thesis, is circularity. The psychologist Richard Wiseman has studied what he calls the luck factor, and found that luck too has aspects of the self-fulfilling prophecy. He describes how people who perceive themselves as lucky, through what can be described as positive feedback, also become ‘luckier’ than those who term themselves unlucky. According to Wiseman luck “is not a magical ability or the result of random chance.” (Wiseman, 2003: 3) Instead, he argues, thoughts and behaviour define good or bad fortune. The psychologist proposes four principles, or characteristics of lucky people:

- Skilled at generating and detecting opportunities;
- Trust in intuition for decision making;
- Positive expectations; and

- A “resilient attitude that transforms bad luck into good.” (Wiseman, 2003: 4)

Wiseman observes that lucky people expand their chance opportunities by varying routines, connecting with a range of people, and by a relaxed and open attitude to what ought to be the answer to a question. (Wiseman, 2004) Drawing Wiseman’s argument to an extreme makes for a cynical reading of victims of tragic circumstances and events. However, we can draw from the principles of luck the virtuous cycle of positive thinking, the auspicious potential of connected-ness and flow, and the importance of searching where we have not sought before.

Lucky People are people in touch, well connected, tuned in, excellent at going with the flow, manoeuvring through time and space. Lucky People combine experience and rational thinking with intuition and emotional skills. Fashion designers are Lucky People in many senses. We are in tune and able to use this in-tuneness to create concepts, images and products that move other people. We are lucky because we have a highly stimulating and rewarding profession that gives us the opportunity to travel around the world, meet interesting people and get paid for it. We are lucky because we have had the financial and social opportunity to choose and train for this profession. And we are extremely lucky because we have, from within the context of fashion, the power to make important changes that can reach far beyond a season’s collection or the life time of a magazine, into a time where other designers carry on with our work and enjoy a more sustainable life. Trend-forecasters share all these opportunities. Lucky People Forecast is the story about trend-forecasters’ and fashion designers’ journey towards more sustainable futures.

5.9.4 Summary

This chapter concludes with a statement of my understanding of change, as informed by the readings and my experiences. These points informed the second empirical study, which is presented in the next chapter.

- With sufficient support human beings have the power to change;
- Human beings, as individuals and as a species constantly change, adapt and affect change, often without even noticing;
- With sufficient support human beings choose to do ‘the right thing’;
- Visions are at least as important as predictions, and in reality the concepts have strong causal relationships;
- Research can be transformative and constitute a piece of activism.

CHAPTER 6. LUCKY PEOPLE FORECAST -
What if fashion and sustainability were compatible or
even synergistic?

6. LUCKY PEOPLE FORECAST - What if fashion and sustainability were compatible or even synergistic?

6.1 Introduction

This chapter focuses on the second empirical study of the PhD project *Lucky People Forecast*. This study explores and seeks to embody a conceptual journey – from a current, predominantly commercially informed paradigm of fashion and trend-forecasting, to one of sustainability. Sustainability, as described in Chapter 2, encompasses ethical, environmental and economical concerns. Whilst their interdependence is acknowledged and underpins the study, it emphasises the environmental aspects, which can be more immediately addressed in a design context. However, whereas for example workers rights are not always made explicit in the text, they are implied in the term sustainability.

This journey was one I took together with thirty-two fashion stakeholders, in Sweden and the UK. Together we explored our understanding of fashion and sustainability and designed alternative paradigms for fashion. The generosity and the wisdom of my travel companions were truly overwhelming, and some of the insights we generated exhilarating. The epistemological leap – from a research context of ‘*what is?*’ to one of ‘*what if?*’ I came to realise was necessary, and the resulting ethical, epistemological and methodological concerns that came with trying to embody a new conceptual paradigm were challenging in the very best of ways. At many times my intuition gave me answers before I found a theoretical framework to back up my ideas. Altogether this is the most exciting (and at times nerve wrecking) journey that I have ever undertaken.

The next section provides a brief recapitulation of the thesis’ key findings from the literature reviews and the 1st empirical study. It explains how these findings informed the hypothesis or proposition that was investigated in the 2nd empirical study. It also introduces a structure for the full report of the Stage 2 study.

6.1.1 Brief recapitulation of previous research

Figure 6.1 illustrates the study process up to this moment, and draws out some key findings from the literature and empirical research. In brief, from an initial understanding of the need for environmental improvement at systemic level in the fashion industry’s mass-market segment, and an appreciation that current formal drivers fail to address this need, I sensed that there was scope for trend-forecasting - already integrated in the fashion industry’s mass-market segment - to serve as a soft driver for change. An initial and broad research question was phrased: ‘How can trend-forecasters be helpful friends to fashion designers on their shared journey towards sustainability?’ (Chapter 1)

In the first literature review (Chapters 2 and 3) the two paradigms - unsustainability and sustainability - implied in this journey were explored and mapped out. This research made

clear that although knowledge exists on environmental improvement at systemic level, it is not implemented in the fashion industry's mass-market segment. Broadly, the reason for this appears to be processes of alienation manifested in society at large and in the fashion industry. The 1st exploratory study – 'what is?' – (Chapter 4) established that the conclusions from the literature corresponded to the reality of the fashion industry's mass-market segment. It showed that alienation, a constraint culture, and the level of knowledge on sustainability – low, fragmented and clouded by stereotypes – hindered environmental improvement at systemic level. A current *stakeholder temperature* was estimated: slightly above *harmless*.¹ This research also established that fashion designers particularly enjoy the creative and visionary elements of their work, although these are underplayed in the everyday activities. Finally it confirmed that trend-forecasting is an important driver of fashion, and thus has potential as an alternative driver of sustainability. The study furthered the understanding of the role of trend-forecasting in the fashion industry and how it operates as a driver for design direction. Trend-forecasting:

- Provides information, inspiration and confirmation;
- Is accessed through and given authority by key events and actors;
- Is accessed through several media; such as audio-visual presentations, online reports, books, consultancy;
- Constitutes a language, and methods and processes;
- Functions, at least partly, through self-fulfilling prophecies - a circular argument.

Therefore, trend-forecasting operates at the levels of agent, format for activities as well as methodology.

The findings from this study led to the appreciation that the best way to affect environmental improvement at systemic level in the fashion industry's mass-market segment is to focus on information and knowledge transfer, motivation/inspiration, and futures oriented thinking. A tentative brief was generated: *to be successful as an alternative driver, trend-forecasting – language, methods and processes - needs to use interdisciplinary, participatory, creative and visionary approaches, and present fashion and sustainability as compatible.*

A further literature review explored processes of change in complex systems in order to inform how trend-forecasting might operate as an agent of change in terms of perspective, modes, methods and processes. (Chapter 5) This research led to a series of insights, some key points of which were: the circularity of complex systems, that the fashion industry can be understood as a complex system – a fashion organism, the significance of meta-narratives or controlling imagery in shaping our understanding of the past and present, and what is possible and desirable for the future. It was established that in order to avoid biased

¹ See Figure 3.3 Harmful-helpful continuum in Chapter 3. 'Harmless' indicates compliance with current legislation.

worldviews being cast onto the future, a variety of stakeholders are required to be part of the envisioning process, and that this envisioning needs to be free from constraints of a dominant paradigm. It was proposed that a fashion-sustainability dichotomy constitutes a legend or image that hinders environmental improvement at systemic level in the fashion industry's mass-market segment. An alternative proposition was made: 'what if fashion and sustainability were compatible or even synergistic?' It was further established that the most powerful way of changing a system is to address it at paradigm level. Through this literature review I gained the understanding that research can be both informative and transformative and even constitute activism. I began to see my role as researcher as an activist addressing a system from an insider/outsider perspective.

Finally, Chapter 5 introduced some approaches and tools that were considered to have potential to:

- Create a free, uncontaminated space that can invite us into new spaces of understanding;
- Act as bridge between personal and professional value systems and between professional roles;
- Facilitate participatory processes, and where the researcher is also a participant.

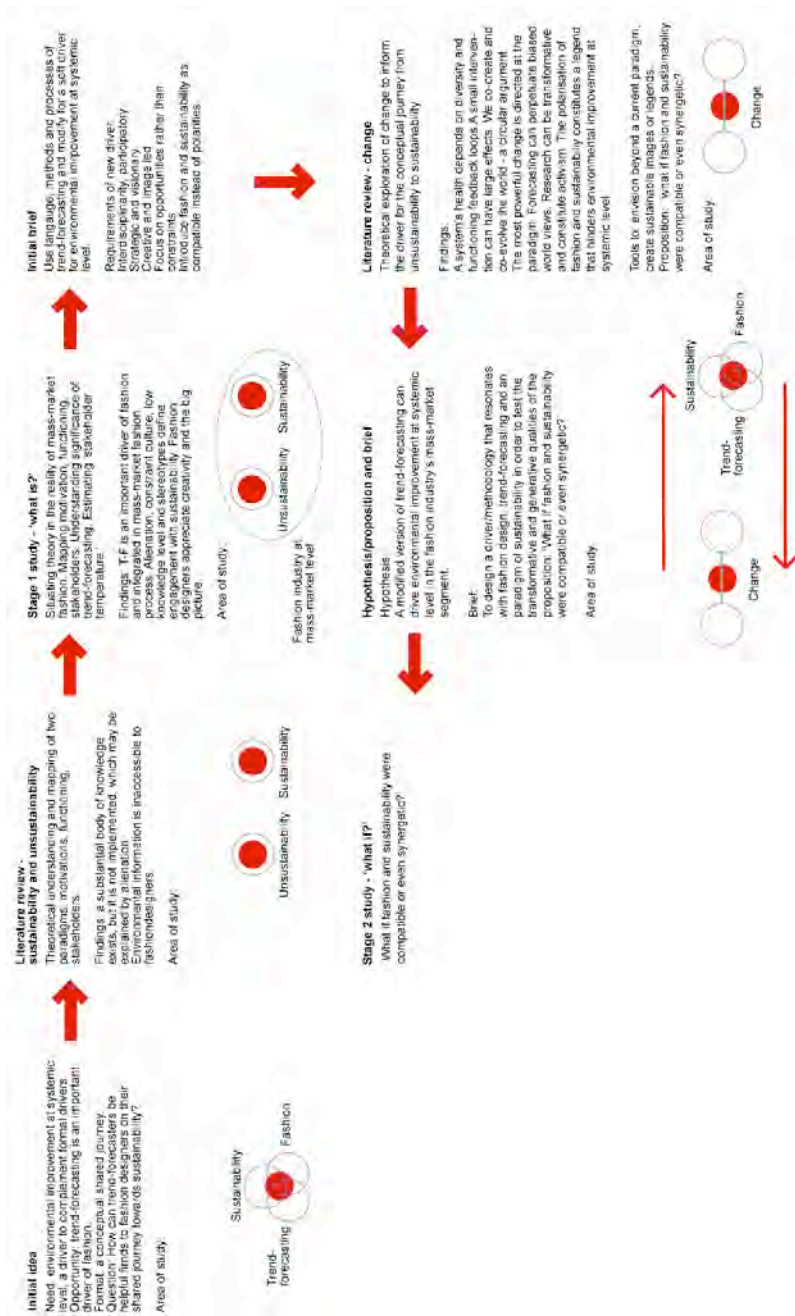


Figure 6.1 The research process from initial idea to Stage 2 study

6.1.2 Hypothesis/proposition and research question

In terms of the metaphor of a journey, the study sought to explore how trend-forecasting can help the fashion industry to travel from a framework of unsustainability to one of sustainability. It was appreciated that trend-forecasting itself would need to make this conceptual shift and be modified to fit its new, expanded role. It should be noted that the journey I propose is by no means linear, or chronological, although for purposes of clarity I have illustrated it as such in some of the figures. Instead it describes a sprawling of awareness from the limited priorities for fashion and trend-forecasting of economics and user experience to a more holistic perspective encompassing ethical and environmental concerns.

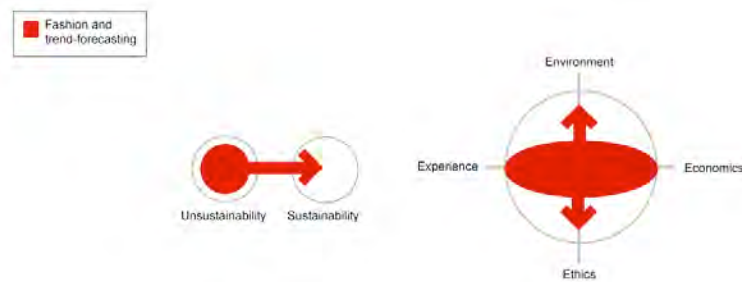


Figure 6.2 Linear and sprawling models of change

In order to capture the two interdependent layers of the inquiry – of agent and agency - an overarching research hypothesis or proposition² and a question were formulated, the validity of the former dependent on the answer to the latter.

Hypothesis/proposition:

A modified version of trend-forecasting can serve as a driver for environmental improvement at systemic level in the fashion industry's mass-market segment.

Question:

How can trend-forecasting be re-designed to fit and serve a paradigm of sustainability?

The hypothesis/proposition was broken down into more specific statements seeking to qualify desired change, and correspond to a sprawling model of change.

² Proposition is a looser term but *hypothesis* implies a proposition that can be tested (see e.g. Seale, 1998) and the testability of my particular proposition was not entirely possible under conventional scientific terms. With my expanding notion of what constitutes research or *search*, testing became subordinate to evaluating the generative potential of my proposition.

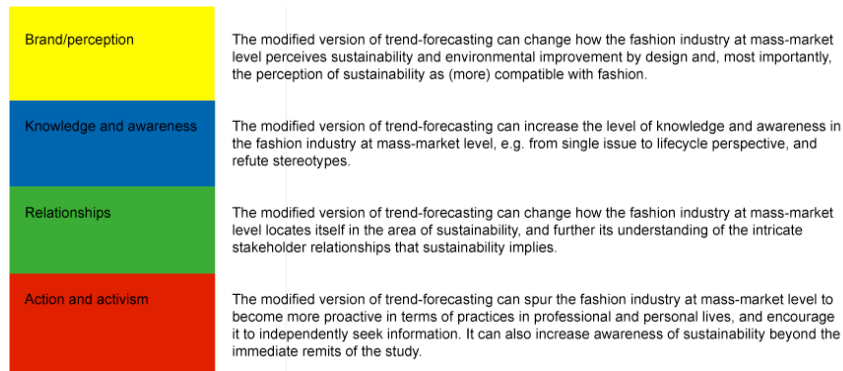


Figure 6.3 The proposition's four statements



Figure 6.4 The proposition's four sprawling areas

The nature of the overarching proposition and question meant that this inquiry came to include two layers.

1. Re-designing trend-forecasting – i.e. developing methodological approaches;
2. Evaluating the proposition using the new methodological approaches.

The outcomes would therefore include both the insights from evaluating the proposition and the new methodology itself – the process was to be, to a significant extent, the product.

Therefore this research can be described as design as well as activism.

6.1.3 From theory to practice – towards a methodology for the 2nd empirical research study

Together the findings from the first empirical research and the literature review constitute a normative framework – value system; a philosophical framework – understanding of reality and change; and an epistemological framework – methodological approaches for the new change agent and the subsequent research. Figure 6.5 below illustrates the steps from the literature review and 1st empirical research findings to guidelines for the Stage 2 study methodology. This figure presents a linear model of the process and flow of information and inspiration. In reality the approaches grew in a much more organic way and approaches were not only informed by the paradigm, but also informed it.^{3 4}

³ For example I decided that 'play' and 'humour' were important characteristics of the new paradigm.

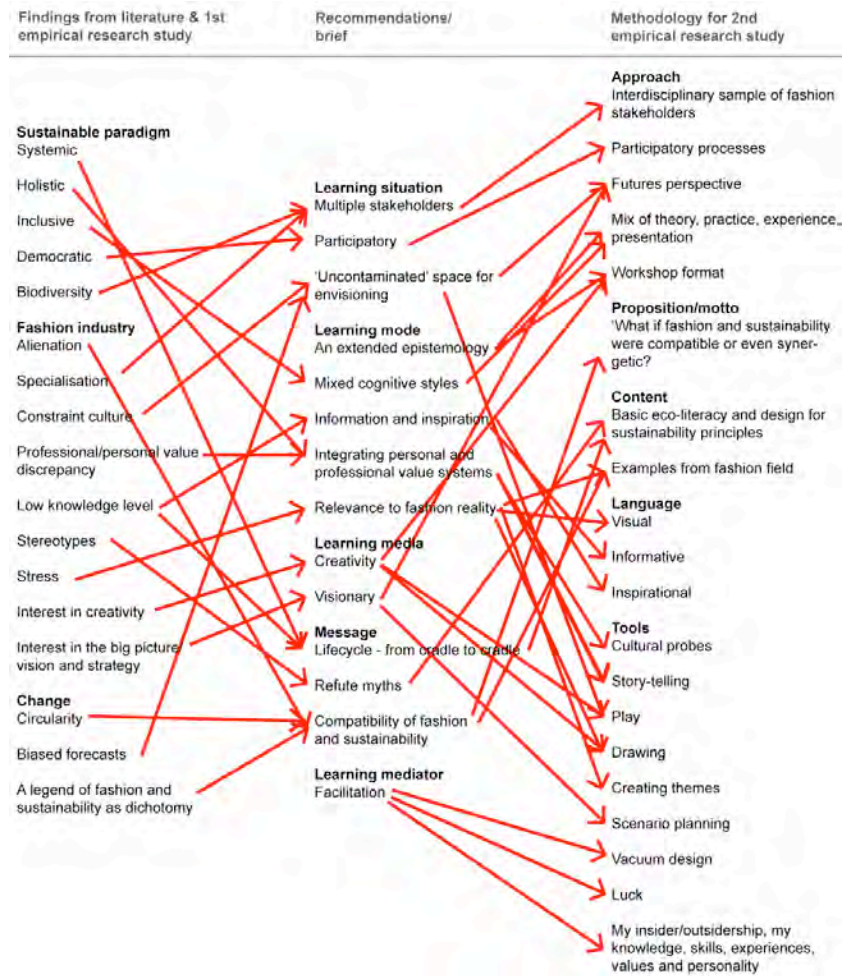


Figure 6.5 From theory to practice: how the literature and the 1st empirical study informed the 2nd study

The framework for the approaches and tools was threefold:

- methods and processes that further sustainability literacy – e.g. on a practical level the lifecycle concept; and on an epistemological level the holistic engagement with learning that Action Oriented Research proposes. (See e.g. Heron and Reason 2001);
- methods and processes in design (e.g. drawing, making, visual and emotive language) and in design research (e.g. the cultural probes approach, Gaver 2001);

⁴ For the purpose of simplicity some labels comprise a set of aspects. For example, 'constraint culture' has come to include cynicism as well as the restrictions posed by a commercial context; 'luck' refers to optimism, the seizing of opportunities, the embracing a degree of randomness.

- c) methods and processes in Futures Studies, such as futures stories and scenario work (see e.g. Slaughter 2001), and a discourse celebrating multiple perspectives on futures (see e.g. Sardar 1999).



Figure 6.6 How the three strands informed the methodological approaches for the Stage 2 study

This chapter presents the process of creating the methodology and research design, it then describes the research process, after which follows a presentation and analysis of the data generated through the inquiry. The chapter ends with a conclusion and discussion.

6.2 Methodology – designing a shared learning experience

This section describes the development of a methodology and research design for the Stage 2 study.

6.2.1 A research conundrum

The introduction presented the research proposition and question of the Stage 2 study and highlighted how in this inquiry methodology is intrinsic in agency, process and outcome. This approach brought complexity to the study and constituted a conundrum in terms of a viable research design. There appeared to be few real precedents for what I wanted to achieve – research embodying and promoting a particular value system, research as activism and research as design. I struggled to situate this challenge within a conventional research tradition.

I explored several possibilities for the study including:

- A comparative, cross-disciplinary study encompassing a mass-market fashion company and companies of other design disciplines of 'high fashion level' and targeting a similar customer base, such as mobile telephony and furniture.

- A study of pioneering companies in the field of environmental improvement by design.

None of these ideas included a futures perspective and trend-forecasting to a satisfactory extent; they did not sufficiently fulfil the requirement of a conceptual journey, nor did they address the fashion industry at mass-market level in a 'hands-on' enough manner.

6.2.2 An epistemological leap – from 'what is?' to 'what if?'

A breakthrough came when I realised I could set the paradigm for my research activities as well as the area of study. Here I am indebted to Dr. Kajzer who, through her thesis, put words, set precedence and therefore gave me the confidence to make an epistemological leap from 'what is?' to 'what if?'. (Kajzer, 2004) I was able to articulate that while it was appropriate that the first empirical study, which concerned current states of affairs ('what is'), resided in a current paradigm of methodology, exemplified by semi-structured interviews and a case-study, the new study required a more radical approach. It ought not limit itself to describing a current state of affairs. Instead it should seek to explore what might be: future ways of doing and being. The methodology must again embody or resonate with the context of the activities I tried to understand, in this case the imaginary paradigm of sustainability. It is important here to note again that the journey I propose is not necessarily chronological but instead conceptual. The 'future' paradigm exists in pockets of our understanding already.

The research design did not become a simpler task after this realisation - a futures, or a 'what if?' approach poses epistemological questions. However, the 'what if' approach presented a creative challenge that felt meaningful to engage with. I began to see the development of the research design as designing a shared learning experience, for me and for the sample I would eventually invite to join me. I could take control of the conceptualisation and realisation of research and epistemology. Drawing from the insights from the first study and aspects of the literature I had encountered, I had already created a brief. Now I revisited the central tenets of the thesis in order to conceptualise the paradigm of research I would be operating from.

6.2.3 Epistemology in this inquiry – defining quality criteria

"ways of researching need to be developed that combine 'finding out' about complex and dynamic situations with 'taking action' to improve them, in such a way that the actors and beneficiaries of the 'action research' are intimately involved as participants in the whole process." (Sriskandarajah *et al.*, 1991, as cited in Pretty, 1995: 17)

Conventional research is guided by academic rigour. This includes such concerns as validity and reliability, a notion of objectivity - and therefore a distinction between the researcher and the researched, value neutrality (although value explicitness is an increasingly adopted stance in qualitative research), the possibility of proving or refuting a hypothesis.

Researching 'what if?' and situating a study within a conceptual paradigm of sustainability

challenges the conventional understanding of research. Below follows an exploration of what such a research paradigm implies and an introduction to some alternative quality criteria.

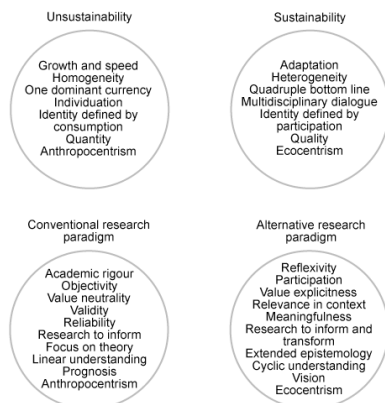


Figure 6.7 The values implicit in unsustainability and sustainability respectively, and two research paradigms

My understanding of a sustainable paradigm informed a series of parameters and quality criteria for research seeking to embody and promote it. I fleshed out a scenario, or a world, the codes of which must guide my research, not only the research questions, but also methodology, interaction with participants, and finally data analysis and presentation. I am well aware of how much in debt my paradigm is to that of 'conventional' research, and of the impossibility of entirely operating outside a current, dominant paradigm. Researching 'what if?' and seeking to embody and support a sustainable paradigm through my research has however meant that I have had, and believe it is right, to take liberties with and question conventional notions of for example validity, reliability and objectivity.^{5 6}

"any belief that sustainability can be precisely defined is flawed. It is a contested concept, and so represents neither a fixed set of practices or technologies, nor a model to describe or impose on the world. The question of defining what we are trying to achieve is part of the problem, as each individual has different values. Sustainable development is, therefore, not so much a specific strategy as it is an approach to learning about the world." (Pimbert and Pretty, 1995: 23)

It is important here to note, that the paradigm of research that is proposed and the paradigm of sustainability this research seeks to embody and support, are by no means suggested as an absolute and singular truth. They are instead vehicles, designed by me from my interpretations of experiences and readings, to *open* up for multifaceted understandings of

⁵ For instance, as further explained later in this chapter, I deemed preserving the trust built up between participants and myself, and the knowing that emerged from the conversations that we shared, more important for this study (and for its overall aims) than a perceivably higher degree of objectivity in the test for attitudinal change.

⁶ I am indebted to Kajzer for giving me the courage to pursue my own quality criteria, some of which are inspired by her work. (Kajzer, 2004; see also Reason 2003; and Reason, 2006)

fashion and sustainability. I have no wish, in Bey's words 'to close the map', or in Sardar's 'to foreclose the future'. (Bey, 1985; Sardar, 1999) In combination, the quality criteria create a space for a responsible, informative and transformative search to take place. (An in-depth explanation of the Quality Criteria can be found in Appendix B, B.1)



Figure 6.8 Quality criteria for this research

Criteria	Description
Reflexivity	Awareness and explicitness of choices made in the inquiry.
Credibility	Immersion in context, peer review, transparency to participants, validation from participants.
Democracy	Inviting participants into a participatory research process, accessibility of e.g. language.
Relevance	Meaningfulness of research pursuit and findings, and meaningfulness of participating.
Translatability	Applicability and usefulness of findings outside immediate context.
Creativity and vision	Generative quality of the inquiry.
Authenticity	Commitment and truth to purpose.

Table 6.1 The quality criteria informing the study

6.2.4 Towards a research design

The new epistemological framework described above, which was developed to embody and support a paradigm of sustainability, formed a basis for the substantive research design process. It is important to note that this process was by no means linear as it is presented in the account that follows. Instead, just like in my understanding of design processes in general, it was a process driven by a vision, where intuition played an important role, where cycles of action and reflection, and trial and error finally led to an operational research design. All through this process I sought to contextualise my ideas and looked at each element as part of a larger system, and tested the design against the needs of the participants, against the paradigm that I purported to embody and support, and against the PhD framework. In this process metaphors - verbal and visual, such as that of a journey - proved important in clarifying for myself and communicating to others my ideas.

6.2.4.1 Deciding on an intervention point

Trend-forecasting⁷ offered a variety of potential intervention points. I mapped these in relation to the requirements of interdisciplinary and participatory processes, an extended epistemology, and 'an uncontaminated' vision space, and the constraints of time and other resources. It was already established that the language, methods and processes of trend-

⁷ An agent, format for activities as well as a methodology.

forecasting would inform the study. I came to the conclusion that the media best suited was a workshop, which would, in a trend-forecasting reality, fall under consultancy or presentations. It was at this stage important to have face-to-face interaction with fashion stakeholders, and inbuilt flexibility to allow participants to inform the unfolding of events, and myself to make changes in approaches when it was called for. It was therefore also clear that I would be the interface to trend-forecasting in the inquiry as it was not practical to bring in another trend-forecaster. The decision to situate the study in meetings and a physical space does not mean that the approach that I created cannot be translated to, for example, a web forum or a magazine, or that other trend-forecasters cannot use my approaches. The conclusion of this chapter discusses such possibilities and also reflects upon the role I as an individual and professional occupied in the study.

6.2.4.2 The potentials of a workshop format

Table 6.2 below draws out some qualities of the workshop⁸ format and shows why it was considered appropriate for this study.⁹

Workshop characteristic	Its potential in this inquiry
Direct interaction	<ul style="list-style-type: none"> · Possibility of immediate feedback · Possibility for both personal and professional value systems to come through · Possibility for team work and learning from each other · Possibility to support a democratic interaction · Possibility to allow informal conversation · Possibility for flexibility to accommodate a particular group's needs and preferences (e.g. language, knowledge level, interests) · Possibility of shared ownership of process, content and learning outcomes
Mixed media approach	<ul style="list-style-type: none"> · Possibility to cater to a range of cognitive styles (e.g. analytical, creative) · Possibility to support an extended epistemology (i.e. theoretical, practical, experiential and presentational knowing)
Time and space boundaries	<ul style="list-style-type: none"> · Possibility to create an extraordinary social and conceptual space (Reason, 1994) – 'an uncontaminated space' for visions from and for an alternative paradigm

Table 6.2 Workshop characteristics and their potential for this inquiry

6.2.4.3 Experimental workshops as intervention and research

Using the workshop as an intervention that is evaluated implies an experimental research approach. Kajzer (2004) points out the positivistic associations of an experiment – to prove or refute a hypothesis. In her work the experimental workshop should instead be understood as a "a structured attempt to create something new or original with an *'experimental flavour'*." (Kajzer, 2004) This research embraces Kajzer's definition, but here 'experimental' must also to a degree be understood in its original sense as the study seeks to affect change in the sample (including the researcher/participant) by introducing a 'stimulus' – the workshop intervention. Like in the natural sciences, every experiment is surrounded by a series of parameters, the potential influence on the results of which must be considered.

⁸ Workshop – "a brief intensive session of study, training, or discussion for a relatively small group of people with an emphasis on active participation." (New Penguin Dictionary, 2001: 1624-1625)

⁹ This understanding of workshops is informed by my own experience of attending and facilitating them, the experimental workshop approach taken by Kajzer (2004), action research approaches (Reason, 1994), management science (Eden and Ackermann, 1998) and focus group techniques (Morgan, 1994a and 1994b).

6.2.4.4 Parameters in this experimental inquiry

This experimental research acknowledges (and embraces) the impossibility of fully controlling the study parameters, however it has identified some of them, and sought to control them to a reasonable degree. On the other hand the aspects of control were always subordinated to the quality criteria and in particular my responsibilities to the participants. Since they were all informed of the agenda, and my value position was explicit, and since I was also a participant there was no attempt at objectivity in its conventional, detached, sense. Table 6.3 presents some of the parameters of this research and strategies I undertook to 'control' them.

<i>Parameter</i>	<i>Measures of 'control'</i>
Space	I sought to use similar spaces for all workshops. These spaces were appreciated to be creative and professional environments without too much 'contamination' in terms of stressful associations. The spaces were easily accessible for the participants.
Time	Time and day: I sought to only conduct workshops and follow up interviews during normal work hours. In terms of the follow up interviews, all took place approximately three weeks after the workshops and all over the phone with me as the interviewer and followed the same structure.
Language	Since the study took place both in the UK and Sweden, in some I was able to use my first language and in some not. The UK sessions had the additional factor of several of us having to use a second language - English. This brought the concern that immediacy in communication therefore varied, and that consistency in the use of terminology (and its connotations) was flawed. By being aware of this and taking care to ensure common understanding in sessions, and by being mindful of language issues in the analysis, I trust language concerns has not harmed the study considerably.
Resources	All groups had access to the same resources in terms of time, materials and refreshments. All individuals received the same invitation, however obviously their interpretation of it varied according to e.g. previous experiences.
Group set up	My ambition was to have all groups consisting of six members, including myself. Again, this was not possible and the groups' sizes varied from four to six. Another variable of the group set up was the degree to which the group members were already familiar with each other and with me. The groups also differed in terms of the ratio of male/females, ages, personal, educational and professional background. Here, some of the differences were planned, since I wanted to find out how a variety of fashion stakeholders reacted to the workshop. The variation in group set up has added richness to the study but also complexity to the data analysis.
The researcher	Although I took the role of facilitator in all groups and followed the same structure, obviously my 'performance' was not entirely consistent. I grew more confident as the time went by, and was more fluent in the Swedish sessions. Although I sought to keep a similar demeanour in all the groups and with all individuals, it is a fact that I was already acquainted with some of the participants whereas others were entirely new to me. Equally, the status or authority I projected in the different groups probably varied (and I have observed how my own use of language and tone of voice changed) depending on whether the group members were very experienced or students, whether we had met before. Again, speaking in my native language possible lent more authority. I have tried to cancel out such differences by being mindful of them during the sessions and during analysis.

Figure 6.9 Workshop parameters and strategies to 'control' them

6.2.4.5 Stimuli in this inquiry – a proposition

In conventional experimental research, the response to a stimulus is measured. The stimulus that was introduced in this inquiry was a proposition: 'what if sustainability and fashion were compatible and even synergistic?. This proposition was broken down into several smaller propositions:

- What if we were to replace the commercial realm with one of sustainability, as a starting point for our design?
- What if we were to define fashion as an experience or service rather than a product?

- What if we were to work in multi-disciplinary teams?
- What if designers were to have a strategic, as well as operational role?
- What if we were to see sustainability as a creative opportunity rather than a constraint?
- What if we were to assume that we as individuals and as a group have the power to affect change?

Finally the propositions were presented through a series of activities and through the format and approaches of the workshop itself – all of which sought to embody and support the alternative paradigm of sustainability. The format and approaches have been described earlier in this chapter and include interdisciplinarity, participation, and the ‘uncontaminated space.’ The activities are introduced in the section on workshop design further into this chapter.

6.2.4.6 What was compared with what – data concerning attitudinal change

The initial plan was to compare attitude (or stakeholder temperature) with the findings from the first study. This strategy proved impractical since all participants from the first study were not available. Even if I could have accepted their stakeholder temperature as true of a larger population, and replaced individuals with a representative sample, such a comparison would have been flawed. Since the study took place, in late spring 2005, the general interest in sustainability had increased dramatically, as evidenced in the wide media coverage and numerous fashion initiatives. (See Chapter 2.) I would therefore not know whether it was zeitgeist, the workshop, or both that affected attitudinal change. In addition, for the second study I wished to expand the sample into other fashion stakeholders. All the above meant that other points of reference for comparison needed to be found.

The obvious route was to compare the beliefs and values of the participants before and after the workshop events. One way to do this would have been an interview or questionnaire with each participant some time before the workshop and then again afterwards. Again, this approach proved unsatisfactory. As previously described, time constraints and frequent travel are main issues with this group of people, asking even more of their time was unrealistic. In addition, it was important for me that the entire study embodied the values and principles of the paradigm it purports to reflect and strive for. Engineering a test situation already before the session did not fulfil the criteria. It might compromise participants’ openness, it would emphasise a power imbalance between participants and myself and perhaps even participants’ willingness to participate. Participants may start ‘revising’ for the session in which case I would, again, not know whether it was actually the workshop that

had affected attitudinal change.¹⁰ My approach therefore was to seek to identify post-workshop change through follow-up interviews.

6.2.4.8 Follow-up interviews

I used follow-up interviews to ask participants to describe if and how they had experienced attitudinal change. There are obvious issues concerning validity and reliability in this approach: a) biased data which might result from a possible eagerness on participants' behalf to please me; and b) discrepancies in focus, intimacy and length of conversations. I considered a questionnaire, and the use of an independent interviewer in my stead to negate these dangers. However, I realised that these options were not ideal for this particular inquiry. Firstly, I found that an indirect approach would breach the democracy of the process and other quality criteria I had set of up for the inquiry. My responsibility to the participants, the participatory process, and the trust that we had established in the workshops would be compromised if I failed to allow a participatory sense-making process, and instead subjected them to an impersonal test situation. Secondly, the use of a questionnaire or an independent interviewer would not allow a continuation of the situated exploration of means to implement more sustainable practices in the fashion industry, and might not optimise the opportunity for new knowledge generation.

From the candid responses from participants in the interviews in the first study, I had a degree of confidence that responses in the interviews following up the workshops would be candid too, if the participants were made aware of the relevance of this for the study.

After having decided on the interview approach as a means to generate data regarding attitudinal change, I set about designing an interview framework that would be as robust as possible. The interviews followed a set structure that ensured that all participants were asked the same questions; the questions were designed to elicit information as regards attitudinal change and the experience of the workshops in several different ways for triangulation of data. The questions were open ended and the format allowed flexibility to address emerging issues. The average length of the interviews was fourteen minutes (the participants were advised they would take between ten and twenty minutes). The time allocated to eliciting data in terms of attitudinal change was approximately seven minutes, which was also the time span of the workshop task that served to provide a base level attitude. Finally, questions were put in place to directly elicit the participants' own experience of the possible attitudinal change they had undergone, the responses to which served a point of reference to my analysis.

¹⁰ I was aware that 'revising' still happened to some extent because of the task participants were given before the workshops. However, this was part of the study, and designed to be driven by the individuals' personal interests.

6.2.4.9 Experimental workshops inspired by action research

This inquiry was inspired by epistemology and approaches in action research, however it is important to note that it was not as such 'true' action research. This exploration corresponded to several of the perspectives and aims of action research – it is political, it hoped to be transformative, it was to an extent participatory and it embraces an extended epistemology. (See e.g. Reason and Torbert, 2001) However, it also diverged on several points.

Firstly, action orientated research involves cycles of action and reflection and can take place over months or even years. An early version of the Stage 2 study outlined workshops spread over four meetings, with time for reflection and individual activities in between. However even this short an inquiry was not perceived as realistic.¹¹ The later version of the workshops therefore outlined one session of just three hours per group, so that it could be fitted into one morning or afternoon. To allow for at least a minimum of reflection, 'sense-making' time was built into the session. I also stretched the research process by designing a small homework task to precede the workshop, to invite participants into a reflective process before the event. Again, after the workshops participants were allowed some reflection time by setting up the follow up interview three weeks after the workshop had taken place.

Secondly, the inquiry was only partly co-operative since I brought in the agenda and structured the sessions. However, by making transparent the agenda to participants and promoting awareness of choice (first of all to take part in the study and later the right to inform the direction of the session), and inviting them to make sense of the workshop with me afterwards, I could ensure a degree of a democratic process. Earlier versions were more open for the participants to form the agenda and process and therefore less explicit about the context of sustainability. However, I considered it more honest, and less risky in terms of meeting the research objectives, to be up-front with the agenda.¹²

6.2.5 Designing a shared learning experience

I had established a normative and epistemological framework for the research, and decided on a format for my intervention – a series of workshops. With myself as the interface, trend-

¹¹ Fashion professionals travel frequently and the previous study had featured many cancellations. Indeed *stress* was one of emergent themes generated from the Stage 1 study. (See chapter 4.)

¹² Yet another aim, which was not a criterion of action research, was compromised. I had aimed to have mixed stakeholder groups, since specialisation and alienation were some of the key factors considered to work against environmental improvement by design and at systemic level. On reflection, mixed stakeholder groups were not always practical considering how short the sessions would be. I appreciated that establishing a common knowledge ground and achieving a fairly non-hierarchical dynamic would in some cases take up too much time. Therefore there was one session with only students. In this session I was mindful of bringing in the multitude of perspectives that had emerged from the previous groups.

forecasting would make a series of propositions, introduced through a range of approaches and activities to a mixed group of fashion industry stakeholders. These approaches and activities were developed into an operational research design. In developing this workshop my combination of experiences, that of teaching design undergraduates and my familiarity with the working lives of the professional participants, was important. Table 6.4 below presents the translation from propositions to approaches and activities. The overarching proposition was 'what if fashion and sustainability were compatible and even synergistic?'

<i>Proposition</i>	<i>Approach</i>	<i>Activity</i>
What if we were to replace the commercial realm with one of sustainability as a starting point for fashion?	A holistic perspective on fashion and sustainability Encourage free thinking, imagination and creativity	Introduction to basic sustainability concepts Introduction to environmental impacts associated with the fashion industry Re-designing fashion objects from a sustainable perspective Generating a scenario of a fashion concept from a sustainable perspective
What if we were to define fashion as an experience or service rather than a product?	A holistic perspective on fashion and sustainability Encourage free thinking	Introduction to the difference between fashion and clothing and fast and slow fashion Introduction to product service systems through examples Re-design of fashion object and creating a sustainable fashion scenario
What if we were to work in multi-disciplinary teams?	Tasks and conversations that encouraged cross-disciplinary team work and both personal and professional values, experiences and skills to come through	Show and tell of personal and professional appreciation of fashion and sustainability through objects the participants bring with them Re-design of fashion object, creating sustainable fashion scenario
What if designers were to have a strategic, as well as operational role?	A systemic and holistic approach to fashion and sustainability	An invitation to use strategic skills through scenario work – creating a fashion concept from a sustainability perspective
What if we were to see sustainability as a creative opportunity rather than a constraint?	Verbal and visual language that resonates with language in fashion and trend-forecasting Using a futures perspective	Presentation of 'inspiring' current examples of design for sustainability Presentation that refutes stereotypes through facts and examples
What if we were to assume that we as individuals and as a group have the power to affect change?	Interdisciplinary groups and a format that allows both personal and professional value systems to come through Making links between the personal and the global, thus highlighting the urgency of and the significance of the individual's actions	A homework task which encouraged reflection on both personal and professional values as regards fashion and sustainability Presentation of fashion cases that have made a change Introduction to lifecycle perspective and facts of designers' scope to define the environmental profile of products Introduction to basic principles of design for sustainability

Figure 6.10 Propositions translated into workshops approaches and activities

6.2.6 The workshop design

The approaches and activities were brought into a coherent workshop format where the entire user journey, from initial contact to the follow up interviews, was considered. An important factor in creating the 'uncontaminated' space for envisioning and to embed the process firmly in the fashion and trend-forecasting context was the choice of a futures perspective. Although fashion normally considers only the near future, for the benefit of free thinking, the inquiry was set twenty years into the future, in 2026.¹³

¹³ There was the concern that such an approach might result in our work merely being perceived as fantasies, however by inserting space to back cast, and situating our ideas in a more contemporary context of for example zeitgeist and demographics, I appreciated that this risk was negligible in comparison to the benefits.

As mentioned above, several versions of the research design were generated and reworked. The preliminary sketches were piloted first as parts and then as a whole with design students and friends from the design community.¹⁴ These pilots were very helpful and led to a series of modifications.¹⁵ The framework and expectations of the participants also grew more explicit, with adjustments to the focus of some tasks and alterations to the time line. For the workshop to be a viable research design in terms of data generation, the documentation of the whole process was carefully considered, as were how and where in activities data ports – interfaces for simple data gathering or generation – could be inserted. In addition to the designated data ports, all sessions were audio recorded as a support for my memory. My own observations and reflections after the workshop were recorded in a journal. Additional data was generated in the follow up interviews. Figure 6.11 below illustrates the final workshop design. *Workshop design* in Appendix B, **B.2** describes the design.

It is important to emphasise again that the workshops constituted a) a small intervention, to regard as a sample of what the modified version of trend-forecasting can do; and b) not a longitudinal study. However, the study made it possible to explore at least a potential of the interdisciplinary, multi-method approach and the generative and transformative power of the proposition 'what if fashion and sustainability were compatible or even synergistic?'. The research design constitutes a curious balance of adherence to a conventional academic research framework, and adherence to my acquired understanding of an alternative sustainable paradigm. At the time of planning the study I was well aware of the risks associated with developing my own methodological approach, and was keen to make the study as robust as possible. In hindsight, I think I could have taken even more risks, pushed the design even further towards the alternative paradigm.

¹⁴ Several pilots of aspects of and the whole design took place; with the group of design PhD students, MA Design Futures students, and BA design and eco-design students at Goldsmiths, University of London, and with BA students at Beckman's College of Design. The workshop was also piloted with a group of friends including two designers and one teacher. In addition, as mentioned before, some approaches had been tried out before in my own research, teaching and commercial work and in collaborations with other researchers.

¹⁵ For example, in an earlier version of the workshop design, a making session was included for hands-on manifestation of the ideas. I realised that there was simply not enough time to allow this, nor could I impose additional tasks on the participants after the workshop. Instead I came to the conclusion that what we would 'make' was new legends and new imagery – visual and conceptual.

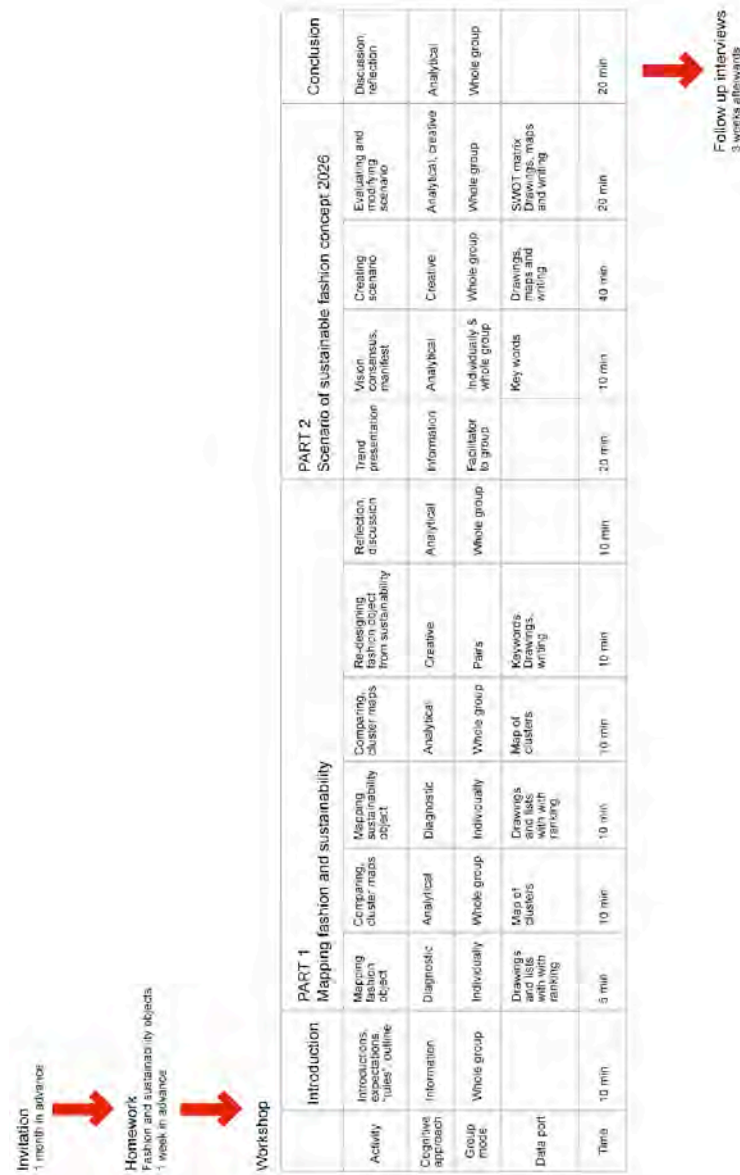


Figure 6.11 Research design

6.2.7 Sample

6.2.7.1 Sample boundaries

A central aim of this inquiry was to explore the potential of a multiple stakeholder, interdisciplinary working group. Figure 6.12 below presents examples of stakeholders of the fashion organism and highlights which were represented in this study. Limitations in terms of

time and access made it necessary to, for the purposes of this study, focus on a reduced range of stakeholders. I chose those estimated to have the most immediate stake in the information flow that may support environmental improvement by design at systemic level in the high-street, mass-market segment of the fashion industry. Therefore the sample excludes for example production, laundry and transport - all very important areas. However, I did seek to counterbalance the limited sample by bringing in perspectives from those stakeholders not present in the workshops.



Figure 6.12 Fashion organism stakeholders, and stakeholders represented in sample, marked with orange dots

Just like the first study, the second study sample included designers, buyers, managers of CSR - all operating in the mass-market segment of the fashion industry. Because the study findings indicated the desirability of involving additional stakeholders, the new study also included representatives from media and promotion, trade-bodies, fashion education and users. These still constitute a fit with the mass-market segment. Upon reflection, and considering the self-referential¹⁶ nature of fashion as described in Chapters 4 and 5, I found there was an opportunity to involve some participants operating outside the mass-market segment, such as an avant-garde designer, and designers operating outside the immediate realm of fashion. Bringing in such persons may give a different and valuable input – and reduce the risk of the ‘ghetto of likeminded people.’ (See Carson, 2006 and the section on

¹⁶ E.g. high-street designers look to designer brands, avant-garde informs magazines, top stylists inspire designers, second-hand clothing informs new fashion.

facilitation in Workshop Design, Appendix B, **B.2.3**) It was also my intention to bring in one or two fashion companies with an explicit sustainability agenda and established practices for environmental improvement by design.

Finally, I adopted the role of the trend-forecaster in this study. The concept of the researcher as facilitator and participant is described by e.g. Morgan (1998). The implications of such an approach has been described earlier in this chapter and will be revisited in the data analysis and conclusions.

Action orientated research, and experts on focus groups recommend a group size between six and twelve people. (E.g. Heron 1996; Morgan, 1997) For spatial and facilitation reasons, I decided to stay with the lower number. The workshop groups constituted both mixes of individuals from different organisations and groups where all participants (except myself) came from the same organisation. One group was composed of a homogenous stakeholder sample: the student group.¹⁷

6.2.7.2 Recruiting strategies

The recruiting of the sample for this inquiry can be described as a snowball or network strategy. The approach was to expand from my closer network of contacts in both the UK and Sweden to a broader group of people.¹⁸

The choice to conduct the research in both Sweden and the UK was foremost an issue of access. However, I was also curious about possible comparisons, such as the level and focus of the sustainability discourse in the two countries. It is important to note that although the scope of such comparisons existed, this was not designed as a comparative study.

For groups where all individuals were drawn from one organisation, I initially contacted the gatekeeper specifying what roles would be relevant to include. The gatekeeper chose and asked appropriate people, and (in most cases) forwarded their details to me. Individuals in groups drawn from different organisations were contacted directly by me. (See *Workshop Design*, Appendix B, **B.2.1** for the specifics of the invitation.)

The recruiting process was generally positive, but it was challenging to find dates and times suitable for all participants, which meant that I had to be flexible with the make up of the

¹⁷ This choice was made because I considered, within the short time frame, that ensuring a level group dynamics and building up a shared understanding would be too time consuming otherwise.

¹⁸ This meant that I knew or was acquainted with a proportion of the sample. I do not consider this to be a problem, as such 'bias' is consistent with an ordinary trend-forecasting event – the fashion circuit is closely knit. However, I have been mindful of this bias in my interaction with the groups, and attempted to avoid imbalanced group dynamics because of it.

groups. It did not prove possible to include an environmentally advanced company.¹⁹ Although this was a disappointment, I served as an interface to the approaches of such organisations and thus ensured their perspectives were to some extent included. Again, in the groups that did not include a manager of CSR or environmental officer I sought to bring that perspective in.

In hindsight, organisations and individuals dedicated an astonishing amount of working hours to this study. I believe this is due to the auspicious timing of the study topic and the access my background afforded.

6.2.7.3 Final sample of the Stage 2 study

The final sample consisted of thirty-three individuals, including myself, divided into eight groups. Table 6.3 below provides an overview of the groups' composition.²⁰ The workshops took place in London and Stockholm, the participants represented companies including²¹:

- The UK – the Gap and Levi's;
- Sweden – H&M, Indiska, Åhléns.

The participants' nationalities included British, Swedish, Belgian and Japanese.²² Only eight out of thirty-three participants were male. This bias is estimated to bear resemblance to the fashion industry at large. (See also Chapter 4, 4.6.1.3.3) Three groups only constituted of four members, including myself. This was a result of difficulties in matching the availability of different participants.

¹⁹ Responses were kind and interested, but companies were too small or too busy to afford the time away from business.

²⁰ Some information is omitted because it would make organisations and individuals easily identifiable, such as the name of organisations, in which country each workshop took place and the nationality of the participants.

²¹ Some names of organisations are omitted because, again, mentioning them would risk violating participants' anonymity.

²² The Western bias is probably representative of the European fashion industry. In a further study a culturally more heterogenous sample would be desirable.

Group	Profile of group	Roles represented
Company A	Participants drawn from one organisation	Designer
		Designer
		Designer
		Buyer
		Manager of CSR
Company B	Participants drawn from one organisation	Trend-forecaster*
		Designer
		Designer
		Manager of CSR
Mixed A	Participants drawn from several organisations	Trend-forecaster*
		Designer
		Buyer
		Designer/other discipline
Company C	Participants drawn from one organisation	Designer/other discipline
		Trend-forecaster*
		Designer
		Designer
		Buyer
Trade	Participants drawn from several organisations	Project leader
		Manager of CSR
		Trend-forecaster*
		Journalist
		Educator
		Promoter/agent
Students	Participants drawn from one organisation	PR
		Trade-body representative
		Trend-forecaster*
		Student
		Student
Mixed B	Participants drawn from several organisations	Student
		Trend-forecaster*
		Journalist
		User
Mixed C	Participants drawn from several organisations	User
		Trend-forecaster*
		Designer
		Designer
		PR
		Trend-forecaster*

* I took the role of the trend-caster in all groups.

Table 6.3 Overview of sample composition

It should be noted that the stakeholder categories defined in this study are by no means absolute. For example producers of fashion are also users, and users – by the collaborative nature of fashion's becoming (described in Chapter 5, 5.7.4) are also in some respect producers. All participants were aware of the role ascribed to them in the study, but never told to confine their contributions to that role.

6.3 Research process - 20 litres of strawberries, 50 fine cakes, 70 cups of coffee, 200 emails, 2 trips to Sweden, and 35 hours of recorded data

"Relieved! I have done the first workshop. There were six of us in a nice bright room... I greeted everyone at the door... It was enjoyable. Yesterday and today, before the workshop I have been a little bit nervous, but mainly excited. It felt so good to finally start doing it. They seemed to enjoy the trend presentation most. It spurred a lot of discussion and debate about the viability of Fair Trade. I felt much more confident that we would produce something meaningful than in the pilot, and it seemed that I conveyed that confidence. I stayed calm when participants were

unclear about tasks, and waited when it got quiet. The participants seemed happy and content when they left. They all willingly agreed for me to call them in a couple of weeks.” (Excerpt from my journal, 10 May, 2006)

“It is Tuesday night and I am at my mother’s. I am here for six days to run four workshops and to hopefully see a lot of her and the rest of my family. I worry about the outcomes of the PhD. What if they are too superficial or too self-indulgent?... I feel I am still a generalist rather than a specialist. The map is broad and perhaps too shallow.” (Excerpt from my journal, 6 June 2006)

This section introduces the active research process, which took place between May and July 2006. Together with thirty-two fashion industry stakeholders I embarked on a shared learning experience and a journey towards alternative, sustainable paradigms for fashion. This process brought some fascinating insights, hard work on behalf of all participants and myself, much joy and moments of doubt. The following constitutes a brief account of the process as I experienced it, supported by excerpts from my journal written during the process.

6.3.1 Pilots, and changes in the study format

All aspects of the workshops, and the entire session were piloted with groups of people comparable to the sample. In brief, the pilots led to a simplified process, adjustments of timelines and clearer communication of for example context, purpose and expectations.

“The scenario took a while to get started. The instructions were not clear enough. This was obvious and also voiced by one of the participants at the end of the session. I had to try several different angles to get it started... However, the participants were excited and the scenario we produced was very interesting. We did not proceed according to the time schedule (although I had reworked it since the pilot where it actually did work). I had to reschedule in my head to make sure we would get through. The tasks worked, in the sense that they spurred some discussion. The feedback was generally positive: “inspiring”, “learnt a lot”, “interesting”, “trend presentation very good”. The Manager of CSR stressed how right it was in time for her – she wants to work more with environmental issues. I felt that the mixed stakeholder group was successful.” (Excerpt from my journal, 10 May, 2006)

The workshops also changed through the process. An example of this is how it was almost immediately apparent that because the focus was so much on the conversation, and the time was so scarce, out of the tools that I brought only pens and paper were used. A large part of the documentation in action – through mapping, drawing and writing also fell upon me. For the sake of authenticity, after each workshop I therefore sent an account of the scenario (from the visual material and recordings) for participants to approve, adjust, add to and comment.

6.3.2 Access and travel

As my fashion industry network is considerably more evolved in Sweden and access was a key issue, the study has resulted in a significant amount of air travel. Although I sought to

limit trips by scheduling workshops on adjacent days, this was often not possible and the ironic result is that the inquiry is associated with a considerable carbon footprint.

6.3.3 Notes on transcripts, translation and organisation

Because of the many roles I served in this inquiry, and the decision not to involve an observer, recording all events was crucial. To this effect I used an I-Pod with a microphone alongside notes at and after the events. This was with all participants' consent and as far as I can tell not particularly intrusive in the sessions. (I refrained from using any camera equipment in the sessions.) The result of the constant recordings was a significant amount of material gathered, which was enormously time consuming to transcribe, in many cases translate, and to analyse. The organisational aspects of this study have at times been almost overwhelming. Similarly, analysing qualitative data across numerous individuals, roles, and groups has required a high degree of structure, discipline and resourcefulness.

6.3.4 Facilitation

"I felt I took on a more serious role than the day before, yes, still making jokes, but not so nervous. We felt more like a team, in there together. The "teacher role" was less prominent... In the conclusion, the designers voiced that they could trust or listen to me because of my design background. Similarly, the environmental officer expressed that these issues, raised from the "outside" have more influence than if he or a colleague would raise them. This correlates with my idea of the trend-forecaster as an "insider outsider" or "outsider insider". (Excerpt from my journal, 12 May, 2006)

"This morning I interviewed [manager of CSR]. A really nice talk. And I am again humbled by how much she knows, and how she has lived it for a long time. I am just at the beginning, and still naïve. She expressed in a very nice way that she knows this too, but that she appreciates my work." (Excerpt from my journal, 2 June 2006)

As anticipated, acting as both facilitator and participant required a high degree of self-reflexivity. I had to be constantly mindful of the overall agenda, tasks at hand, time-keeping and group dynamics, make quick decisions, and yet be in the moment. The participants offered helpful feedback during the process. Despite all my attempts at creating a safe space, I did fall short in some respects, mainly because of lack of clarity. Generally the groups worked well together and I had primarily to be aware of allowing appropriate space for everybody, and balancing focus and flexibility in the session. When preparing the study I had been particularly conscious of the risk of treading on the toes of the manager of CSR representatives. Instead the encounters with them proved a very positive experience, where they were very generous in sharing their knowledge and experience both in the groups and in the subsequent interviews with me. They appeared to view my intervention as helpful and stressed the benefits of an insider/outsiderness.

6.3.5 Analysis of the study

This study had several parameters, with many overlaps and underlying factors. Each needed to be addressed in the analysis of the study. Table 6.4 presents an overview of the study's parameters and their respective analysis frameworks.

Parameter	Role	Description	Analysis framework
Research proposition	The questions guiding the inquiry An intervention	A modified version of trend-forecasting can serve as a driver for environmental improvement at systemic level in the fashion industry's mass-market segment. In terms of: Brand/perception Knowledge and awareness Relationships Action and activism	What were the transformative and generative qualities of the proposition?
The modified version of trend-forecasting	Research methodology Methods and processes of intervention	Informed by a brief and quality criteria in order to support and embody an alternative, sustainable paradigm A set of approaches, activities and tools	How well did the modified version of trend-forecasting meet the brief? How well did the methodology work as a whole, and as separate elements?
Quality criteria	To ensure robustness of the study; To ensure that the described alternative paradigm of sustainability was honoured	Reflexivity Credibility Democracy Relevance Translatability Creativity and vision Authenticity	How well did the research honour the quality criteria?

Table 6.4 Study parameters and their analysis frameworks

6.3.5.1 Scope of transformation

The type of effect that my intervention initially aspired to ranged from *awareness* to *action* and ultimately *activism*. Activism in this context should be understood as the spreading of the proposition 'what if fashion and sustainability were compatible and even synergistic?' beyond the remits of the workshop through words and actions. Limitations in terms of time and access to organisations put constraints on the extent to which I could make an intervention, and therefore the scope of expected change had to be restricted to a heightened awareness or attitudinal change in the short term. I therefore included the criteria *Action and activism* as a hope rather than a realistic expectation, and in order to show criteria as they might appear in a longer and deeper study. In other words, the study had as its aim to achieve a higher temperature in the stakeholders as regards perception but not practices. During the research process I realised that *stakeholder temperature* was too linear a model of change, and adjusted it to a more sprawling model of *stakeholder climate*.



Figure 6.13 Linear and sprawling models of change – stakeholder temperature and climate

6.3.5.2 Scope of analysis

The study generated a vast amount of data, and there were numerous possible foci and approaches to analysing and categorising data. I realised that the study, beyond being an exploration into the integration of fashion, trends and sustainability, could be analysed in terms of for example:

- Creative processes;
- Language;
- Cognitive styles;
- Group dynamics;
- Power and gender.

I sought to limit data analysis to the immediate scope of the PhD project and to keep the analysis process as transparent as possible. However, I also allowed myself some observations outside the scope of the specific research questions, where I deemed findings highly relevant to the future exploration of this area.

6.3.5.3 Analysis process

All data from the carriers or ports²³ and the interview transcripts was coded, entered into Excel charts and categorised into themes. Finally, the data was sorted into the four overarching analysis categories: Brand/perception, Knowledge and awareness, Relationships, and Action and activism. The data was cross-referenced with group, role, gender and age. Additional data generated during and after the active research phase was treated in the same way. Finally I sought to reflect upon and understand the study as a whole.

²³ Such as the drawings and ranked lists of the 'fashion' and 'sustainability' objects.

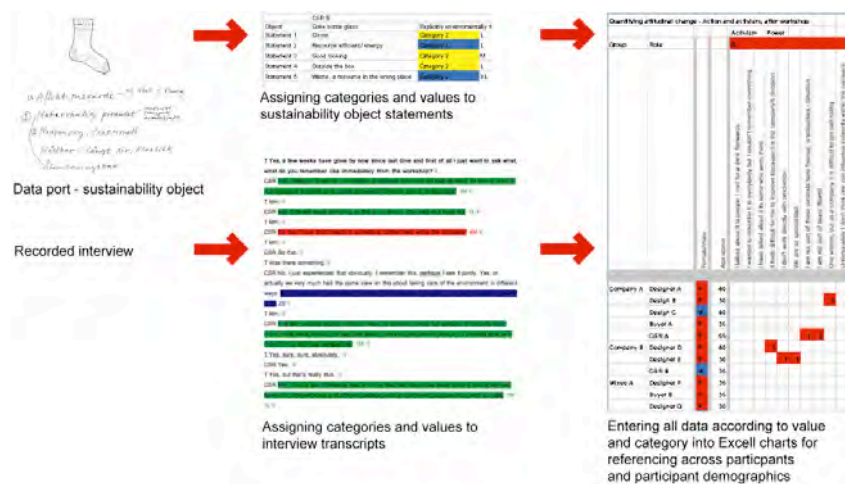


Figure 6.14 The analysis process

The layers of interpretation in this process, with myself as the interface, called for a high degree of rigour to ensure a sound analysis process. To this end, I drew up coding templates²⁴ for the four analysis criteria and the subcategories that emerged, and kept referring to these to ensure consistency in coding and interpretation. (See Appendix B, B.3) To validate the data analysis, another researcher, Dr Noemi Sadowska, was brought in. Dr Sadowska's PhD thesis at Goldsmiths, University of London, in the fields of design and gender, also employed a qualitative and interpretative approach, and she had therefore the suitable experience to validate this research. She coded 10% of the material (samples from data carriers at the earliest stage of the workshops, and transcripts from the follow up interviews).

6.3.6 Organisation of data

For the sake of transparency and a coherent narrative, the data has been organised as it was generated in chronological order according to the research design. This allows a presentation of data sets across all groups to be considered at each point or activity throughout the process. Figure 6.15 below provides an overview of how data was generated throughout the research design and what questions it purported to answer.²⁵ Again, there were many overlaps, some intended for the purposes of triangulation and some an emergent

²⁴ Much like the templates of assessment criteria used in marking student projects.

²⁵ The figure highlights that an extra data category emerged after the intended active research phase as some participants continued to contact me with for example requests for more information, and reports on how their organisation had assimilated the workshop message in their work. In addition to designated data ports, through out the whole process I was given different types of feedback from organisations, groups and individuals, and I continuously reflected upon this feedback and upon my own experiences of the process. These reflections were gathered in a journal

quality of the inquiry. Finally, it is important to note that the intervention cannot simply be unpicked into parts but must be viewed and evaluated as a whole as well.

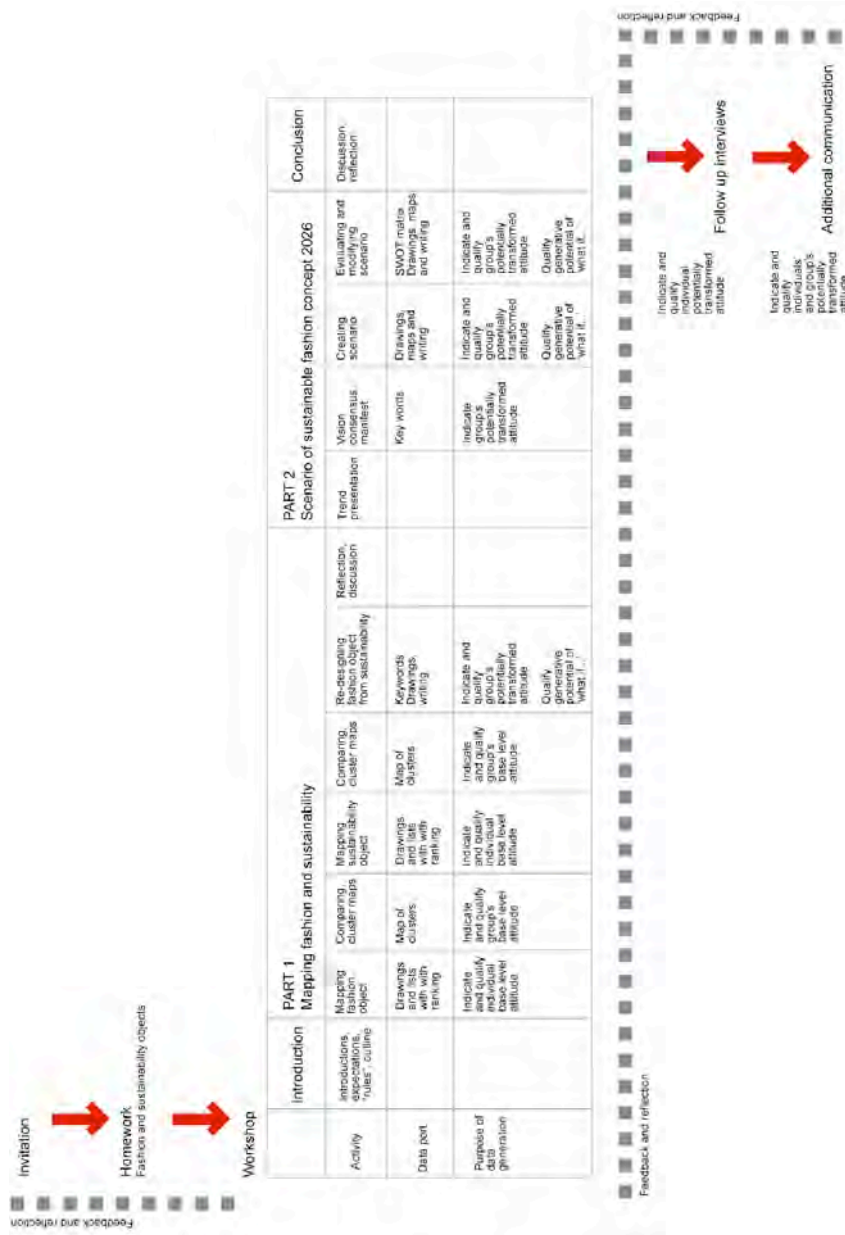


Figure 6.15 Data ports and the purpose of data generation

6.4 Data presentation and analysis

This section presents and interprets the data generated through the inquiry in chronological order according to the research design. The account is divided into three parts:

- Workshop – part 1;
- Workshop – part 2;
- Follow up interviews and additional communication.

This presentation is followed by a section that qualifies and quantifies attitudinal change, evaluates the methodological approaches, and discusses the extent to which the quality criteria guiding the inquiry were honoured.

The *Workshop process data* charts in Appendix B, **B.7** present all data, the coding and relevant participant demographics. For the sake of clarity the colour *red* is used for all fashion descriptors and *green* for all sustainability descriptors. The four overarching analysis categories are coded²⁶:

- Brand/perception – yellow;
- Knowledge and awareness – blue;
- Relationships – green; and
- Action and activism – red.

I have indicated which proportion of contributions of data was mine. Since I was also a participant in this study, the total number of participants as it appears in all graphs is 40.²⁷

6.4.1 Presenting the workshop data – part 1

The first part of the workshop served to map fashion and sustainability respectively and in combination, and constituted of five elements with data ports in place.²⁸ The following paragraphs present the data generated from each element and discuss some emerging patterns.

6.4.1.1 Mapping fashion individually and as a group

All participants, including myself, drew objects, 'manifesting what fashion represented to them' that they had been asked to bring in, and made a ranked list²⁹ (from the most to the least important aspect) of the reasons why they perceived the object to embody, illustrate or

²⁶ The colours red and green as they occur in the analysis categories are neutral to fashion and sustainability.

²⁷ This is because there were 32 participants and eight groups and I was a participant in each of these groups.

²⁸ These were: *mapping fashion individually*, *mapping fashion as a group*, *mapping sustainability individually*, *mapping sustainability as a group* and finally *re-designing a fashion object from a sustainable perspective*.

²⁹ This process was confusing for some participants who were not sure whether they were describing the object or fashion, and the nature of the statements also reveals slightly different interpretations of the task. However, to my understanding the analysis process was not impaired by the initial confusion.

symbolise fashion.³⁰ The images 6.1, 6.2 and 6.3 below constitute some examples of the visual characteristics of the data port.

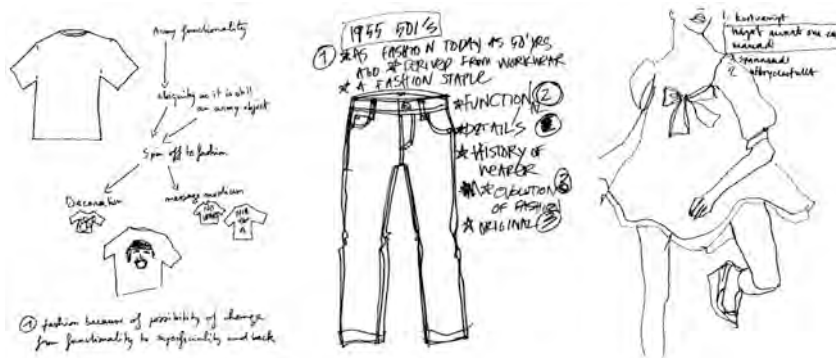


Image 6.1 Mapping fashion, Designer H, Mixed A. Object: "T-shirt." Descriptors: "1. Possibility of change - from functionality to superficiality and back, 2. Ubiquity."

Image 6.2 Mapping fashion, Designer A, Mixed C. Object: "1955 501's" (Levi's jeans). Descriptors: "1. Fashion staple, 2. Functional details, 3. Shows evolution of fashion, 4. Original, 5. History of wearer."

Image 6.3 Mapping fashion, Student A, Students. Object: "Magazine." Descriptors: "1. Short-lived, 2. Expressive, 3. Exciting."

Next, the group gathered to share their fashion descriptors. In turn each participant showed his or her object and read the list to the group and each descriptor was entered on a post-it note, which was stuck on a big piece of paper. As this progressed the group arranged clusters of descriptors that had some kind of affinity. When everybody had contributed their lists and we had assembled some clusters, these were reviewed and named. We also looked at the relationships between the clusters and tried to place them appropriately. Finally, the participants were invited to add key words they thought were missing. The result was a map representing the particular group's collective understanding of fashion. Image 6.7 below exemplifies the fashion maps.

³⁰ Participants were not asked to limit the number of their statements and the statements also ranged from a single word to a couple of sentences.



Image 6.4 Mapping fashion in groups, Company A. Keywords/clusters: "Ego, eternal, function, language, play, forward/vision, time aspect – right now."

In the analysis process the individuals' objects were organised into themes³¹, and both their descriptors of fashion, and the groups' keywords were organised into the four categories *Brand/perception*, *Knowledge and awareness*, *Relationships*, and *Action and activism* and a series of emerging subcategories. This material was cross-referenced with other variables, such as role and age.

Figures B.8.1 to B.8.5 in Appendix B present all the themes, and their respective frequency derived from the individuals' objects and statements. Figures B.8.6 to B.8.9 present the themes and their respective frequency from the groups' keywords. The figures show both the overall distribution of statements and the distribution of those descriptors that were ranked the highest - priority statements (which are marked '1').³²

To my knowledge this material represents a unique insight into non-theoreticians – fashion practitioners and users – appreciation of fashion. The participants' varying degrees of a theoretical context to fashion, practice at and talent for verbal expression in general and on fashion are evident in the statements. However, these differences did not appear to be reflected in the distribution of results. With different language and interests, the participants expressed predominantly comparable and often cohesive views. The statements – across all roles - alternate between producer and user perspectives. An exhaustive presentation and discussion of the material is outside the scope of the thesis, what follows is a summary of the key tendencies that are relevant for the comparison with the appreciation of sustainability that will follow.

³¹ These categories were not mutually exclusive; for example a fashion garment could fall into both the categories 'fashion explicitly' and 'brand.' This type of overlap recurs in other analysis of the study and explains why the total of factors in the graphs sometimes exceed the number of participants.

³² The total amount of statements (including my own) of fashion across the groups, were 169 (making the average per participant 4.2) These statements resulted in 174 references across the four categories.

The individuals' descriptions of fashion:

- The *Brand/perception* category, i.e. emotive, distinctly subjective descriptions, dominated by far and uniformly across all groups, roles, gender and ages. Not only did such statements dominate the reading of fashion, they were also considered the most important aspects of fashion, i.e. given priority statements;
- Those statements that were sorted into the *Relationships* category were also defined by the emotive and micro perspective;
- Conversely, factual statements (*Knowledge and awareness*) constituted under 10% of all statements, and comprised no priority statements;
- Only nine responses (out of 169) fell into the *Action and activism* category. None of these mentioned a personal responsibility or right, but portrayed 'fashion' as an influential field;
- There were some demographical differences in the responses. Designers were underrepresented, and CSR, buyers and PR professionals overrepresented in the *Knowledge and awareness* category. The relatively older participants emphasised the classic, timeless property of fashion³³, while the predominant association to time was that of transience;
- From an environmental perspective, it is of interest that the immaterial aspect of fashion, and its existence outside the realm of clothes was raised both in the choice of objects, and in the descriptions.

In the main, the themes correspond to the literature on fashion as presented in the previous chapter. With the notion of fashion as *emotional* as opposed to *rational*, and *experiential* as opposed to *theoretical*³⁴ it is unsurprising that the factual statements are scarce. The participants' statements drew out some contradictions in readings of fashion. For example, while the majority of statements in the subcategory *Time* (the most frequent category) alluded to the fast and transient, they also included notions of timelessness. Similarly, whilst in the main attributes which can be termed as positive (such as *inspiration*, *good looking*, and *fun*) dominated, there were also some descriptors pointing to the ambiguity of fashion (*pretty-ugly*, *pseudo camp*, and *anti-cool*). They indicate an element of initial revulsion or resistance as part of fashion's allure. Fashion is not an easy friend, but a Janus character, elusive and complex. To my understanding this ambiguity comprises an aspect of risk and sometimes decadence that is crucial to a holistic understanding of fashion.

The groups' descriptions of fashion:

In the groups' synthesis of fashion some descriptors grew stronger and some new descriptors were added, whereas others disappeared. The discrepancies between the

³³ What is sometimes referred to as *style* rather than fashion.

³⁴ See also Chapter 3. *Fashion: Fashion education*; Chapter 4. *Discussion: A low status – high status job*; Chapter 5. *Fashion: The fashion smirk*.

groups' understanding of fashion and the individuals' understanding of fashion are considered to be both the result of group dynamics (e.g. dominant characters), and which statements were easily understandable to a whole group. The process from individual to group understanding represents an illuminating example of emergence – the whole is different, and larger than the sum of its parts. This is not to say that the group statements were always clearer, cleverer or 'truer' than the individuals' statements. At times the process of generating a collective sense, took away some richness and texture from the definitions, such as when *Ambiguity* fell away from the *Brand/awareness category*. Some key developments in the group mappings of fashion, in comparison with the individuals' statements were that the proportion of factual statements (i.e. *Knowledge and awareness*) emerged even smaller in the group mapping, while both the *Relationships* and *Action and Activism* categories grew slightly bigger.

6.4.1.2 Mapping sustainability individually and as a group

The mapping of sustainability followed the same process as the mapping of fashion, starting with all participants³⁵ drawing and making lists to the objects they had chosen to represent sustainability. The images 6.4, 6.5 and 6.6 below constitute some examples of the visual characteristics of this data port.



Image 6.5 Mapping sustainability, buyer B, Mixed A. Object: "Roll of recycled loo paper." Descriptors: "1. Shows awareness of environmental issues, 2. Recognises that resources are limited, 3. Exactly the same as not recycled product – consumers not affected by switching to this product, 4. Something small that everyone can do, 5. No reason for anybody not to use this product for this need."

Image 6.6 Mapping sustainability, Designer I, Company C. Object: "A woollen sock knitted by Mum." Descriptors: "1. Environmentally friendly - materials, transport, labour (Mum loves to knit), recyclable, 2. Necessary product, functional, 3. Affection value - no throw away product, 4. Sustainable, long life, classical."

Image 6.7 Mapping sustainability, User A, Mixed B. Object: "Granite stone." Descriptors: "1. Adjustable to other materials, 2. Has its own soul and history, 3. Unaffected by culture, 4. Global, 5. Beautiful."

This was, again, followed by a show and tell session in the groups, during which a shared map of sustainability was created. Image 6.8 below represents an example of the sustainability maps.

³⁵ Bar one participant who did not bring a sustainability object.

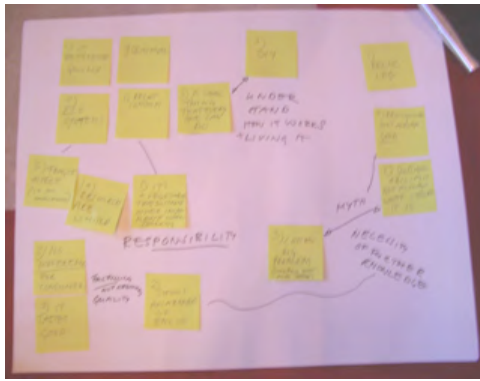


Image 6.8 Mapping sustainability in groups, group 3. Keywords/clusters: "Responsibility, myths, understanding how it works and living it, necessity of further knowledge, fulfilling – not affecting quality."

The data (from the individuals' objects, lists and the groups' keywords) were treated in the same ways as for the mapping of fashion task. Figures B.8.10 to B.8.14 (Appendix B) present all the themes, and their respective frequency derived from the individuals' objects and statements. Figures B.8.15 to B.8.18 present the themes and their respective frequency from the groups' keywords. What follows is a brief summary of the key patterns that emerged in the analysis.

The individuals' descriptions of sustainability:

- The *Knowledge and awareness* category achieved the highest frequency of sustainability descriptors and priority descriptors. In the main it features references to product lifecycle stages, however with little reference to systemic concepts (such as 'lifecycle' or 'cradle-to-cradle');
- The *Brand/awareness* category received only slightly less statements – with references to longevity, functionality, and values embodied in sustainability. In the main, attributes were 'positive' such as *good quality* or *interesting*. A small proportion of statements can be seen as conflicting with fashion, such as *design not prioritised*;
- As applied to sustainability, the *Relationships* category constituted references to a broader set of stakeholders than as applied to fashion, and did not directly place the individual self in the map;
- As in the mapping of fashion, the *Action and activism* category received the lowest number of statements but, in contrast, stressed *personal involvement*, *responsibility* and *power*.

Leaving my contributions aside, there was a fairly even distribution between the three first categories, with *Knowledge and awareness* dominating the priority descriptors. This dominance was expected and can be explained by the focus on particular, mainly production

related issues, in the fashion/sustainability discourse and the popular general sustainability discourse.

The groups' descriptions of sustainability:

The relative spread of statements across the four analysis categories remained much the same in the group mappings. However some subcategories changed. In *Brand/perception* the subcategory *values* gained prominence and only 'positive' attributes remained. *Local (in Knowledge and awareness)* grew from 15% of the individuals stating it to 62.5% of the groups. This may partly be due to the fact that I contributed it as a descriptor in three of the groups; however, its relative freshness as an idea in the context of fashion, and the way it can easily be understood through the area of food, may also explain its adoption.

6.4.1.3 Mapping fashion and sustainability – discussion

A closer comparison of the sample's descriptions of fashion and sustainability reveals some tensions. For example, where fashion is described as belonging to the moment, the now, sustainability is described in terms of longevity, and where fashion provokes emotive and personal (albeit across the sample very similar) responses, sustainability draws more factual and impersonal statements. Finally, where fashion is identified as a force in itself, sustainability is described as demanding choices and individual investment. When the individual locates herself in relation to fashion, it is instead about pleasure, well-being and confidence.

Figures 6.16 and 6.17 below compare the distribution of fashion and sustainability descriptors across the analysis categories. The clearest tendencies are the propensities to describe fashion in emotive terms and sustainability in both factual and emotive terms. In effect, the sample's representation of fashion is more homogenous than its description of sustainability. A much less familiar field to the sample in general than was fashion, the more heterogenous distribution of descriptors might be explained by a less rehearsed and thereby less 'set' understanding of the field. The respective descriptions of fashion and sustainability do not come out as a clear dichotomy, but rather as two fields whereof one is 'claimed' and familiar, and the other is as yet new, mainly unexplored territory. The latter may be significant as it suggests that there is scope for fashion industry stakeholders to explore, inhabit and shape sustainability.

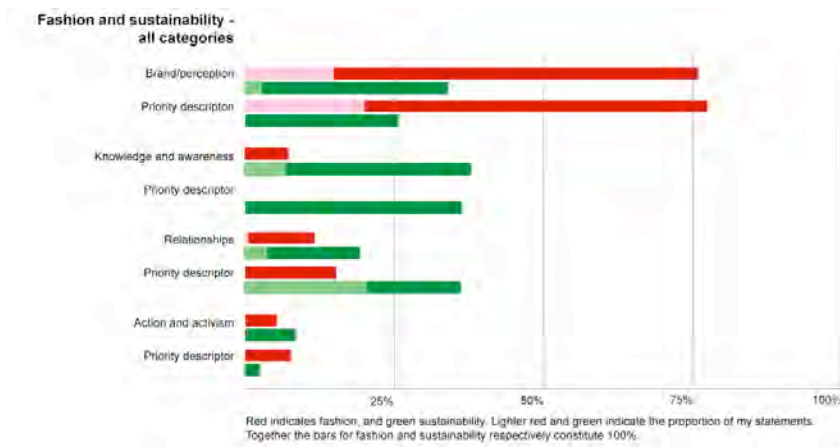


Figure 6.16 Fashion and sustainability individual descriptors, distribution across categories

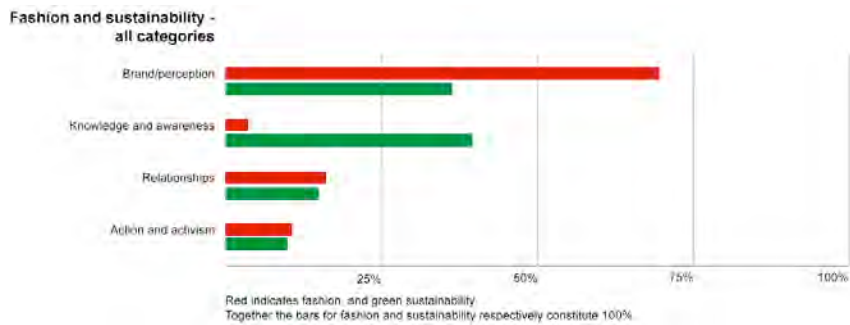


Figure 6.17 Fashion and sustainability group descriptors, distribution across categories

6.4.1.4 Re-design of fashion object from a sustainability perspective

The workshop's first part ended with an activity asking participants to re-design one of the fashion objects brought in, using keywords from the sustainability map as a starting point. The groups (including myself) were divided into smaller entities of twos or threes.³⁶ Images 6.9 and 6.10 below present examples of the drawings and writing that the task generated. Figure 6.18 presents the keywords that the groups selected to work with, and their distribution across the analysis categories.

³⁶ Across all the workshops fifteen such groups worked on the Re-design task. Out of these groups eight chose the Miu Miu clog (that I brought in), one group another shoe, two groups chose a pair of jeans and the rest of the groups chose respectively an I-pod, a perfume bottle, a fashion magazine and a watch. The predominance of the Miu Miu shoe as the starting point may be influenced by my bringing it in. However, since the study in similar settings other groups have also favoured a shoe, which suggests it is an inspiring object, perhaps easier to address because it is not immediately associated with the everyday work with fashion garments.

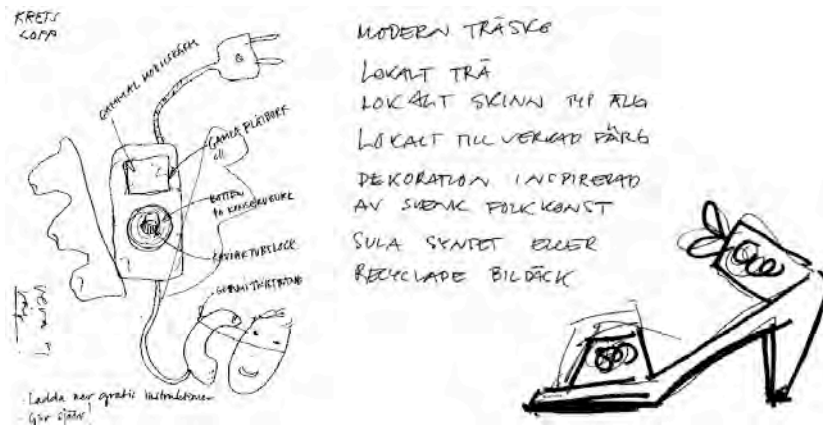


Image 6.9 Re-design. Company A, team 1. Fashion object: I-pod. Sustainability keywords: "Lifecycle thinking", Re-design: "DIY I-pod, download free instructions off the Internet. Made from old tins, bottom of tin for pad, screw top from caviar tube for switch, old leads to charge, old phone to listen, fasten with rubber band. Wind up and wave power. Packaging from egg carton.

Image 6.10 Re-design. Trade, team 2. Fashion object: Miu Miu clog. Sustainability keywords: "Lifecycle thinking", Re-design: "Modern clog, made in Dalarna (part of Sweden), locally sourced wood, local leather - moose/salmon/pike, locally sourced dye (Falun copper mine), decoration inspired by Swedish folk-art, sole synthetic or recycled tyres, no boxes, instead nice fabric pouch to save space and material."

The *Knowledge and awareness* category by far dominated the groups' choice of keywords for the Re-design task. This is hardly surprising since it is assumed that the participants, who had very little time to contemplate, looked for a principle they could easily get to work with. *Local* and *Long-lasting* were the most popular keywords in this category.³⁷ The most advanced keyword was *Design for disassembly* (which had been mentioned very briefly in the introduction to the workshop). All groups started the task with a brief diagnostic mapping of the object, spanning from material throughput to associated habits and lifestyles. In the presentation of the task I had made clear that it was open to both literal and more abstract re-design ideas. While the design propositions mainly focused on the former, such as concrete sourcing suggestions, there was a range of suggestions including ideas of user interaction, virtual solutions and even poetic notions.

³⁷ As previously described, the reason behind the popularity of *Local* is likely to be its relative novelty in a fashion context and its familiarity from the food debate.

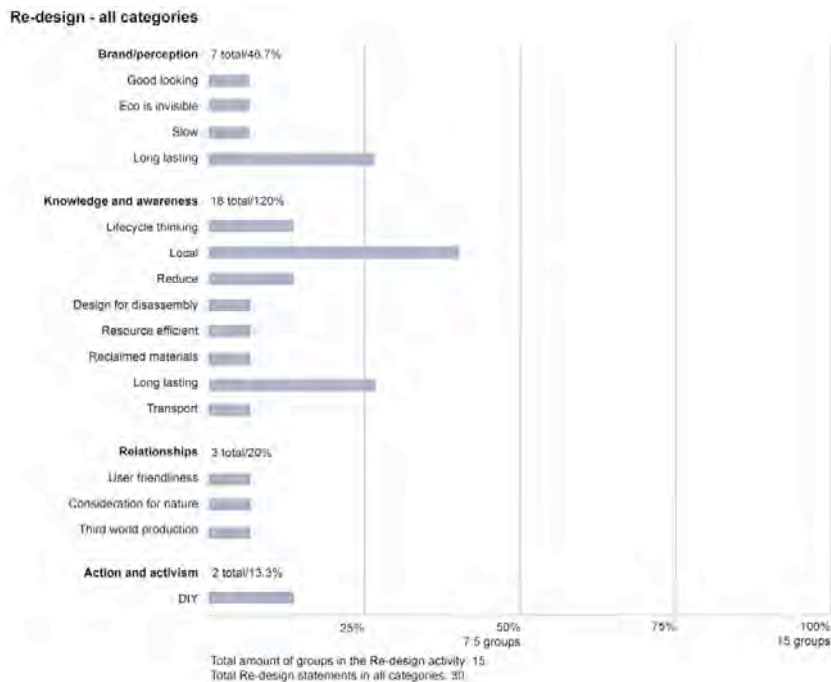


Figure 6.18 Re-design group descriptors, distribution over all categories

6.4.1.5 Re-design of fashion object from a sustainability perspective - discussion

Although the aim of the task was for participants to get an immediate and hands-on familiarity with how the sustainability keywords that they had generated might relate to a practical fashion brief, some of the ideas that were brought forth had qualities that merit further exploration. For example, the recurrent theme of a brand allowing and capitalising on local interpretations and sourcing of its products is potentially viable. The enthusiasm of the groups – designers and non-designers - in approaching the task, the immediate teamwork it spurred, and the groups' pride when presenting the outcomes, suggested it was both educational and empowering.

The discussion that followed the re-design activity, which also served to bridge the workshop's two parts, confirmed that the participants found it a positive and engaging experience. It was commented on that the thinking process – putting fashion in the context of sustainability – felt natural and quite familiar to the ordinary design approach. However, a few participants also voiced the sentiment that although I had stressed that commercial concerns could be, for the moment, left aside, their ideas tended to end in commercial cul-de-sacs. Their commercial awareness had become integral to their design process and thinking, and was impossible to shed even when the task authorised it.

6.4.2 Presenting the workshop data – part 2

The second part of the workshop comprised a presentation of sustainability concepts and principles, and current examples from industry and academia; creating a scenario for a fashion concept in year 2026; and finally a concluding discussion. The scenario process had designated data ports in place. This section presents and discusses the data that each element of the scenario work generated.

6.4.2.1 Vision consensus – generating core values

After having been introduced to the parameters of the scenario work and reminded of the 'rules' of the session, the participants generated some keywords that would guide the concept. The result was a collection of post-it notes representing each group's collective vision for the session. Image 6.11 below presents an example of these documents.



Image 6.11 Vision consensus. Mixed A. Keywords: "It tastes good, not affecting quality, seasonal/local, responsibility, resources are limited, should be fully integrated – not an alternative."

All the groups' keywords were organised into the four analysis categories. Figure 6.19 presents the frequency of the respective categories. A full overview of the keywords, and their distribution across categories and groups can be found in Appendix B, **B.7.2-B.7.5**.

The key patterns that emerged from the analysis of the keywords were:

- *Brand/perception* and *Knowledge and awareness* were equally important when the participants created guidelines or core values for their scenarios;
- In the main, the keywords span the same territory as they did in the group mappings of sustainability (and to some extent fashion), whereas I had anticipated a shift in the nature of the keywords to occur after the presentation. For example, there are few direct references to design, however, perhaps the participants at this point saw the design perspective as integral;
- *Local* was the singular most popular keyword.³⁸

³⁸ An explanation of the popularity of *local* was offered in the Re-design section.

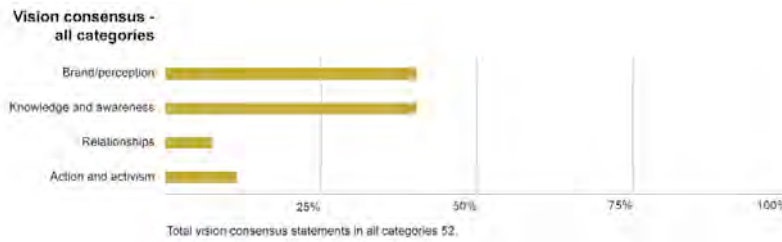


Figure 6.19 Vision consensus, distribution over categories

6.4.2.2 SWOT

The scenario work constituted a free-flowing discussion process to which the scenario checklist³⁹ lent some rigour. The process was loosely divided into a 'yes yes yes' part, where all constraints were removed, and a 'no no no' stock-taking phase. The latter was represented by a SWOT analysis.⁴⁰ Image 6.12 below represents an example of this data port.

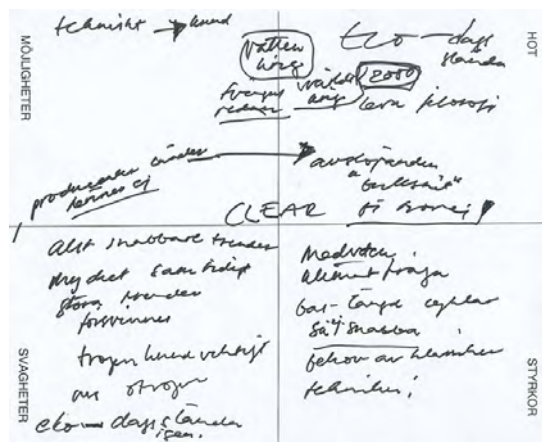


Image 6.12 SWOT. Company A.⁴¹

³⁹ The scenario checklist comprised a set of parameters to which the scenario might relate, such as location, user experience and touch points.

⁴⁰ Because of time constraints a formal SWOT only took place in a proportion of the groups. In the other groups, the concepts were still evaluated and modified, but in a more organic way.

⁴¹ Strengths: "The technological innovations of CLEAR [the name of the concept] will attract new consumers." Weaknesses: "Trends get faster and faster. On the other hand there is so much going on simultaneously that big trends disappear. Consumers are not loyal. We need a loyal consumer. The philosophy must be lived, here and there – otherwise it has no value." Opportunities: "The trends are for increased awareness of the climate issues. There will be longer cycles for basics, a need for classics. The ever-increasing interest in technology also supports our scenario." Threats: "What if eco once again becomes only a fad? Then nobody will care. The production countries will not be able to keep up, so there will be scandals revealed, and lack of credibility. People will think the eco-commitment is bullshit. The lack of water is a major issue. The next world war will be about water. Perhaps not in 2026, but in 2050."

In the analysis of all the groups' evaluation of their concepts some key themes stood out. These themes can be understood to reflect the participants' appreciation of life in 2026, based on how they perceive contemporary society, and as filtered by the focus of the workshop. The following presents the emerging themes of the SWOTs as pertains to the external factors, i.e. opportunities and threats. Qualities particular to the respective concepts - strengths and weaknesses - are discussed adjacent to the presentation of the scenarios.

In the main, the themes – ranging from the macro to the micro perspective - reflect a popular discourse with references to technology, lack of time, and global versus local. As a whole they represent many seeming contradictions – such as an increasing dependence on technology, yet a yearning for the trace of the human hand. The participants seemed to be able to elegantly reconcile many of these contradictions in the scenarios. The concerns more specific to fashion included the geographically removed production sites, the homogenous fashion offer and fashion production's dependency on intense water usage. The environmental aspects were more pronounced than the social. The outlook on the future that the SWOTs constituted was predominantly positive. The areas where the participants were most fearful were environmental issues and the effects of increasingly advanced and invasive technology.⁴²

⁴² All groups' concepts, whether based in reality or on-line, did indeed end up having elements of person-to-person interaction in the 'real' world.

Area	Prediction
Technology	<p>Technology will become increasingly advanced, younger generations will become completely technology literate and view it as a natural, integral part of life and a true extension of themselves.</p> <p>Because of the omnipresence of, and our familiarity with virtual worlds, we will accept immaterial products and services.</p> <p>People will have questioned our reliance on technology, and regard it solely as means rather than a goal in itself.</p> <p>Internet shopping grew out of technology and lack of time. Increasingly advanced and pervasive technology may make us insular. 2026 will have seen a backlash and people want to meet other human beings face to face.</p> <p>The more advanced technology becomes, the greater need for the physical meeting of people.</p> <p>Genetically modified animals are going to be an important part of reality whether we like it or not.</p>
Global - local	<p>The world will become increasingly globalised in terms of access, simultaneously, we will become more interested in the very local.</p> <p>We will cherish and support our local neighbourhood and the people living there, this is due both to concerns of safety and wanting to engage in the local community.</p> <p>Regions will become more interesting than national boundaries.</p> <p>Shopping will become uninteresting if the offer is identical all over the world.</p> <p>Production will move back to local markets because the cost of labour will be equal across the whole world.</p> <p>The production of clothes continues to be an important industry in China, but the consumers will be Chinese instead of Westerners.</p> <p>The infrastructure will be better and more energy efficient in 2026.</p> <p>Although shops and brand will take on more local characteristics, so called A locations will continue to be important.</p>
Sustainability	<p>In 2026 the urban environment will be recognised as more sustainable than the countryside. That production is local will become more important than that it is organic.</p> <p>The awareness of and interest in sustainability will have increased significantly and environmental concerns will have become intrinsic to everything we do. Fashion will equal sustainability in 2026.</p> <p>The shortage of oil and, in particular, water will be the most significant problem in 2026. Water shortage will make production more local but also shake big companies into taking responsibility in order not to lose cheap production sites.</p> <p>Water shortage will start the next world war, if not in 2026, in 2050.</p> <p>The production countries will not be able to keep up with the demands for sustainable production, so there will be scandals revealed, and ensuing lack of credibility. People will perceive companies' stated commitment to sustainability as insincere.</p> <p>Environmental awareness might again prove just fad and people cease caring.</p>
Craft	<p>There will be a lack of high making skills in Europe, which makes local production difficult.</p> <p>There will be schemes to help producers share and build up their skill base.</p>
Individuality	<p>There will be an increased desire to be recognised as an individual rather than part of a group.</p> <p>People will make even bigger demands on individually tailored products and services.</p>
Fashion	<p>Fashion will become more about the experience than about materiality.</p> <p>Homogenous fashion will give way for more individual fashion.</p> <p>Fashion will constitute simple, durable garments that are easy to adapt and individualise.</p> <p>Garments will be simple and leave much elaboration and expression to jewelry and accessories.</p> <p>Clothing will become closer to the body and consist of a spray-on material (of e.g. cornstarch).</p> <p>The trends will become increasingly specialised and the codes adhere to an increasingly smaller group of people.</p> <p>People will always seek the type of 'kick' that fashion represents.</p>
Business	<p>The personal meetings that business transactions will constitute, will make monetary transactions seem crude.</p> <p>With the demand for transparency of all business and products, the amount of information that users need to digest will be significant and perhaps repelling.</p> <p>People will appreciate learning as part of the shopping experience.</p>
Time	<p>Lack of time will be as significant a factor, if not even more so in twenty years time.</p> <p>People will have ceased to want to choose, because of over exposure to consumer goods.</p> <p>In 2026 the perception of a lack of time, and stress, will have given way to a sense of having time.</p>

Figure 6.20 Predictions of threats and opportunities to scenarios

6.4.2.3 The completed scenarios for fashion 2026

Image 6.13 represents an example of the process maps describing the scenarios. From the maps and the transcribed recordings of the session, I wrote summaries of the groups'

Lucky People Forecast no. 1

Group: Company A

Concept name: Clear

Key words: participation, justice, lifecycle, surface and content, personal power, profitability

Territory

This group started out discussing the importance of transparency in production, communication, retail, use and beyond. The participants felt that the early eco-wave of the late 80s and early 90s had failed to convince the consumer because of flawed labelling and an eco-look that did not always correspond with practice.

Concept

The central idea of this concept is that all production and use is transparent, so that users can fully understand the effect of fashion on environment and people.

How it works

The concept's interface is a real shop, the centre of which is a scanner where the user can check how the clothes are made, by whom and what their effect is on the environment. The user controls the amount of information accessed. The information is also visual, on big screens: images of people producing garments, what it looks like inside and outside the factory, maps of the journey the clothing takes and how it is transported (by boat). There is live video screening of people wearing the products in different parts of the world. Before trying on the user can get a quick idea, through the scanner, of how the product will look on through a computer image. Thus, the user only needs to undress for and try on clothes that really stand a chance.

All products are fitted with a digital environmental card and tagged. The card stores the user's individual environmental credit points. Each user is given a million environment points at birth; subsequent practices and consumption adds or removes points. Good environmental fashion practice awards points to spend on products in the shop through a virtual check. The group debated the environmental soundness of data chips, and decided on the use of aluminium or a future biodegradable material. The chip tracks how often a garment is washed and at which temperature. Extra points are awarded if the user hands on garments he or she has finished with. The user loses points for air travel, and how the user gets to the shop (walking or driving) also affects points.

The clothes come in fairly classic shapes of very high quality. They are expected to last for about five years, or the user gets a free replacement. To renew and restyle, the user visits the shop for upgrades, new digital prints, colour, re-styling and fitting. The shop works like a subscription – this is how it makes money. The staff is happy and very well educated. There is plenty of staff, which generates excellent service and good work opportunities.

Figure 6.21 Lucky People Forecast no. 1

Lucky People Forecast no. 4

Group: Mixed A

Concept name: www.allclothesintheworld.com

Key words: local, seasonal, resource efficiency, responsibility, not affecting quality, not an alternative, it tastes good

Territory

The starting point of this concept was extreme 'fast fashion' and its intrinsic polarity to the reality of limited resources. The group asked: would people in the future crave even faster fashion or become spiritual and perhaps consume less? The assumption was that since we are increasingly buying experiences above objects, fashion in the future would be even more intangible.

Concept

The aim of this concept is to sell the fashion emotion raw, instead of going through a tangible garment. The consumer gets the feeling without having to consume (almost) anything.

How it works

Developments in the music industry proved helpful in making sense of and explaining this scenario. Just like we can already download music files through for example I-tunes, in twenty years time we will be downloading fashion. With music the I-Pod or another MP3 player serves as a vessel, interface or transmitter of the tunes. The equivalent for the fashion files is a simple grey tracksuit or pyjamas. According to the group, what everyone would really like to wear if they did not have to think about looks. From a website, fashion files are downloaded to the tracksuit or pyjamas. What the users sees in the mirror, and what other people see is the fashion of choice, for example a style Margiela designed in the early 90s.

Implications for fashion

This scenario has interesting implications for the fashion industry. When fashion becomes a service – a downloadable virtual Dior and so forth, it becomes a lot cheaper than such fashion is today and therefore accessible to everybody. The equivalent of today's high-street shopper will in twenty years time be wearing Dior instead of H&M.

Just like small record labels are benefiting from the advent of download music, independent designers will benefit from this new system because it makes designers like them more accessible to a bigger audience. They can finally compete with H&M and the Gucci group etc. There will be a much more interesting choice – 25.000 independent designers instead of a handful of chain stores and mega brands. The concept also opens up for personal creativity, just like Apple's Garageband which invites users to create their own music, the website allows consumers to create or partly create their own fashion. Everyone becomes a designer – the possible death of brands.

Somewhat paradoxically, this scenario allows for even faster fashion. The consumer may choose to at the start of the day set up a play list of today's fashions. It also means that fashion is truly global without the negative impacts of transport - fashion miles. A fashion from New Zealand is just as accessible as one from London. Downloadable fashion means that all fashion is constantly available, just like music. To continue with the music metaphor, it allows users to follow the mood whether it be for Led Zeppelin or a new band from Iceland. For designers one implication is that they can produce new fashions when they are ready, and otherwise live on royalties, instead of having to churn out new ideas in a twice a year (or more) cycle. The designer can decide whether a style can be adaptable or not by users by specifying whether a fashion file is locked or open for edit. It is the end, eventually, of all tangible clothes bar tracksuits and pyjamas. As one designer participant of the group put it: "It was just an illusion anyway". (Designer, scenario 4, p2, 2006)

The group conceded that its concept www.allclothesintheworld.com needed to embrace the importance of the live gig for the music industry, and design equivalent spaces for fashion spectacles. The group appreciated the main environmental cost of this scenario to be the energy usage. The participants considered the implications of technology being switched off.

"When you do this you should be in the privacy of your home – otherwise people will see you in your grey tracksuit! It is the new Adam and Eve situation. Switching off is equivalent to eating the apple of truth. The illusion is gone." (Designer B, scenario 4: 3, 2006)

Figure 6.22 Lucky People Forecast no. 4

The transcripts of the scenarios were analysed using the *Brand/perception, Knowledge and awareness, Relationships and Action and activism* categories. The analysis sought to answer two questions:

- What was the transformative power of the particular approach taken in the workshops, i.e. do the concepts evidence a broadened engagement with sustainability and fashion amongst the participants?
- What was the generative power of the particular approach taken in the workshops, i.e. do the concepts evidence broadened creativity and vision, in terms of sustainability and fashion, amongst the participants?

The section starts with a discussion of the concepts, organised according to the four categories. It then goes on to answer the specific questions asked above.

6.4.2.4 The scenarios presented through the four analysis criteria

The scenarios transcended the keywords from the vision consensus exercise. The conversations through which the concepts for fashion in 2026 were generated were rich in approaches and details, and brought in a variety of responses to the challenge of situating fashion's mass-market segment within a context of sustainability. Several of the scenarios took as an inspiration computer programmes and websites for the operation of, and interaction with the concepts. These metaphors proved valuable in opening up the notion of a fashion shop into service options, voting mechanisms, and advanced user-brand interaction. Figure 6.23 presents the distribution of the contents of the scenarios across the four analysis criteria.

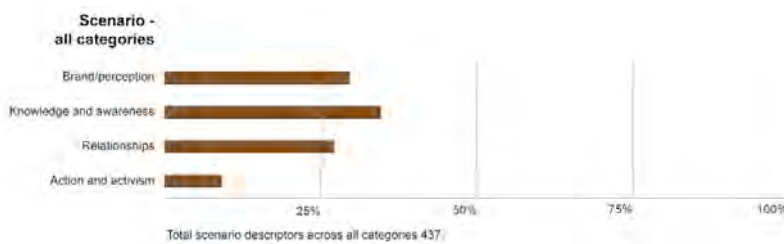


Figure 6.23 Scenario, distribution across all categories

Some of the key patterns that emerged were:

Brand/perception

- All groups were adamant that sustainable fashion must be attractive, and explicitly sought expressions outside eco-stereotypes;
- The concepts celebrate the *personal* feel (valued over professionalism and perfection)⁴⁴, they stand for an alternative to *homogenous, mass-produced, standardised fashion*⁴⁵ and the lines between the corporate and personal are blurred.⁴⁶ There is a distinct emphasis on authenticity in the experience.⁴⁷

⁴⁴ It is interesting to note that several groups listed *warm, cosy* and *friendly* as desirable qualities of a fashion concept – far from the ‘cool’ image usually associated with fashion, and probably a reflection of an increasing interest in community building in general, and the association of sustainability in particular.

⁴⁵ The argument for an experience economy is well rehearsed in branding and marketing circles, and so is the quest for authentic and personal goods, services and experiences. It is easy to understand how these arguments sit as a reaction to a common perception of an increasingly streamlined – and global – product offer. The participants would have taken part in this discourse at work and beyond, and also in their travels experienced the similarity of products on offer in e.g. Paris and Los Angeles.

⁴⁶ There was a tendency for the description of a shopping environment that is not experienced as such, but instead as a *social space, a music forum, an educational space*.

⁴⁷ E.g. if a retail environment is part of a chain, it still retains aspects of the very local, and is not duplicated across the world.

- In many ways the concepts described bring together what is commonly understood as opposites, e.g. personal – yet mass-produced.⁴⁸

Knowledge and awareness

- In broad terms, in the scenario task this category included much more specific statements than in previous exercises, with distinct ideas of e.g. suitable materials to use, and inclusion of several lifecycle stages. There was also a stronger emphasis on the role of design, including strategies for appropriate lifetimes and a broad spectrum of material choices.⁴⁹
- *Local* was included as a concern in all groups' scenarios.⁵⁰
- Several groups, in different terms, spoke of the importance of educating the consumer through *transparency* as regards all steps of a product's lifecycle.
- Advanced interactive technology played an important role in terms of ensuring a good object-user fit⁵¹, and educational aspects.⁵² Technologically advanced production solutions enabled individualised garments and imbued a sense of craft.
- Many of the concepts can be understood as product service systems. They operate on the basis of a subscription, drawing profits from the servicing of garments already in the loop, and therefore achieve less material throughput.⁵³

Relationships

- This category drew 27% of all statements, which is significantly more than in the previous tasks of the workshops. A likely explanation is that the task of actually designing a system allowed, necessitated and inspired closer engagement with multiple stakeholders in the fashion system, and respective interrelations.

⁴⁸ The combination of these polarities to some extent reflect discourses in marketing, however it is possible that the theme *sustainability and fashion* – also often described as anathema – brought an interest in similar seeming oxymorons to the forefront of the discussions. Several scenarios proposed an almost Fordist production mode, yet with a front of bespoke tailoring. Mass-customisation and individualised mass-production have been key marketing buzzwords in recent years.

⁴⁹ From those fabrics commonly associated with environmental friendliness, such as *hemp*, to ideas of using very local resources innovatively, e.g. *potatoe starch* and *pine needles*

⁵⁰ This probably reflected the groups' (all of them) appreciation of the environmental costs associated with *transport*, but also the perceived need to engage closer with the very regional both in terms of material resourcing, and building communities. It is regarded likely that the interest in the local therefore represented a reaction against increasingly global and homogenous fashion, and perhaps alienation between man and nature, and producers and users.

⁵¹ Through advanced fitting methods, and rapid printing techniques in the shop.

⁵² Such as the possibility of scanning a product to find out the story and environmental cost of its products.

⁵³ Several concepts sought to ensure that users purchased garments that really matched their needs, through e.g. *trial wearing*, and imagined services, such as *re-styling*, and *updates* to prolong user-object relationship. Some scenarios suggested a service that helped discarded items find new users. The participants were acutely aware of the experienced lack of time in contemporary (and future) life and outlined retail environments where several needs could be met in *one-stop-shops*. They also brought in several dimensions of users' lives in *point systems* that took into account not only frequency of laundry, but also e.g. transport mode to shop.

- Many of the scenarios focused on a closer link between user and object over its entire lifecycle.⁵⁴
- Collaboration - between designers and users, between users, and between companies - was a strong theme. Several of the scenarios outlined a future where the line between e.g. designer and user is increasingly blurred and users more proactive in their choices, taking on aspects of designing, and sharing responsibility for the retail environment and the development of virtual environments.⁵⁵
- The concepts engaged with a variety of stakeholders.⁵⁶ They emphasised the necessity of honesty and trust in transactions and that users experience immediate feedback on actions and behaviour, such as understanding the relation between choice of material and environmental impact and the price of a garment relating to labour salary.

Action and activism

- This category was, as in most of the previous workshop tasks, that of lowest frequency. However, qualitatively the category grew in the scenario task, with situated notions of a more proactive stance on behalf of companies, designers and users.⁵⁷
- In the scenarios, brands and retail environments take on the role of educator of sustainable strategies, practices and values.
- The groups emphasised that the communication must be positive in nature, truly integrated in its products and services, and be flexible for users to engage with or even driven by users.⁵⁸

The distribution of statements across the four analysis criteria in the scenario work is significantly different from that of the other tasks. As expected – with the increased information basis from the trend presentation, and with the wider scope of applying the

⁵⁴ E.g. actually encountering the sheep behind the wool, being able to see the factory worker and his working conditions, knowing something about the person who has worn a garment before the current user. The groups spoke of, in different terms, the importance of experiencing being part of a product's lifecycle, with a 'before' and 'after' your particular role in it. The shared stories that these closer relations enabled, afforded closer emotional, and even spiritual bonds, between users and objects, and users and nature. The concepts sought to enhance users' sense of well-being and empower them through closer interaction with nature, more personal and encouraging encounters between users and staff, and by inviting users into the designing and making processes.

⁵⁵ The notion of the more proactive user coexisted with an appreciation of a future in which users were immersed in such an amount of choice and information that concepts must supply sophisticated filters ensuring relevance of content, products and service for users.

⁵⁶ The multiple stakeholder perspective may be interpreted as a reaction against big, multinational brands, and a keenness to support independent designers, family businesses, ideas sprung out of very regional needs and resources.

⁵⁷ The concepts featured user engagement, and increased responsibility in choice making through for example a *voting system*, which enabled users to draw up their own environmental and ethical priorities and see them manifested in the goods they purchased. Companies used their commercial power to change the *outlook on the fashion system* and for example *challenge the elitism of fashion*.

⁵⁸ The communication outlined was visual, tactile, experiential and immediate.

information of the task – *Knowledge and awareness* constitute the largest proportion of responses, closely followed by *Brand/ perception*. However, the *Relationships* category is much better represented than before, and although *Action and activism* as a category is still small, in qualitative terms, it has grown with more situated responses, and more faith in fashion brands and users' power to affect positive change.

The workshops culminated in the scenario work and it was therefore hoped that the concepts generated would build upon the different tasks that preceded them, and reflect a qualitatively richer engagement with fashion and sustainability. It was also hoped that the scenarios would reflect some insights from the broad range of examples used in the trend presentation. Finally, the scenario exercise – the largest of the task, in terms of time allocated, its location in the future and its scope - was designed to allow and inspire involvement at systemic level, and involvement with the experiential in some detail. The task was hugely ambitious for the time frame, especially bearing in mind participants who had no previous experience of working in this way and in most instances had never worked together before at all. Yet, the richness of the concepts that came out of the work, the exchange and creativity of the teamwork was impressive.

6.4.2.5 Discussion

What was the transformative power of the particular approach taken in the workshops, i.e. do the concepts evidence a broadened engagement with sustainability and fashion amongst the participants?

Figure 6.24 below presents the distribution of statements over the four analysis criteria across all workshop tasks. It indicates clearly that from an early disposition towards subjective descriptions (of fashion), and factual statements (of sustainability), the picture has become more balanced. In the re-design task factual responses dominated, which can be explained by the product focus of the task. However, when participants were encouraged to use their analytical and creative skills in more strategic and systemic ways, their engagement with relational aspects of fashion and sustainability increased dramatically. They started to make links between the factual and the experiential and between the material world and emotions. The concepts - some of them fantastic, some realistic already in the shorter term - take ownership of fashion and sustainability as an entity.

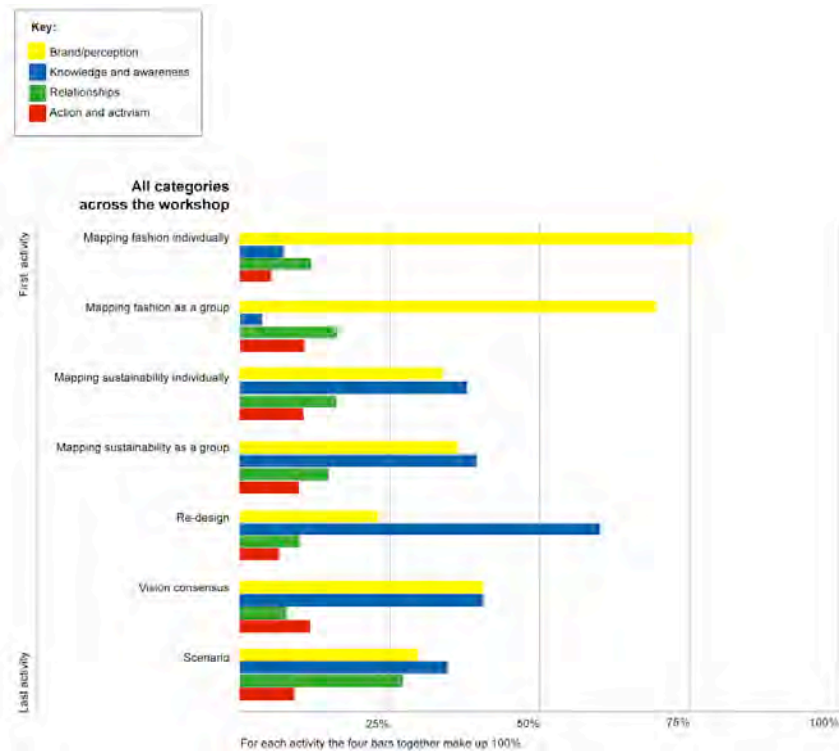


Figure 6.24 All categories, distribution across the workshop

What was the generative power of the particular approach taken in the workshops, i.e. do the concepts evidence broadened creativity and vision, in terms of sustainability and fashion, amongst the participants?

The scenario work was primarily designed as an educational tool, for immediate and systemic implementation of some of the information and messages that the various workshop elements sought to bring across. However, the level of the ideas generated was sometimes astounding.

Much of the idea territory, such as the blurring of boundaries between designers and users, and the creation of commercial spaces that imbue the personal, authentic and 'independent' has recently been frequently rehearsed in the areas of branding and marketing. However, in the concepts, these ideas stemmed from the participants perceived needs of a future of fashion within the context of sustainability, and were articulated and manifested in tangible examples, and an understanding of their role in, for example, production with greater transparency.

One of the questions posed in the chapter on change (Chapter 5) was whether it is possible to imagine beyond a current framework. In the design of the workshop format in general, and

the scenario task in particular, sincere attempts were made to create a space free of current constraints, such as financial concerns and stereotypes of what constitutes environmentally friendlier fashion. It was also my belief that art, and design, can offer glimpses into futures, that are harder – or impossible – to have through linear, rational processes.

On the whole, I have to concede that the scenario work came to reside in a current paradigm. As already discussed financial concerns – on the part of users and designers as much as buyers – were especially difficult to leave behind, a symptom, it is argued, of our conditioning to supremely commercially focused habitats. Yet, I have no doubt in that we were afforded glimpses of futures that were larger and more spectacular than any of us individually could have managed. In the groups a greater consciousness took place that gave us access to new insights and transcended the notion of fashion as a product, fashion and sustainability as anathema, commercial concerns as necessarily being the dominant driving force for fashion's existence and user choices.

Most participants came to the session expressing a clear dichotomy (on the one hand *fashion* – 'a creative, dynamic pursuit, where I can situate myself', and on the other hand *sustainability* – 'outside my realm'). However, by the end of the session, in the scenarios that the groups generated, such a dichotomy no longer existed. After having defined what sustainability meant for the particular group, e.g. claiming ownership through identifying particular relationships, the creative process synthesised sustainability with fashion.

Analysing the generative quality of the scenario work highlighted how significant a role metaphors played in enabling the groups to make this leap. Not only did the metaphors ensure a level of shared understanding across a group, they also invited us into new spaces of understanding. An example of the more interesting concepts that emerged was how the participants used popular computer programs, such as I-tunes, and websites, such as My Space, as metaphors for new systems in fashion. Drawing upon these virtual spaces enabled new thinking and conversations, and concrete design ideas about what fashion might be in the future, including user experience, retail outlets, emerging technologies, innovative products and services. The metaphors allowed us to stretch our imagination beyond material representations of fashion into new, rich and unexpected territories.

"[The scenario] was also exciting, the thing that we realised that it could be approximately like I-tunes. I hadn't imagined that before, I-tunes, that that might work." (Designer B, 2006, transcript 12: 2)

6.4.3 Presenting the data from the follow-up interviews

Approximately three weeks after the workshop, the participants were contacted individually for a brief follow-up interview. The aim of these interviews was to generate data to:

- Evaluate attitudinal change affected by the workshop;

- Evaluate the workshop approaches, tools, the discrete elements of the workshop and the workshop as a whole;
- Evaluate to what extent the quality criteria guiding this inquiry were met, as experienced by the participants;
- Explore with participants possible future directions of the work of implementing more sustainable practices in the fashion industry's mass-market segment.

This section starts by presenting and discussing the findings of the workshops' success in affecting attitudinal change in the sample, and the participants' experience of the workshops, and concludes with a broader discussion of the implications of the findings.⁵⁹

6.4.5 Presenting the data on attitudinal change and the meaning that the participants drew from the workshops

The data from which attitudinal change was established was drawn from two data ports:

- The individual mapping of sustainability at the beginning of the workshop - to establish a base level attitude; and
- The follow-up interviews – to establish attitude after the intervention of the workshop.

The follow-up interviews also generated statements of the participants' own experience of their attitudinal change.

The data was organised into the four analysis categories *Brand/perception*, *Knowledge and awareness*, *Relationships* and *Action and activism*. These were provided with subcategories and allocated a scale from Small to Extra Large. (See Coding templates, Appendix B, **B.3**)

The four criteria represents a framework where different types of attitudes to sustainability in the context of fashion can be mapped; subjective notions – *Brand/Perception*, factual statements – *Knowledge and awareness*, relations to stakeholders and contexts – *Relationships*, and intents to act – *Action and activism*. This framework was devised in order to present a sprawling – as opposed to linear – model of change.⁶⁰ This map is not designed to provide a reading of the relationships between the adjacent territories – i.e. it is not significant that *Brand/perception* is placed opposite to *Action and activism*.

⁵⁹ All interviews were conducted over the phone, recorded, transcribed, and those with Swedish participants were translated into English. It was possible to conduct the follow up interviews with all but one of the participants. The transcripts were coded and data entered into Excell charts.

⁶⁰ The paths provided can be compared to the territory we might cover while travelling to a foreign city – starting perhaps in the immediate neighbourhood and gradually venturing further out, the direction of our excursions dependent on our interests, dispositions and guide. The gaps between the markers on this map are important as they show how clumsy a tool all models by necessity will be. There are many blind spots, and the model is a crude net by which we try to catch some aspects of reality.

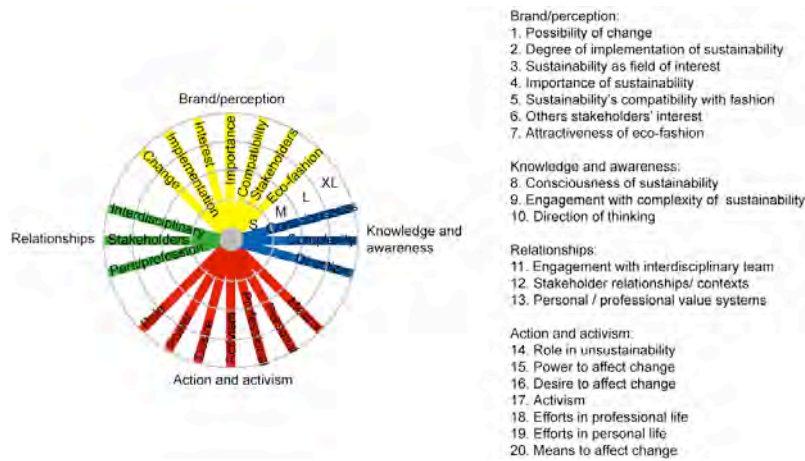


Figure 6.25 Analysis criteria and scales

When an individual or group's statements as regards attitudes to sustainability are indicated on the map, it is possible to elicit a shape of the particular attitudinal profile. The resulting shape is a blueprint of what we can draw out of this individual or group's metaphorical walk around the particular territory. The shapes can be overlaid with other shapes and comparisons made. For example, the shape of the organisation X in the figure below would represent a company that has a well-developed opinion as regards sustainability, and possesses a significant amount of knowledge, but which does not act upon this knowledge in practice, and has little engagement with the complexity of systems. Organisation Y, on the other hand, is very active in terms of its practical work with sustainability, does engage with systems, and has a well-formed perception of sustainability and fashion, but little factual knowledge to sustain the three former fields.

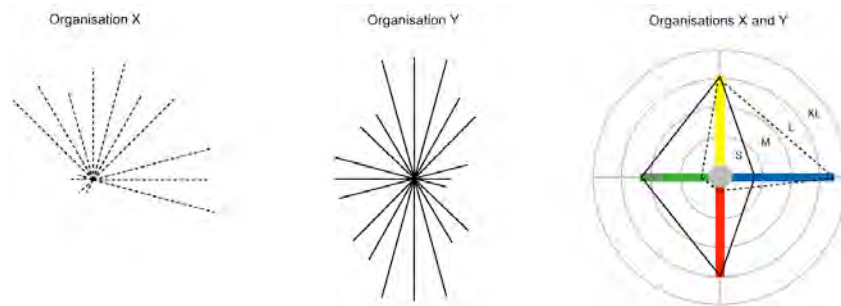


Figure 6.26 Type examples of organisations' sustainability profiles

The map of the four territories was used to *visualise* the different individuals, groups and roles' attitude to sustainability before and after the intervention of the workshop. The data was *qualitatively* analysed, a process through which key themes were drawn out and

meaning interpreted. The text that follows seeks to represent these meanings and some of the experiential aspects of the study by including quotes from the interview transcripts.⁶¹

In addition to the visual and qualitative interpretations of attitudinal change, the participants' responses were *quantified*, giving all responses in the Small segment the value 1, Medium the value 2, Large the value 3 and Extra large the value 4. The values generated were treated in two ways:

- Mode 1 - an average value was first calculated for each of the four analysis categories, and then added up and divided by four. This meant that participants that had no statement in e.g. *Action and activism* received a zero for that category which affected the average score;
- Mode 2 - the total derived score – the sum of all an individual's statements, no matter their distribution across categories - was divided by the number of statements.

The significance of the two analysis modes is that they describe two modes of engagement. When values are only divided by responses (Mode 2), the breadth of understanding and engagement is not taken into account, which it is when the values are also divided by the four analysis criteria (Mode 1). In the main, a high value in analysis Mode 1 indicates *generalism* or *breadth*, and in the latter analysis mode *specialism* or *depth*.

Brand/percept.			Knowl. & aware			Relationships			Action & activ.			Mode 1 Total			Mode 2 Total		
Sum of statements	Number of statements	Average	Sum of statements	Number of statements	Average	Sum of statements	Number of statements	Average	Sum of statements	Number of statements	Average	Sum of averages	Number of categories	Score	Sum of all statements	Number of statements	Score
7	3	2.33	14	6	2.33	4	2	2	18	11	1.64	8.3	4	2.07	43	22	1.95

Figure 6.27 Example of Modes 1 and 2 (Designer E, after workshop intervention)

The data was analysed in the context of a series of parameters, including demographics of the participants, particular workshop features, and the relation between the scores derived, e.g. the ratio between *Brand/perception* and *Knowledge and awareness*.

Figure 6.28 below provides a comparison between the external researcher's and the researcher's treatment of the data. The coding of the former generated consistently lower

⁶¹ It should be noted that in order to ensure authenticity and to respect the participants' original statements, the translation from Swedish to English has been conducted almost verbatim. This means that quotes often read awkwardly. To facilitate the reader journey I have added clarifications in brackets.

scores than the latter's, which is not deemed as problematic as this concerned the data gathered both before and after the workshop. However, it is conceded that clearer explanations of the value categories might have achieved more even scoring. In terms of the spread across themes, there is a good relation between first and second coding. However, the external researcher coded more instances in the transcripts, wherefore Figure B shows a thicker sprawl than Figure C. This discrepancy can to some extent be explained by 'double coding' – the external researcher gave almost identical statements scores. Yet another difference is that the external researcher denoted hits in all twenty sub categories, whereas in the first coding several categories were unused. A possible explanation for this is that while the second researcher only had a sample of transcripts, it seemed wrong not to use all the categories. Again, less sub categories, and clearer explanations might have facilitated a better match. (The data chart of this comparison can be found in Appendix B, **B.10**)

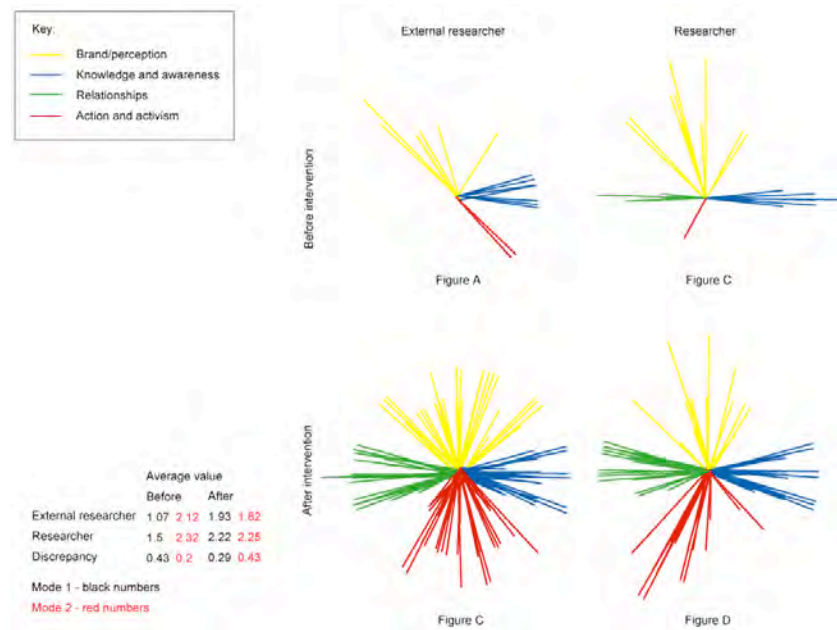


Figure 6.28 Comparison between external researcher and researcher's coding

The following section starts with a qualitative evaluation of the *meaningfulness* of participating in the workshop and proceeds with a quantitative analysis of attitudinal change.

6.4.5.1 Qualifying attitudinal change - emerging themes of the participants' experience of the workshop

Below, quotes from a series of participants illustrate the diversity of *meaning* that the different individuals drew from the workshops. It spanned from a new perception of

environmentally friendlier fashion, an increased factual understanding of fashion's social and environmental impact, to a heightened awareness of the complexity of causality, and the benefits of interdisciplinary teamwork, and an expanded notion of their own power to affect change in the personal and professional realms.

The following paragraphs draw out emerging themes in terms of the experienced meaning of the workshops. These themes are organised according to the four major analysis criteria *Brand/perception, Knowledge and awareness, Relationships and Action and activism*. In many cases there are overlaps between the categories.

Brand/perception

Theme 1: Re-appreciation of eco-fashion

For several individuals the workshop fostered a re-evaluation of sustainable fashion as an area; a new interesting angle on fashion, far from the stereotypes of the late eighties and early nineties.

"I really have [thought about the workshop afterwards] and when I sat down... to think about what we should write in this column [for the company's news letter... it [was] obviously this that we [were] going to write about. Because... it really does feel like it is a new angle and that there are lots of new things happening and that it's not like that old eco-stuff... But instead in a new way. I think that is really exciting. And that one is talking about it. That there is sort of a dialogue again... When, we who (laughter), we who were there the last time round, one realises that one dares almost not say the word ecology... One got kind of burnt by it last time round..." (Designer C, 2006: 1-2)

"It felt like a really, really interesting part of fashion and a new, exciting way to think about it... one often thinks about like certified... things that are super ecological but that are boring and it's a bit like nerdy and strange and a bit odd... Yes a bit nerdy, what can I say, crafty stuff... And that don't feel modern or like fashion. So this really felt like you had found people and products that really had made it more modern. It felt modern, it felt more right." (Student C, 2006: 4)

Theme 2: Lack of persuasive examples

However, there were also participants who were not convinced by the current offer of environmentally friendlier fashion presented to them in the workshop. Such statements did not come from the designers, but mainly from those buyers and PR professionals that were represented. Whilst acknowledging that environmental improvement by design is still mainly a pursuit of smaller companies, they asked for more examples from well-recognised, bigger brands.⁶²

⁶² Their hesitance at fully embracing the sustainable fashion perspective correlates the theme of a *constraint culture* (described in Chapter 4, 4.6.1.1.2) where financial concerns, and the perceived attitude of the end user sometimes overrule new design initiatives. Designer K's statement further along in this section, provides a designer's perspective on this constraint culture, as she describes her frustration at sustainability only being acceptable to her buyers and other decision makers in her organisation if it can be evidenced as a strong trend.

"You know the way food... you can get fair trade, organic in your favourite brand... I want to be able to do that with clothing... I would like to be able to get a pair of Levi's that I know had been... produced ethically... And like with food I am prepared to buy, to pay a bit more... Rather than like. I don't know, these other things that always look a bit funny... American Apparel is probably the only one that's doing that, I guess... But even... their products, their organic products or whatever like it's not..." (PR B, 2006: 3)

Theme 3: *Niche does not translate to mass-market*

The *lack of persuasive examples* discussed above, draws out yet another important theme; that *niche does not necessarily translate to mass-market*. Whilst the examples presented at the workshop were carefully considered for their creative height, and a 'look' that did not perpetuate stereotypes of eco-fashion, they still did not suffice to convince key fashion industry stakeholders. Whilst the designer participants could see the potential for a translation to a mass-market audience of these examples, the buyers and PR representatives could not. This offers an important insight about the communication of sustainability, and implementation processes, as currently in the fashion industry predominantly financial staff and not designers have the final mandate to let a concept or product go ahead or to stop it. Whilst the idea that niche will gradually inform mass-market is popularly accepted, this study shows that such a development is not something that can be relied upon to happen.

Theme 4: *Re-appreciation of colleagues and other stakeholders*

Virtually all participants expressed enthusiasm at the mixed stakeholder workshop format, and for some it proved to be the key aspect that they took from it. The interdisciplinary format had the most profound effect on those groups consisting of representatives from one organisation; after the workshop they continued the discussions and could build upon the shared experience. The value of the format will be further discussed under *Relationships*. Here a particular aspect of it – *the re-appreciation of colleagues and other stakeholders* is drawn out.

For CSR C the most significant aspect of participating was the realisation that a designer in her team actually shared some of her values. She expressed a new hope in the company's CSR work, as it could be championed by other professionals alongside herself.

"it was really interesting this woollen [home and hand knitted] sock... that she [a designer] brought, the fact that she had one.⁶³ Yes, I was thinking that I have one of those at home... So I thought it was very interesting when she brought this woollen sock so that one can see the generation before so to speak... Yes, and still, what appreciation we do have today so that it is not forgotten in all this... fashion discussion... And then that [designer's name] who works as a fashion designer brings it in... That was very interesting." (CSR C, 2006: 2)

⁶³ The fashion designer in question brought in a hand knitted sock to embody sustainability.

For another participant, the workshop changed her view of her peers' attitude to sustainability, as she found that they expressed a greater level of concern and enthusiasm than she had anticipated. This brought about a greater sense that 'sustainability was happening' for her.

"I had perhaps thought that somebody would say that no, that won't work... people will just want to continue shopping and so forth, but everybody was somewhere deep inside, well in their hearts onto that something will probably happen." (Trade representative A, 2006: 1)

In many of the interviews the issues of companies' organisation and corporate culture were raised, often in the context of barriers to sustainability. CSR B voiced surprise and delight when realising that counter to the company's practice and 'lore', the designers did not perceive themselves as 'exempt' from environmental and ethical discussions.

"[the designers] have been something of a protected species in a way. And (laughter) they themselves don't think that they are a protected species, that they have to be. I thought that was damn good. I mean if one looks at the environmental work, not only at [company name] but look around a little bit, it is too much, I think, about beating about the bush and cleaning up around the products in some kind of way. How are the things that we choose to work with produced, not so much what one chooses to work with in the first place. That is, which fibres and which things you actually want to send out on the market because it is about, it is obviously about demand." (CSR B, 2006: 5)

Theme 5: *Hope and confirmation*

Especially for those participants who had worked within the realm of sustainability, or directly experienced the movement of the late eighties and early nineties, the reward of the workshop was not so much new knowledge as a new sense of *hope*. They found it inspiring to receive confirmation of the value and direction of their ideas and work – from me, in the sense that I (a designer and trend-forecaster) had chosen sustainability as a topic of study, from the examples I provided, and from their peers' explicit interest and curiosity – at which they often expressed surprise. To provide *confirmation*, as was discussed in Chapter 5 (5.7.4), is a key role of trend-forecasting; in an industry where so much money is at stake, and decision times are short, it is vital for professionals to receive evidence with which they can substantiate their ideas – not least in their contact with financial staff. Confirmation from outside, independent agents, can provide the extra courage and incitement needed to turn an idea into practice.

"...I can't say that it has changed my... way of thinking, but... it gave me hope... the environmental concern was more manifest than I had thought... I discovered that there was more than I had thought... amongst our designers as well... More interested than that what is perhaps on a daily basis expressed.... and that is what I found very interesting because it was exciting and that is what we have discussed more afterwards as well, this very inspiration that they too felt. And they have had this... in their thoughts but it, it doesn't perhaps express itself every day as clearly." (CSR C, 2006: 4)

Knowledge and awareness

Theme 1: *The need for further knowledge – the next step*

For several individuals the workshop provoked both a positive notion of having been given new, important information and a sense of frustration at not having had access to this information before, and not being sufficiently educated. Several participants had conducted independent research and thinking after the workshop; by turning to books and websites suggested, and by discussing the issues raised – such as the local perspective, and the energy cost of laundry – with friends and family. It should be noted that no participant expressed unease at the nature of the information, they did not find it difficult to relate to their practice, or alien to the fashion process. They did however – often – ask that more information of this nature should be available to them and their colleagues.

“...it is really about that one needs the knowledge, I suppose, how to improve, what one can do or... I think that's it, a lot more knowledge about the development of different fibres and different materials and a little bit... like 'the journey of the product', you know. Like this thing with transport too, that perhaps one doesn't think about, and dyeing, yes I believe in pure knowledge about it. Because I just feel that one hasn't been given any knowledge, there aren't any such courses at [company's name], and it is hardly part of any design degree either, I don't think... So we need knowledge about it, I think... To be informed about it.” (Designer D, 2006: 3)

The quotes below, from a CSR professional illustrate how an expert also found the workshop enriching, in this case an incitement to explore alternative fibres. The second quote also highlights the particular challenge of volumes that a large company faces, and again, the need for solid evidence to bring into discussions with financial staff.

“Something that we, ourselves, have been thinking about is to learn some more about synthetic materials... We know too little about that, because one often focuses so much on cotton and miss out... And I got a bit of a push for that, because it was one of the examples that you presented.” (CSR B, 2006: 3)

“And the other materials, the outside-the-box materials and not like the organic cotton, that's kind of inside-the-box, but one would need some kind of input, how does one proceed if one is interested in knowing more about hemp or bamboo or some... one also wants to know, so are these qualitative examples that mean that if one wants to make fourteen haute couture things one can get hold of the stuff, it's not a problem, but if one wants to make some thousand skirts or whatever it might be... But then if one gets back to one's base and sort of wants to discuss it one gets, you know, when people's guard go up one gets to hear a lot of arguments as to why one shouldn't do it... And then it may be good if there is, that one sort of knows that there is a way of finding the answers.” (CSR B, 2006: 3-5)

The interview question targeting what participants thought ought to be the next step after the workshop generated a series of comments as to what they considered the needs and challenges of their organisations and themselves. While they almost exclusively thought that the format of the workshop they participated in – a wide map, with a focus on vision and inspiration – was an appropriate introduction to fashion and sustainability, they recognised the need for more in-depth and practice based information. Many – from CSR

representatives to designers – expressed the wish for help with a very concrete action plan, to be guided through the first steps of the process towards more sustainable practices. After the workshop, whilst trying to find out more, they struggled to find comprehensive and accessible sources. This mimics my understanding of the limitations of the literature available on the subject. (See Chapter 3, 3.7.1).

Theme 2: Dynamic models - lifecycle awareness

In terms of raising awareness, the workshop was successful primarily in getting across the systemic approach - the importance of the lifecycle perspective, and the intrinsic role of design for environmental improvement.

“For some reason, when we have talked about this the design has never been that important, instead design is design and one can sort of take any... It is in fact the production itself that it is about. But I think that you showed quite well... that it starts with the design. That is the foundation for everything. And also this thing that it connects to... the reclamation process as well... one sort of needs to think about all the steps in the whole. That was something of an eye opener.” (Project Leader A, 2006: 1)

The positive feedback on the lifecycle model from the participants was rewarding, but also slightly surprising. How could such a generic model generate such a wealth of enthusiasm? Surely this information was not entirely new to the participants? This raises issues about the efficacy of sustainability communications targeted at the fashion industry, and in general, which will be explored further in the conclusion of this chapter.

Theme 3: Embrace the challenge

Several participants spoke very positively about how the workshop had challenged them to think, such as to carefully consider what fashion and sustainability really meant to them. It was clear that – the designers in particular – enjoyed the intellectual stimulus that the workshop offered. The level of the discussions in the groups appeared to provoke a sense of pride, but also feelings of not being sufficiently intellectually stimulated on an everyday basis at work.

“And it really made me think and rack my brains in any case, because at first I, well the whole train of thought was... I pondered and pondered what to bring, and what does it mean if I bring this and. How do I feel about this and. Yes, I do think... that was a great task actually.” (Designer I, 2006: 1)

Arguably more surprising (since creativity is commonly associated with fashion design practice and ought therefore be ‘taken for granted’ by designers) was how highly the creative aspect of the workshop was valued. It confirmed findings from the first study of this PhD project; that creativity – the very reason why most fashion designers seek out this profession – is experienced to constitute only a small proportion of the actual work.

"Yes, but partly that [it] was so much fun to sort of freely, well to sort of play sounds wrong, but... But to sort of be creative in a free way." (Designer C, 2006: 1)

"That one [could] set free one's imagination and think somewhat outside the framework and sort of not... One is so used to it being so structured at work, I feel sometimes. One has so much... well so much structure to adhere to... And here one could be a bit more free and, well that is fun. One kind of forgets that sometimes... what was important in the beginning." (Designer D, 2006: 1)

Relationships

Theme 1: *Extended knowledge ecology*

"And I got to know, I got so much that [CSR professional's name] for example, who is the person responsible for ethics... has such an incredible amount of knowledge and just sitting there with her brainstorming and... one ought to do that much, much more, both as a buyer and as a designer, I think... She could share so much more of her knowledge... To everyone, now and again, continuously with us... That would be really super... Which we don't do, because everybody is aware of these codes [Code of Conduct document] and so forth that we work with, but she knows so much more. I know how to work from a piece of paper sort of but... there is so much more... That may lead to other changes..." (Buyer B, 2006: 4)

Many of the participants spoke of the interdisciplinary group format as one of the key merits of the workshop. The extended knowledge ecology that the interdisciplinary format fostered was appreciated both at the concrete level of becoming privy to colleagues' specialist knowledge, and of getting to know colleagues – some of which did work together on an everyday basis – in a new and deeper way, where both personal and professional value systems were brought in. This new meeting generated a new esteem of the colleagues; several participants expressed admiration for how clever, insightful and creative their team or peers were. A few participants suggested that the format could be translated to other issues than sustainability, and generally enrich an organisation's culture and knowledge ecology.

Theme 2: *Insider/outsiderness*

"...it made me so happy that it was about these, that this is... not a trend but something that is about to, to sort of get that confirmed... that there is no way back, I think, in terms of these issues... I think it's just going to grow... And that it was so good to sit down, that is sort of what I felt... And I think this is important. But that, yes, that someone like [head of design] is there and the buyers are there and designers are there, because they were sort of absolutely super excited... they were so, 'oh this is so exciting' and 'I want to start studying again' and 'how interesting it was...' 'How much I learnt' and you know... Entirely new thoughts, even though I have training with them after each [trip to suppliers], or information... About the specific suppliers, what I have seen and what is happening and so forth, but in some way it is almost always, when somebody comes in from the outside that. And they think that is really interesting, but then they get to hear it from, it's always like that, when one gets to here it from several... places then it becomes sort of more like a confirmation or, 'aha it's these things that are happening.' I think that... was my big gain from it I can say." (CSR A, 2006: 1)

For the CSR representatives, the mixed stakeholder group took on a particular meaning. Whereas before the workshops I had been wary of treading on these experts' toes, in reality they appeared to value the fact that somebody with a fashion designer background

championed social and environmental issues. The CSR representatives expressed joy at seeing their designer and buyer colleague enthuse over the field of sustainability. In some instances this provoked insights as how to better communicate sustainability within the company - possibly relying less on 'don'ts', such as flagging up new regulations, and more on inspirational examples.

"...it did feel relevant and because it came from somebody who didn't come from the tree-hugger direction, if you know what I mean... Somebody who doesn't perhaps wear the environment hat... Who is and can actually do it in design terminology, it was fun to get that perspective. I thought that was good, I absolutely thought that was enriching." (CSR B, 2006: 3)

Theme 3: *The forum*

"Well, I remember that the very conversation around these issues was so engaging... That... sort of feeling I remember. That it was an issue that touched everybody and that... I felt that everybody had thought a lot about... And, yes. If I were to sum it up it was this engagement and the importance of getting to talk about it." (Fashion Educator A, 2006: 1)

Again and again in the follow up interviews, and at the time of the workshops, participants raised the importance of having been offered a forum to discuss sustainability. Indeed often conversations with these very busy professionals were so vivid and engaged that we could easily have run over time, and they often expressed surprise when I announced the end of a session. The quotes above and below illustrate the strong desire the participants had to process issues of sustainability with each other. Many suggested potential means of extending the forum, through for example regular seminars or an interactive newsletter.

"the fact of knowing someone but also just the thing of a completely different discussion than maybe working directly... Or a little bit more focused than a pub conversation... That was very interesting. The fact that it's slightly new as an experience... It's quite a good concept in order for people to, at least for me it was good that it was different from what I do normally... That I can actually say, I don't know, I probably say things that I don't really talk about so much in my work." (Designer J, 2006: 2)

The sense of being part of a community, of sharing values with peers, also brought out insights that a critical mass might exist to actually make change happen – as illustrated in the quote below. This aspect of the need for confirmation appears again a significant issue in terms of implementing more sustainable practices in the fashion industry.

"what you have started, what you have actually contributed to as well, I think, it's also that you have shown that one does have, although one doesn't meet up, or doesn't know each other, that one can also see that... one still reasons in a similar way, no matter where one, that one never meets up, that one is influenced, that we still think. In a sense it is part of the zeitgeist... And it might lead to so much more because if someone has an idea one might also see that there was actually support for it in a larger, I mean a larger context." (Promoter A, 2006: 6)

Theme 4: *A new understanding of causality*

Several participants evidenced that the workshop fostered a deeper engagement with the dynamic relationships that sustainability intrinsically entails. The follow-up interviews spurred vivid and complex discussions about both unsustainability and sustainability. Many participants built quite advanced theories of causality; arguments far removed from the simple polarities of e.g. good or bad, brands versus consumers.⁶⁴

"I don't know but before I think a band could have three or four albums before being completely forgotten... But now, I'm sure it's quite difficult for bands to go out and making the one album and to get a contract... I don't know if it's coming from the record label or, it's not sustainable in terms of taste... Maybe it's more about the attitudes... Where something is good but then, you know, the next day it's not good anymore... So, maybe it's something to do with the dedication... What people like to wear or what people like to listen to, it goes quite fast... I don't think it's irreversible, I think it's a lot of different factors... mixed together and the fact that a season lasts six months... I don't know for how long you're supposed to wear a coat but really, six months is a bit short... For the money the consumer pays... So I'm sure, I don't know if it's going faster or maybe people are just... I think there was this sort of... common sense... maybe between quality and quantity... it seems that now it's more about quality and time... Because everything goes faster... how much do we actually care about what we consume..." (Designer J, 2006: 7-8)

Action and activism

Because the study was not longitudinal and the intervention for each group of participants was limited to a three-hour workshop, it was realistic to hope 'only' for attitudinal change. However, the responses from the interviews show that some small changes in practices had actually taken place, mainly in the participants' personal life, but in a few instances also in their professional practice.

Theme 1: *Personal actions*

"I have stopped doing so much laundry. If my little girl just has one stain on her dress she will have to wear it for another day, there will be new stains at nursery anyway... Since the workshop I have thought about it all the time. In terms of everything that I have been doing. This thing with throwing away, shopping, throwing away, shopping, it's insane. I have even been to [Oxfam] although it is not really my thing... But I feel so strongly that we have to reduce the consumption. I used to throw glass bottles in the bin but after the workshop I just can't do that anymore. It has become more focused thinking for me. I have talked about it at home as well." (Designer J, 2006: 2)

The predominant areas of change in the personal life were laundry and pursuing local food produce. It was clear that the participants felt empowered by these easily integratable means of acting more sustainability, and that the relevance of these lifestyle choices – such as frequency of laundry – had not been obvious to them before. It was also clear that the ground for implementing small changes was well prepared. These individuals were eager to

⁶⁴ This theme, *the new understanding of causality*, and the participants' eagerness to venture theories and discuss sustainability in general resonates with the previous theme of *Embracing the challenge*.

do something, they had just not known what, and they had not perceived that their actions mattered.

“some of those facts presented at the end, they did really make me think and I actually found myself (laughter), now when I go to supermarkets. I feel really conscious of... food miles... And I'm trying to buy things that are made, that are grown in Britain... More or less. And... if I do have to buy something that is not grown in Britain I try to make sure it's at least European... Rather than from South America or South Africa or something.” (Buyer B, 2006: 2)

“I have done small things, small diddy things, like using the backside of the paper and drawing on those as well. And also to not print out so much. It costs [30 pence] per print out and I might accumulate a whole box of waste paper in a week, and obviously I'm not the only one printing either. So I have been thinking extra hard. Both at work and in the everyday life.” (Designer J, 2006: 2)

For some participants, the workshop appeared to make them trust their own eyes and intuition more, as in the quote below, which illustrates how one individual was suddenly more acutely aware of the extent of producerism and consumerism. The workshop appeared to have sharpened the focus and brought sustainability to the forefront of the participants' consciousness.

“I have thought quite a lot about... in general what one is working with and... what one is doing and how much one is actually, you know, polluting and how much one is oneself, as an individual, in one's work... How much one will, at the end of the day, pollute even more. (Designer K, 2006: 2)

“But, perhaps exactly... that one starts to think about what is going to happen in the future and then it was quite interesting to hear what other people think, because one can be struck by this, like when I was in Barcelona for example, when one goes into the shops and there is just more and more and then one starts to wonder, is there really no end to this.” (Trade body representative A, 2006: 2)

Theme 2: *My contribution matters*

One of the themes from the first study, *Cynicism* (see 4.6.1.1.4), spoke of an apathetic stance to sustainability, and how in the light of the complexity of the environmental situation, the personal sense of responsibility of the individual can be diminished. It appeared that although sustainability communication does frequently point to the importance of everybody taking action, something had not quite 'clicked.' Perhaps the communication was too impersonal or did not provide enough agency. In the interviews after the workshop, several participants spoke of a new realisation of the significance of their own contribution and evidenced how the workshop had spurred thoughts about possible paths of action.

“Yes, I mean even though one... obviously knows that one... has one's own impact on the environment or what it is called and of course one always feels that yes, I ought to do more... But at the same time I think that I and many others have felt a bit like but what can I do... There are eight and a half million others who don't care, so it doesn't help that I do, but... It does actually feel a little bit like, yes it does matter. I can at least do my bit... And exactly this thing with footprints and this, I looked at that

site too and checked it out a little, on the Internet. It, but it feels, it becomes so personal. It becomes close in some way... I have probably become a bit more aware and work a bit more actively for. I really think properly about it... About what to do in the near future, starting to think about okay, should we, well environmental aspects. Should I change all the light bulbs at home and we need to change our car... yes a bit like that." (Project Leader A, 2006: 3)

Theme 3: *Many possibilities*

Whereas practical changes resulting from the workshops were not significant, participants had *considered in thought* where such changes may take place, and what they might personally do. The quotes below exemplify many such statements about the perception of new possibilities being opened up.

"I have become a bit more enlightened about production and things like that and that there are such a lot of things that one can change that one doesn't think about... when one thinks about ecology in terms of fashion, one often thinks... production, for example cotton and things like that... but that one can think along entirely different lines too and that it actually doesn't need to be about having to change in terms of farming ecological cotton... But that one can reclaim synthetic materials like you said... And then... the transports and smaller things like that that one can do... And that one cooperates... well little things like that, that I haven't thought about before at all." (Student D, 2006: 3)

The student group was the most positive in terms of the potential for change within the fashion industry. This is unsurprising since they were both the group most used to taking on new information and ideas, and the group the least acutely aware of, and conditioned to the constraints of the fashion industry structure.

Theme 4: *Lack of means*

"Yes I have probably started thinking about alternative ways... of working... But unfortunately I don't believe that, I've also been thinking about how one might be able to influence indirectly within the company, and I don't think that I could do that... Because at the end of the day it is so much about... business... if one is talking about like organic cotton or something like that, then it's about a trend... And then the second after it is the price one is talking about... And then one sort of realises that I can probably not, one probably can't influence... By saying that it is such a strong trend, that's probably the only way that one can influence." (Designer K, 2006: 2-3)

Some of the individuals expressed doubts as to being able to affect change. In the main, these reservations sprung out of mistrust in the organisation's willingness to prioritise issues outside the immediate realm of profit, and out of their perception of their status within the company hierarchy. The accounts of an experience of a limited power, and lack of means to make change came almost exclusively from participants of groups drawn from mixed organisations. In hindsight this could have been anticipated, as those participants did not experience hearing colleagues express interest in and commitment to sustainability. The theme of *Lack of means* prompts two recommendations for further efforts to implement sustainability in the fashion industry. Firstly, more emphasis should be put on providing

agency in the learning situation. Secondly, groups should be formatted so that there are several representatives from the same organisation.

Theme 5: *Championing – ownership*

The 'activism' in the category of *Action and activism* was included in the hope that the underlying message of the workshops might even transcend the remits of the study. The interviews did feature evidence of a degree of such transcendence taking place. Most participants had told at least one person about their experience and continued having discussions with colleagues, friends and family after the workshop. Some participants had made concerted efforts to spread the workshop message beyond its origin, through a company newsletter, by disseminating the presentation I gave to a senior colleague, and by recommending the workshop to professional contacts.

"And then I went to see a photographer actually... I know somebody who works for [fashion brand name], and then I said to her, because they ought to be really interested in things like that... so I told her about you, and she just said 'god, that's really interesting, that's exactly the kind of thing that we need'... I think that she wants to contact you... If you do this kind of talks or sort of wants to... Because that would be super good." (User B, 2006: 3)

The interview responses evidence the participants' engagement with sustainability on yet another level. This was how they frequently suggested avenues I might take to build on the work of implementing sustainability within the realm of the fashion industry, clearly using their own professional skills – as designers, buyers, PR representatives. They suggested contacts from their own networks, sources and modes of working. The participants had started *championing* sustainability, which can be interpreted as them having taken *ownership* of, and integrated it with their own body of knowledge and experiences.

"I think that one ought to link it more strongly to today's consumer... I mean, you touched upon it quite a lot. But I think if you make it even clearer it will be even more interesting to, like, H&M... Ericsson... I mean if you can find some kind of model like, have you read this Ford for example... His sort of view on how we consume today... Linked to your environmental theories... I think one could get that together in quite a strong way... That it is a bit like this in the future, that we want to have, to be able to make that choice. Without compromising the design." (PR A, 2006: 3)

6.4.5.2 Quantifying attitudinal change

Whilst the previous section sought to reflect and analyse the *meaning* that the participants drew from the workshops, and to *qualify attitudinal change*, this section presents a quantitative analysis of the data. A range of parameters are addressed:

- Age
- Gender
- Education

- Professional role
- Location of the workshop - Sweden/UK
- Position of group in the workshop sequence
- Group composition
- Attitudinal score before intervention
- Configuration of scores between the respective analysis categories

The section starts with a broader overview of attitudinal change across the sample and the distribution of responses between the four major analysis categories and their subcategories. It proceeds to discuss attitudinal change as pertains to the parameters outlined above. (For an overview of the sample see Table 6.8. All data charts can be found in Appendix B, **B.9**).

6.4.5.2.1 Attitudinal change across the whole sample

Figure 6.29 below shows an overview of the entire sample's attitudinal change profile. Figure 6.30 represents all individuals' scores as analysed in both Modes 1 and 2. (Mode 1 indicates generalism or breadth, and Mode 2 specialism or depth.) In this figure the individuals are organised in ascending value of change according to Mode 1. The different colours of the bars highlight the relation between professional role and value of change.

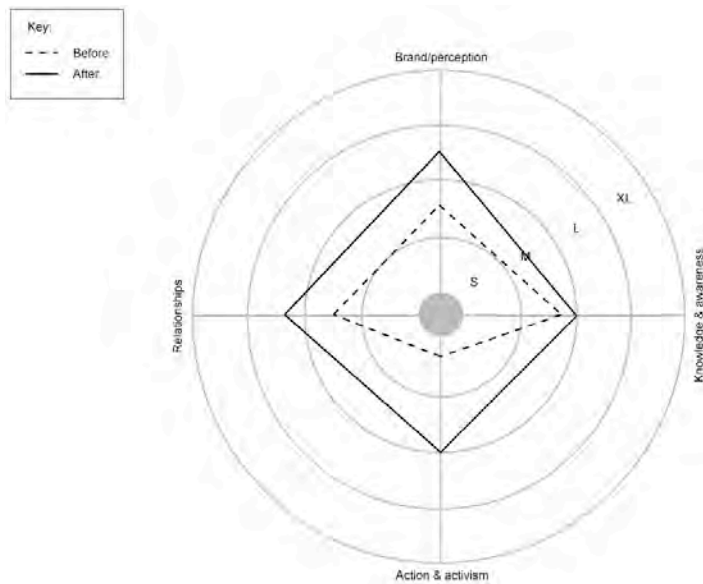


Figure 6.29 Average scores of all individuals across analysis categories

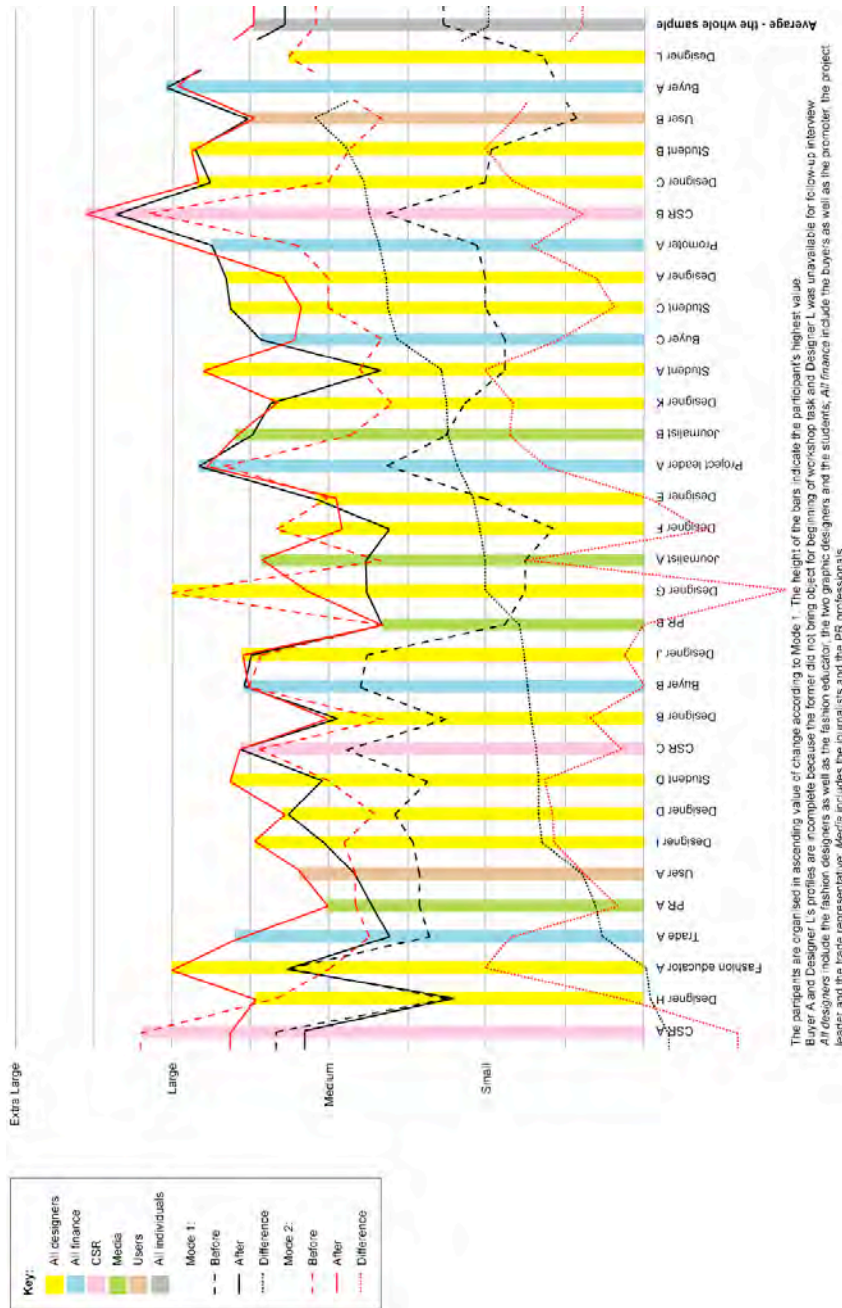


Figure 6.30 Individuals - scores before and after workshop intervention, and change scores

Most importantly, the figure illustrates that the workshop intervention did affect attitudinal change in the sample of fashion industry stakeholders. According to analysis Mode 1 – breadth - the average increase value was almost a band (from just over Small to just over Medium) at 0.98. With analysis Mode 2 – depth - the average increase value was 0.38.⁶⁵ These values were derived by comparing the group average score before and after the intervention of the workshops.

There are some other general patterns that are apparent from the figure:

- In the main, and with a few notable exceptions, the lower the score generated before the workshop, the higher the level of attitudinal change was. This was true when values were derived using both Modes 1 and 2.
- In those three cases where the change value according to Mode 2 was negative, the initial input was highly specialised with statements of high scores in only one or two analysis categories, whereas statements after the workshop fell in several categories, and specialism therefore was 'diluted'. The initial statement may be the result of expertise and specialism, or fluke – the participant made few statements and those that were made parroted specialist language.
- Most participants achieved their highest score *after* the intervention, and according to Mode 2. However, all but three participants' scores of change were higher according to Mode 1. The interpretation is that the intervention predominantly provoked a *broadened* engagement with the field of sustainability rather than a *deepened* engagement. Figure 6.31 below illustrates the ratio between breadth and depth of attitude or engagement with sustainability before and after the intervention.

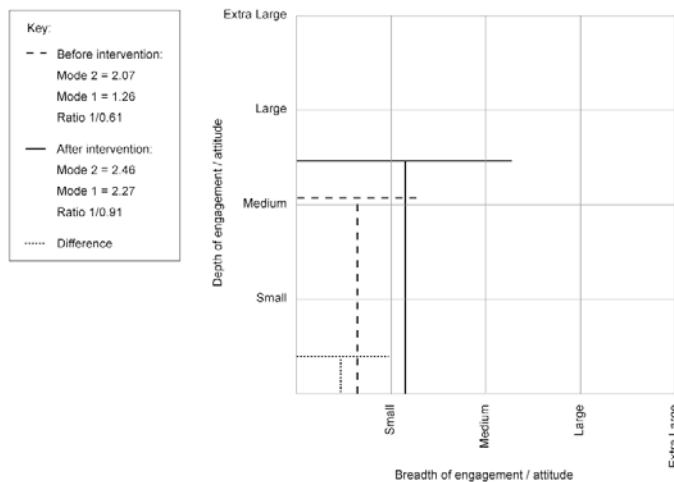


Figure 6.31 Breadth and depth of engagement/attitude

⁶⁵ The median across the whole sample for analysis Mode 1 was '1' and for Mode 2 '0.47'.

6.4.5.2.2 The relative representation of the evaluation criteria before and after the intervention

The two figures below present the range of the twenty analysis criteria that made up the four major evaluation criteria: *Brand/perception*, *Knowledge and awareness*, *Relationships* and *Action and Activism*. (See Figure 6.25 Analysis criteria and scales.)

The key tendencies are:

- The profile after the intervention of the workshop evidenced a greater balance between the four criteria. The new, more balanced profile is consistent with the ambition of offering a holistic or systemic perspective on sustainability and fashion, and to invite participants to engage with an extended epistemology.
- A positive change occurred for all the four major criteria.
- *Action and Activism* evidenced the most prominent increase, an explanation of which may be that as it had the lowest initial value; and thus its scope for increase, and the interest it therefore arguably drew was higher.
- *Knowledge and awareness* evidenced the least increase, which may suggest that the informational content of the workshop was relatively lower than its inspirational value.
- The only sub criterion with a negative development was *Importance of sustainability*. This is not considered to indicate that participants found sustainability less important after than before the intervention of the workshop, but instead that they went on to make less general and more qualified statements after the input of the workshop.

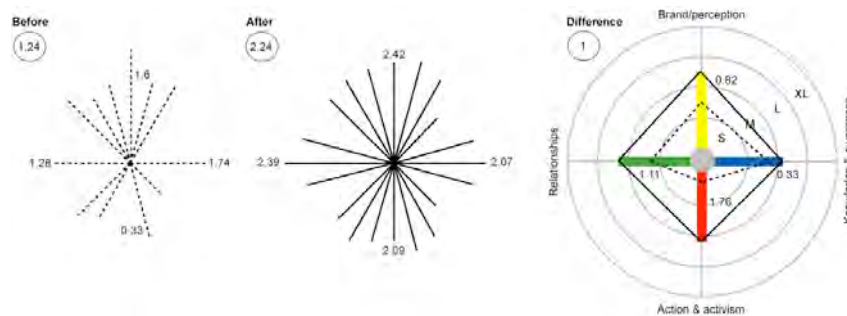


Figure 6.32 Analysis categories – scores before and after workshop intervention

Eight of the sub criteria only manifested themselves in the responses after the workshop.⁶⁶ An explanation for this is that the task through which base level statements were generated did not easily lend itself to for example issues of teamwork – a discussion that was only

⁶⁶ These were: *Attractiveness of eco-fashion*, *Consciousness of sustainability*, *Direction of thinking*, *Engagement with interdisciplinary team*, *Personal/professional value position*, *Desire to affect change*, *Efforts in personal life* and *Activism*.

relevant after the workshop. The workshop also prompted new areas of engagement for the participants, such as *Activism*.

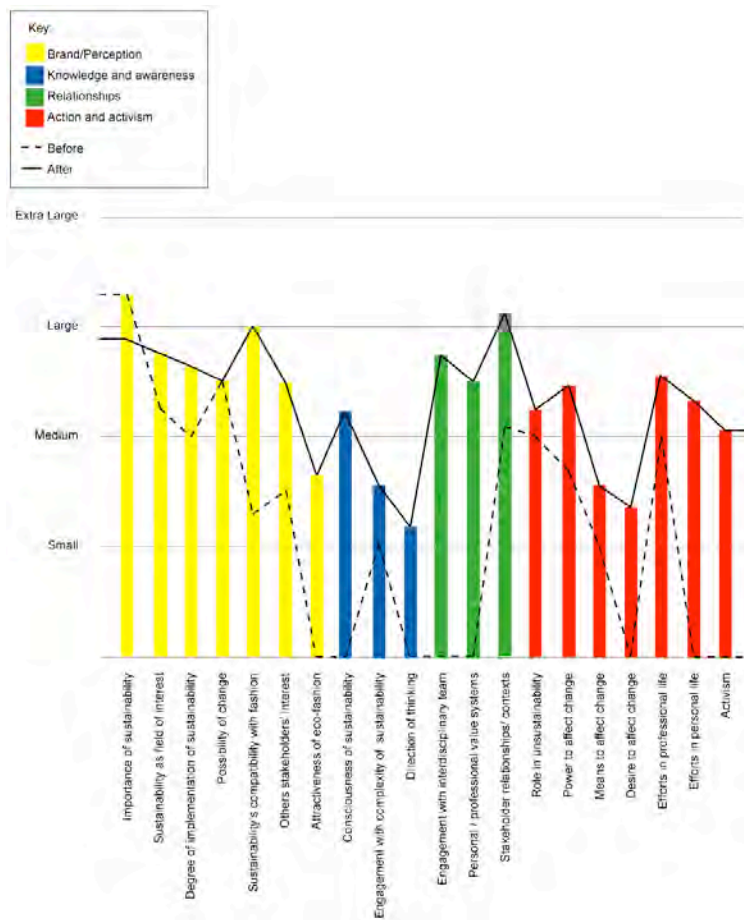


Figure 6.33 Analysis subcategories – scores before and after workshop intervention

6.4.5.2.3 Attitudinal change and demographics

The following paragraphs discuss how parameters particular to the individual, such as age and professional role, and to the group, such as its composition, may have influenced the results. In Figure 6.34 some demographic profiles are shown for those participants with the highest and lowest scores according to analysis Modes 1 and 2, in terms of a) the scores before the intervention; b) after; and the change (e.g. the discrepancy between before and after scores).

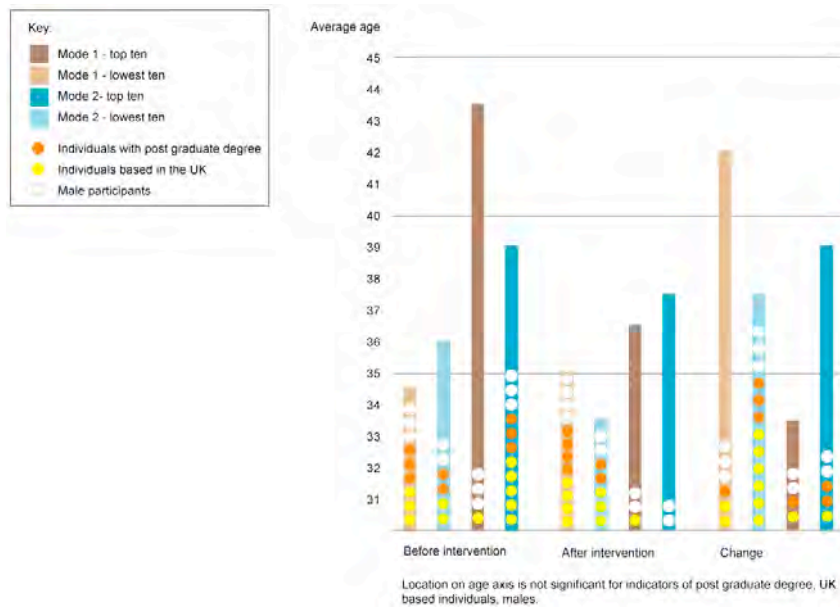


Figure 6.34 Demographic parameters and scores

What was the significance of age in attitudinal change?

The age difference between the highest (average 39 years) and lowest (average 36 years) scorers before the intervention according to analysis Mode 2 is negligible. However, according to Mode 1, the age difference (43.5 for highest and 34.5 for lowest scorers) is pronounced.⁶⁷ The age factor is unsurprising in itself, as knowledge and experience should increase with age. Additionally, two of the participants in the top-three segment were CSR professionals. The discrepancy of the significance of age in the two analysis modes indicates that the relatively older participants had a broader perspective on fashion and sustainability than the relatively younger group, whereas a high score in the Mode 2 analysis required less well-rounded responses.

After the intervention, the age difference in Mode 1 was less pronounced, a possible explanation of which is that the relatively older participants were less eager to venture into new territories or that their knowledge level was 'saturated.' The figure illustrates that both before and after the workshop the highest scores equalled a higher age average. This is still true in the change value for Mode 2 although the age difference between the highest and lowest scorers is less pronounced. However, when using Mode 1 to analyse change, the age – score relationship is inverted and the highest scores equal a lower age average. This is unsurprising since there was less scope for improvement for those individuals that scored

⁶⁷ Here three of the highest scores were represented by three of the four participants over fifty-five years old.

highly already before the intervention, and because three of the four students (arguably best conditioned to the learning situation) were amongst the highest scorers. The conclusion to the question whether age was significant in attitudinal change is therefore no, since it appears that those individuals of the lowest change score, had already a high score before the intervention and had in that sense reached a point of *saturation*. On the other hand, those with the lowest score before the intervention also achieved the highest change scores. Therefore, a high initial engagement with sustainability rather than a relatively higher age determined a low change score.

What was the significance of gender in attitudinal change?

The small number of males in this study (eight out of 32 participants – 25%) means that projections are not valid. The bias in gender of the sample is deemed to represent the fashion industry in general, which was raised in the discussion of the first empirical study. The figure shows that on the whole the representation of males largely follows that of the group as a whole. (See Chapter 4, 4.6.1.3.3, for a more exhaustive discussion of gender bias in the fashion industry.)

What was the significance of educational level and country of residence in attitudinal change?

Five of the thirty-two participants had a post-graduate degree, of which four were designers, and four UK based individuals.⁶⁸ The UK based group of seven individuals therefore included four of the individuals with a post-graduate degree, which means that they almost coincide. According to Mode 1 the UK based individuals and post-graduates had consistently lower scores than the sample average. In terms of Mode 2, the UK and post-graduates groups had a slighter higher 'before' score than the sample average but after the intervention, and in terms of change, their scores were significantly lower than the average. The sample is too small to make statistical projections and a bigger study might explore a possibly connection of the results to the specialist focus on many Master Programmes in Design, a high degree of specialisation in the professional practice, and whether the sustainability debate in the UK is more specialised than that in Sweden.

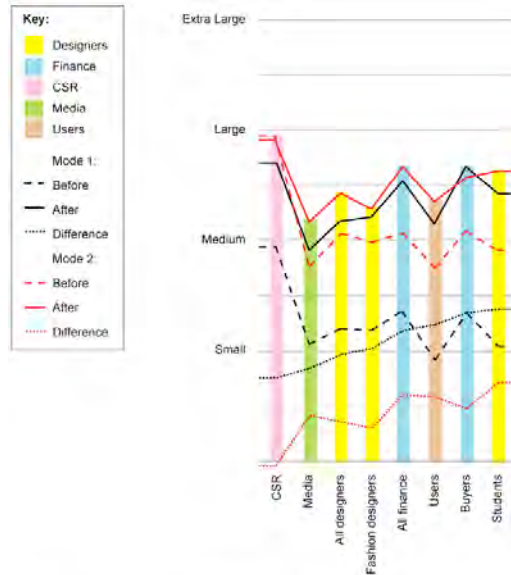
What was the significance of professional role in attitudinal change?

Figures 6.35 and 6.36 compare the average values of the different professional roles (and of students and users).⁶⁹ The figures show that the lowest change score according to both Mode 1 and 2 belonged to the CSR professionals; this is expected as they arguably came in

⁶⁸ This is deemed normal as Masters in fashion are still not as common in Sweden as in the UK (and probably even less so in the mass-market segment wherefrom most of the Swedish participants were drawn).

⁶⁹ *All designers* includes the fashion designers as well as the fashion educator, the two graphic designers, and the students; *All finance* includes buyers, trade body representative, promoter and project leader; *Media* includes PR representatives and journalists.

with the most familiarity, knowledge and commitment to the field of sustainability. The minus value for Mode 2 can be explained by a high degree of specialism in statements generated before the intervention, and the broadening of statements after the intervention – a tendency that was true of most of the participants, but taken to the extreme when the starting point specialist score was very high. The student group achieved the highest average change score in both Modes 1 and 2.⁷⁰



The groups are organised in ascending value of change according to Mode 1
The height of the bars indicate the groups' highest value.

Figure 6.35 Roles – scores before and after workshop intervention, and change scores

⁷⁰ Again, this is expected as their average score before the intervention was low (but not the lowest in Mode 2) and, moreover, that they were arguably the most familiar with the learning situation.

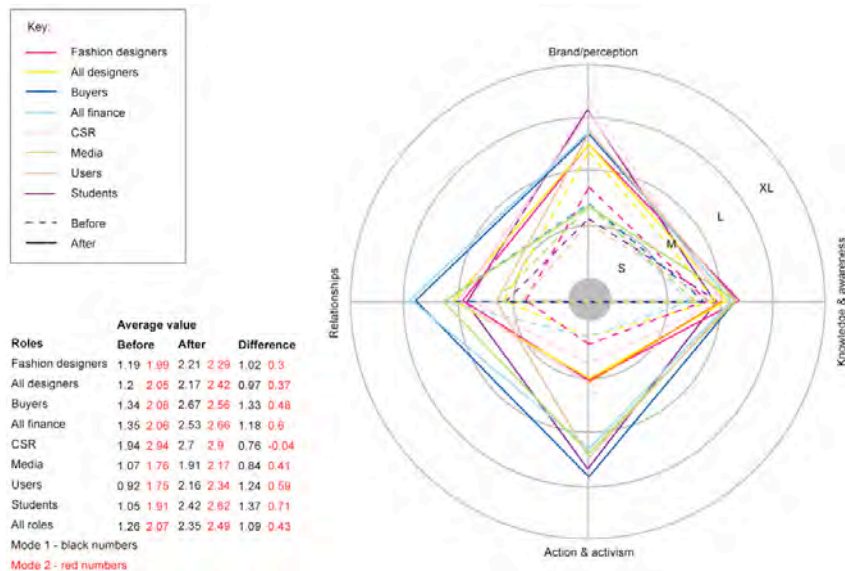


Figure 6.36 Roles – spread of scores before and after workshop intervention

Although the figures indicate lower scores of change for, for example, *Media* and *Designers* than *Financial* staff and *Users*, Figure 6.35 highlights that the individuals making up all the role groups are in actual fact spread fairly evenly across the spectrum. Therefore the conclusion must be – possibly with the exception of the students and CSR representatives – that professional role was insignificant in terms of level of attitudinal change.

What was the significance of group in attitudinal change?

Figure 6.37 below shows the derived shapes of all groups overlaid. Figure 6.38 represents the groups' values indicating which groups consisted of one sole organisation and which were a mix of individuals from different organisations.

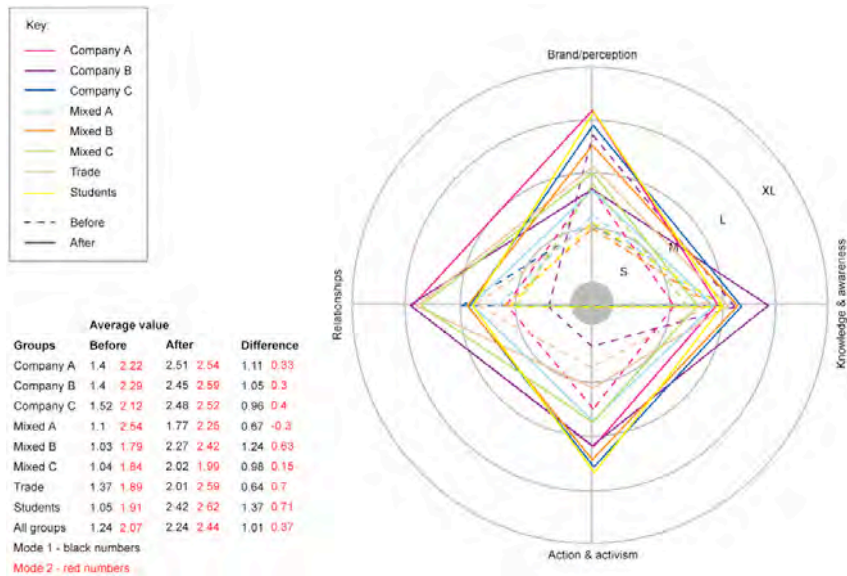


Figure 6.37 Groups – spread of scores before and after workshop intervention

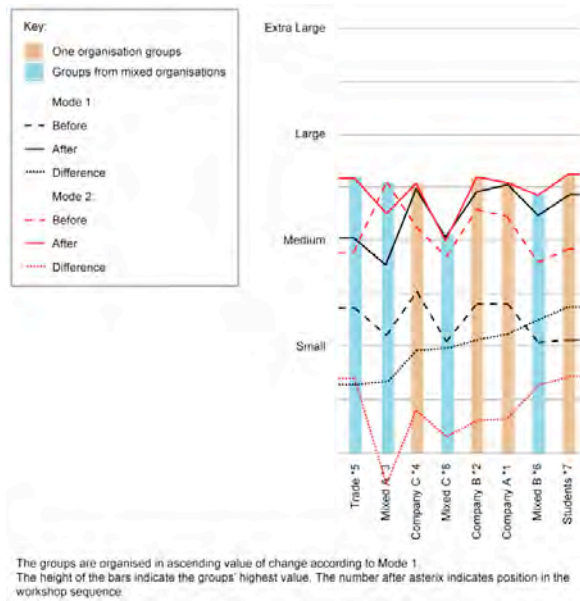


Figure 6.38 Groups – scores and demographics

The analysis of the data shows that the groups' position in the sequence of workshops, i.e. if a group was at the beginning, middle or end of the workshop series, did not affect the change score. The number of individuals that a group comprised – between four and six -

appears to have born no relevance either. The fact that the two workshops carried out in the UK ended up low on the change spectrum may be a result of my relatively lower proficiency of the English language, differences in attitudes between Sweden and the UK, or the make up of those groups – a mix of individuals from different organisations.

In fact the Figure 6.38 does highlight a trend for groups drawn from one single organisation achieving higher change scores than the mixed groups. The major reason for this is considered to be that individuals from the former category had the benefit of at the time of the workshop experiencing that they shared values and commitment with their colleagues, and after the workshop conversation could continue to take place between the members of the group.

All groups, bar the student group, comprised individuals of different age, gender and professional roles.⁷¹ Neither average age, nor age discrepancy appears to have had bearing on a group's change profile. The over-representation of individuals with post-graduate degrees amongst those groups of the lowest change scores, is considered to be due to their coincidence with participating in groups drawn from a mix of organisations. Finally, the presence or absence of male participants in a group appears to have born no significance on the score of change.

6.4.5.2.4 Attitudinal change and the relative configuration of values

It has already been established that in general the lower the score before the intervention of the workshop, the higher the score afterwards. However, did the configuration between the scores of the respective analysis categories – *Brand/perception*, *Knowledge and awareness*, *Relationships* and *Action and activism* - have any bearing on the level of attitudinal change affected?

Figure 6.39 below shows the profiles of the five individuals that achieved the highest and lowest scores of change according to Mode 1. Figure 6.40 provides an equivalent illustration of the outcomes when Mode 2 was used. A comparison between the lowest and highest scoring profiles according to Mode 1 uncovers one strong pattern.⁷² It shows that while the highest scorers all had an *increased*, or identical value for *Action and activism*, for the five lowest scorers this value was either *negative* or there was not one in the first place.

⁷¹ Although the students achieved the highest value of change, the explanation for this is regarded to be the group's familiarity with a learning situation, and its relatively low value before the intervention rather than its homogeneity.

⁷² The analysis of the five highest scorers according to Mode 1 show no obvious pattern of configurations (with the exception that the profiles of Promoter A and Designer C are almost identical). None of the profiles evidence a positive change in all four directions, and the areas where most change is evidenced vary. In terms of the five lowest scorers there is a trend for the most positive change occurring in the area of *Relationships*.

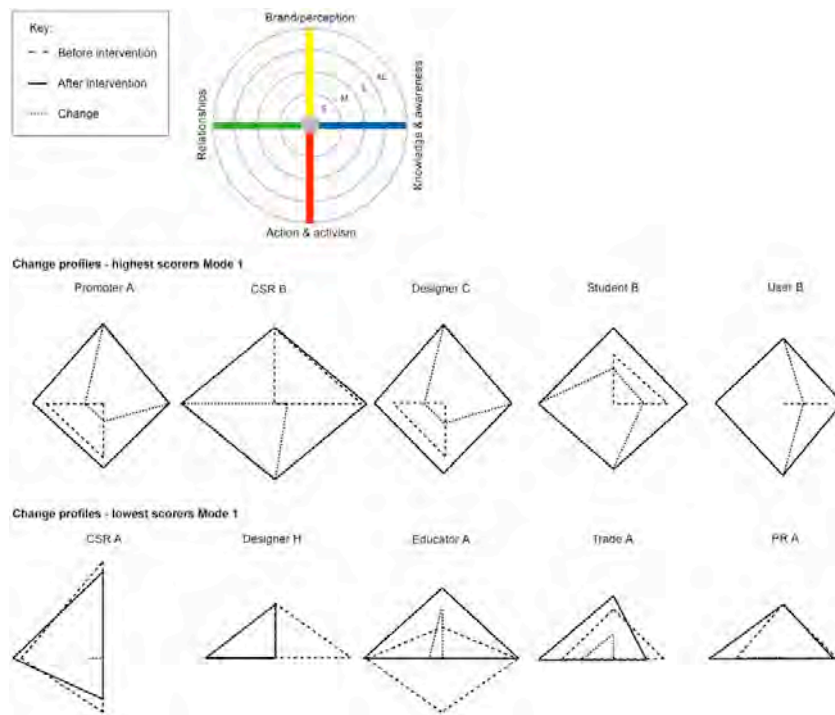


Figure 6.39 Profiles of highest and lowest scoring participants according to Mode 1

This result correlates the previous discussion on the importance of agency in terms of implementing more sustainable practices and attitudes. A possible reading of the results is that for those individuals that experienced that they had agency⁷³, other doors also opened. Through feeling empowered in this area, they also had better access to a higher factual understanding, greater empathy, and more extensive opinion forming.⁷⁴ In reverse, for those participants where agency was diminished, or never existed in the first place, the workshop had a lesser, or even a negative effect in terms of opening up new areas. It appears that a sense of *agency* was the most important key to a 'sticky' and empowering learning experience.

Out of the five lowest scorers, four also obtained the lowest scores in terms of *Action and activism*.⁷⁵ The highest scorers, however, were fairly evenly spread out amongst the fifteen highest scorers in terms of *Action and activism*. This indicates that a diminished sense of

⁷³ The themes in the Action and activism category included the experience of having *means to make changes*, of individual *contributions mattering*, and of there being *many options* available.

⁷⁴ Examples of what the three other categories - *Knowledge and awareness*, *Relationships* and *Brand/perception* – signify.

⁷⁵ And the fifth the seventh lowest score at 1.5 which was 0.5 down from the value before the intervention.

agency had more bearing on the whole learning experience than an increased appreciation of having power to affect change. A recommendation follows that the focus in such a learning experience need not be so much on maximising the sense of agency, but rather to absolutely make sure that no participant comes out of it even slightly *disempowered*.

Why did certain individuals experience a greater degree of agency? The Figure 6.39 shows that there is no significant pattern in terms of professional roles. However amongst the five highest scorers, three individuals were part of groups drawn from a single organisation whereas the lowest scorers comprised only one individual from such a group, which may confirm the previous observation that the group format consisting of several individuals from one organisation is more auspicious in terms of attitudinal change. Three of the lowest scorers belonged to the same mixed group – Trade - which may be significant as it was possibly the least relaxed setup of all groups, because of the high profile of the members. Three of the lowest scorers were also in the highest age category, which as has been described earlier implies a greater degree of experience and knowledge, and possibly saturation point⁷⁶ (resulting in a low change score). In conclusion, there appears to be no isolated factor to explain why some individuals derived a greater sense of agency from the workshop than others.

An analysis of the lowest and highest scoring profiles according to analysis Mode 2 reveals no patterns of positive nor of negative correlation in the configuration on the four analysis criteria. This means that the experience of agency was not significant in achieving a high specialist value.

⁷⁶ At least within what the workshop could offer.

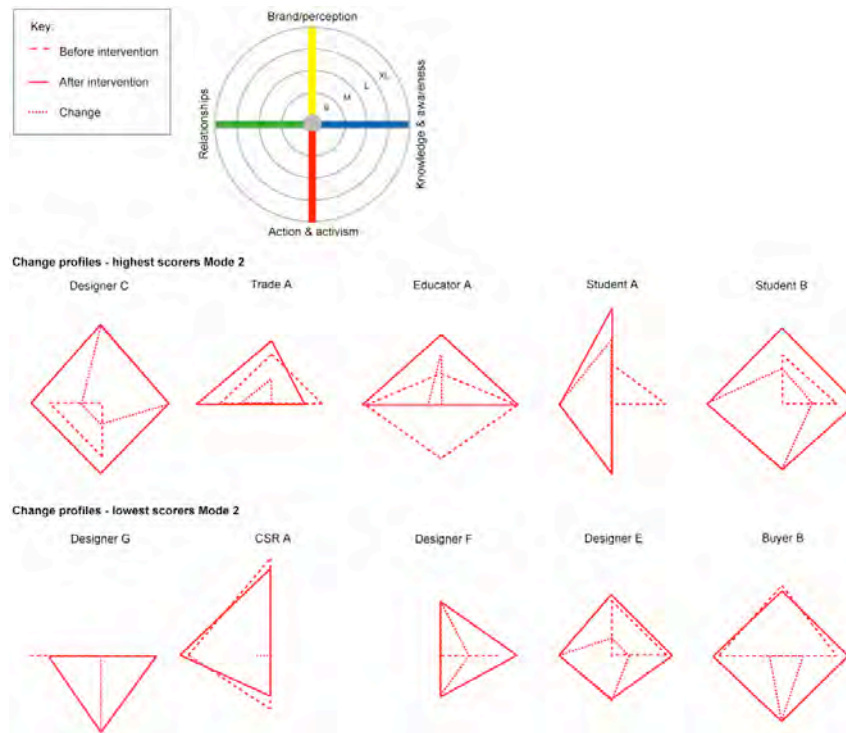


Figure 6.40 Profiles of highest and lowest scoring participants according to Mode 2

6.4.5.3 Evaluating methodological approaches

The overall research question guiding this thesis: *How can trend-forecasters be helpful friends to fashion designers on their shared journey towards sustainability?* was channelled into two layers of investigation. The previous section has targeted one of them, the research proposition: *A modified version of trend-forecasting can serve as a driver for environmental improvement at systemic level in the fashion industry's mass-market segment.* Fundamental to the proposition being true, was the other part: the successful design of a new, or modified, trend-forecasting approach, which can also be described as a pedagogy of sustainability in the realm of fashion. This section therefore seeks to answer how well the brief, the aim of which was to design methodological approaches that should promote and embody a paradigm of sustainability, was met. The participants' responses to the methodological approaches were organised on a scale from Small to Extra Large.

- Small – some problems raised, or neutral comment.
- Medium – perceived as 'good.'
- Large – perceived as 'very good,' distinctly helpful.
- Extra Large – an extraordinary experience, singularly useful.

It should be noted that participants were not asked directly about the methodological approaches.⁷⁷ Instead the statements arose from questions such as 'What can you remember from the workshop?', 'What did you find the most and least engaging about it?'. The question targeting what the participants would like to see as a follower to the workshop also prompted comments about the workshop format and contents. The data has only been treated qualitatively, as the spread of responses do not afford a robust quantitative analysis. (See Follow up interview questions, **B.4**, and Methodology data charts, **B.11**, Appendix B.)

The evaluation of the methodology used in the inquiry is structured into three sections:

- Approaches;
- Workshop elements and tools; and
- Contents.

Approaches

Methodological approaches	Description
Mixed stakeholder group	Mixing professional roles within and across organisations.
Integrating personal / professional value systems	Inviting both personal and professional knowledge and experiences.
Participatory process	Working as a team, researcher included in process.
Workshop format	Interactive approach, a mixed range of activities and delivery modes.
Extended epistemology	Theoretical, practical, experiential, presentational ways of knowing.
Mix of cognitive styles	Catering to analytical, creative, playful learning styles.
Language	Mix of information and inspiration, visual and emotive language. Fashion and trends oriented language. Focus on opportunities and integration rather than constraints and dichotomies.
Futures perspective	Setting the scenario in the year 2026.

Table 6.5 Methodological approaches in the inquiry

Mixed stakeholder group

As described earlier in this chapter, most participants reacted very positively to the interdisciplinary format. Indeed for some it was the most rewarding aspect of taking part in the study. In general, the key positive attributes of the interdisciplinary groups were⁷⁸:

- An experience of there existing a critical mass of committed fashion industry peers for positive change to be possible;
- An new experience of sharing values with other stakeholders in the fashion industry;
- A new appreciation of colleagues and peers, in terms of values and body of knowledge;
- A new appreciation of the team as a whole, in terms of composition, values and body of knowledge.

⁷⁷ With the exception of the experience of an interdisciplinary team.

⁷⁸ As described previously in the chapter, the mixed groups took on different meaning for different individuals and professional roles. For the CSR representatives for example, the interdisciplinary approach offered the insight that their colleagues were more interested in sustainability than they had thought.

"And that [is what] I thought was so interesting and at the same time... beforehand I felt a little bit like. Well, how will I fit into this?... you know we are so different.... But... then it turned out that. One should be different, one should have these different perspectives... And that is how one gets the breadth and the width and there occurs ... a fruitful discussion with different... backgrounds and outlooks on the questions." (CSR C, 2006: 5)

"It is great fun to see how the others think. And that, in it self, becomes something of an eye opener, that one has, well, such different angles on it." (Project Leader A, 2006: 4)

There were also a few statements that indicated problematic issues as regards the mixed format, the key critique of which targeted the difficulty of reaching common ground quickly enough to be productive together. Such comments, however, came mainly from individuals of groups drawn from different organisations and thus the problem appears more related to the fact that the group members did not know each other from before than to the mixed format itself.

"it was difficult because one had to think and articulate so that everyone could understand." (Designer J, 2006: 1)

"in terms of coming to a result it is not as effective. Because probably one needs time to reach a common point of view and things like that." (Journalist A, 2006: 3)

On the whole, the interdisciplinary work groups constituted a very successful approach. It was at its most effective in groups drawn from one organisation, where a new group cohesiveness was generated (at least temporarily). For the mixed group, the interdisciplinary approach did to some extent foster a new sense of community too, however its primary achievement was to offer participants a wider perspective on fashion and sustainability.

Personal/professional value systems

This approach is complex to evaluate beyond a superficial level.⁷⁹ What the responses did express was the participants' appreciation at having gotten to know their colleagues in a slightly new way, and seeing other aspects of them. The accounts of new practices in the personal life, described earlier in this section, may also suggest a meeting of value systems.

"And to hear... these people being personal, to not only be in their professional roles... But to be able to develop one's personal thoughts around these issues. That I thought was valuable." (Fashion Educator A, 2006: 4)

⁷⁹ When designing the workshop, I considered ways of bringing in both personal and professional value positions into the discussion of fashion and sustainability. I saw this as a crucial aspect in negotiating the processes of alienation that were manifested both in the first study, and in the literature.

Participatory process, workshop format, an extended epistemology, a mix of cognitive styles

These approaches are closely connected and will therefore be treated together. Although the participatory mode was not⁸⁰ mentioned explicitly in the interviews, the interactivity and the variations in delivery across the session were addressed.

"I thought that [interactivity] was really good because we [designers] are so used to either driving a project ourselves... we design our clothes and think and look and take in a lot and then we have to create something from that. So we do that on a daily basis, but a lot of the time we just spend taking in..." (Designer 1, 2006: 4)

"I prefer that to just [having] information... fed to me." (Student C, 2006: 5)

"the workshop's better [than a lecture] because... you bounce ideas off each other." (PR B, 2006: 4)

"it was exciting to do something practical, and that was more that one realised, but then it was quite a relief to be free from boundaries too... not have like any technical or. When we did this future..." (Designer K, 2006: 4)

"everything is sort of sorted [in my mind] in different categories of experiences. I think that when you were talking and showed the slides, that is sorted in another category that has at least as much value... To me, that was really interesting. So I can't say that it was, that it comes further down the list either in any way." (Designer A, 2006: 2)

When designing the workshop, I went to considerable length to ascertain that the exercises would embody an extended epistemology and cater to a variety of cognitive styles – from the analytical to the creative. I picked examples for the presentation similarly endeavouring to offer a breadth spanning from the factual, number oriented to the visually appealing. This approach was validated as the point of highest engagement did indeed vary between individuals. However, I had been stereotypical in my assumptions as the attraction of individuals to the respective elements was not reliant on professional roles. Financial staff showed no more interest in those models boosted by statistics than 'creative' professionals. The non-designers appeared to take on board the creative tasks with as much enthusiasm as the designers. This finding speaks against seeking to typecast an audience in terms of the experiences offered; instead the aim should be a well-balanced range, and a good rhythm of activities.

Language

This approach, again, is difficult to evaluate. No direct mention was made to the language, which is unsurprising if the audience felt 'at home.' I had tried to achieve a language that was inspirational as well as informative, and distinctly image led, in order to appeal to a fashion audience. Yet an important aspect was to introduce sustainability as an opportunity rather than a constraint. The latter was addressed in the responses.

⁸⁰ Nor was the fact that I participated actively in the workshop.

“there was this kind of brainstorming that one actually needs... And that is what we haven’t actually had. At least I haven’t been part of anything like that, in this free form... it has more been like... now there are new regulations, now we can’t use this and that substance anymore... And it has been a lot about these regulations, the laws and how we can live up to the regulations that are imposed on us by the authorities... Or we know that... this is being discussed now and this is coming up and now we... have to be one step ahead and start preparing ourselves. So that it has always been more this background reality, it is concrete, we have to do something... Not this free thinking and the... brainstorming.” (CSR C, 2006: 4-5)

Futures perspective

Finally, a *futures perspective*, setting the key workshop task in the year 2026, was employed.⁸¹ As has been described previously in this section, this space for freedom and creativity was taken up well by the participants. However, although I was explicit about the freedom from, for example, commercial constraints, the participants (designers, and CSR professionals as much as financial staff) found it almost impossible to leave them behind. They had no problems making up new technologies, or modes of behaving, but so conditioned were they to financial concerns that they took them with them into 2026.

“the perspective of twenty years time enabled us to free ourselves from the desk and think quite freely, which we definitely did.” (CSR B, 2006: 1)

Workshop elements and tools

The following paragraphs evaluate particular elements of the workshop and the tools employed in the inquiry. The Table 6.6 below provides an overview on the workshop elements, and Table 6.7 an overview of the tools. The text explores the various elements and tools in chronological order according to the workshop design.

Workshop elements	Description
Task before workshop	The participants were asked to bring in objects to manifest what fashion and sustainability respectively meant to them.
Individual mapping	The drawing and producing ranked lists of fashion and sustainability respectively, using the objects as a starting point .
Group mapping	The maps that the groups created of fashion and sustainability respectively.
Re-design	The process of re-designing the fashion objects using some of the key words from the sustainability map.
Presentation	The presentation on sustainability and fashion.
Scenario	The group task of creating a fashion concept for 2026 set within the context of sustainability.
SWOT	Evaluating the concept for 2026 in terms of Strengths, Weaknesses (internal to the organisation) and Opportunities, Threats (external to the organisation).
Naming	Generating a name for the concept.
Workshop as a whole	The flow of the entire workshop.

Table 6.6 The elements of the workshop

⁸¹ The purposes of this approach was several-fold: to engage with fashion designers’ interest in trends; to create a free space, void of constraint, such as finance; and to explicitly situate the exploration within a solution and opportunity focused realm.

Tools	Description
Modified cultural probes approach	Using everyday artefacts as a 'door' to narratives of both personal and professional value systems and experiences.
Story telling/metaphors	Giving a 'face' to abstract or complex phenomena through narratives.
Scenario planning	Exploring the future of fashion by creating concepts.
SWOT	Strengths Weaknesses Opportunities Threats matrix, a model used for the evaluation of e.g. a concept
Lifecycle evaluation	Using the product lifecycle map to identify points of problematic nature or where there may exist opportunities.
Working in themes	Organising ideas or issues into clusters.
Drawing / making	Using visual means in the shared thinking, communication, and representation processes.
Facilitation	Management of safe space, time keeping, group dynamics, flow of session, communication.

Table 6.7 Tools used in the inquiry

The *modified cultural probes approach* (and its related activities) got the most mentions by the participants and is appreciated to have served its purpose well.⁸² While several participants expressed that they found the mapping processes difficult, the key merit of the modified cultural probes approach appears to be that of spurring a series of *narratives* which helped establish group rapport and situate the discussions about sustainability within the participants' own respective and shared realities.

"I thought perhaps that [the most engaging aspect] was that when one brought out one's products... because it was so different in terms of how one had been thinking in a sense... then one had already had a chance to think." (Trade A, 2006: 1)

"The most exciting thing was to hear everybody's different opinions. And that everybody was so good. The two things that we had brought, everybody is thinking in different ways, but then it was good that you brought it down to a simpler level, we could see that one could link everything together. That was exciting." (Designer J, 2006: 1)

The *re-design*⁸³ task drew fewer responses from the participants than the mapping processes and the scenario. This can probably be attributed to the relatively limited time the exercise occupied and that it was overshadowed by the more 'fantastic' scenario task. However the responses that it did yield were positive, and the participants clearly built on it in the scenario work. In hindsight, the re-redesign task would have merited more time and emphasis.

"And then it was great fun, that case to develop a product quickly like that... It is, well, one has to think properly..." (Project Leader A, 2006: 2)

⁸² The simple task, to bring in two objects – one for fashion and one for sustainability, was created to serve several purposes. A) to start the participants' reflection process before the actual workshop; b) to constitute a vehicle to bring in both personal and professional value systems; and c) to help the groups bond at the beginning of the workshop. The lists that came out of the objects – the *individual* mapping of fashion and sustainability respectively - also provided data to establish baselevel attitude.

⁸³ Using the *lifecycle map*, the participants evaluated a fashion object and re-designed it using some of the keywords from the sustainability map.

The workshops included a presentation, the contents of which are outlined in the table below.

Contents	Description
Sustainability concepts	Triple bottom line, ecological footprint and rucksack, the cradle-to-cradle perspective.
History of ecology and eco-fashion	A brief introduction to the environmental movement and its reflection in the realm of fashion.
Contemporary situation and drivers	Current priorities and strategies in terms of the sustainability imperative.
Principles for design for sustainability	Principles organised into four key themes: reduce, reuse, recycle and reframe.
Current examples from industry and research	Case studies illustrating design for sustainability in the context of fashion organised in the above four themes.

Table 6.8 The contents of the presentation delivered in the workshop

"I remember from your presentation, some of the facts you gave, like that to sustain across the whole world a Western lifestyle... it would take three planets..., and some of those things really stuck with me, they were really interesting... this idea...that all these things can be affected right at the very beginning, when the product is designed... I think it's probably something I haven't thought much about before."
(Buyer B, 2006: 1)

"the fact it that is becomes something of... an eye opener, one becomes much more susceptible to... this type of information... And, we have also... started to look at... this at work... Different projects and what we can do and so forth so that it becomes like a natural step... But I feel more aware personally and search for information independently as well... Just because one feels that one didn't know as much about this as one ought to... Yes, and I have surfed on [World Wildlife Fund] and all these places, [Clean Clothes Campaign]." (Project Leader A, 2006: 2)

"it felt like one got more sort of... flesh on the bones... About what it was that we talked about all of us, we were on the same.... level. (Designer K, 2006: 1)

All the aspects of the presentation provoked comments from the participants who often reflected back facts from it. Many drew parallels to their own lifestyle – such as trying to shop for more local produce, and some had continued looking up concepts, such as the ecological footprint, on the Internet and in literature. It was somewhat surprising that even very basic models, such as the lifecycle map, appeared new to the participants and generated positive feedback, which will be explored further in the conclusion of this chapter. As already described, the responses to the particular contents could not have been predicted by stereotypical assumptions of cognitive styles adhering to particular professional roles. However, as has also been discussed earlier in the chapter it was evident that the examples of fashion companies engaging with sustainability failed to convince in particular the buyers and PR representatives of their application to a mass-market audience. The designers could more easily make such a translation.

A loose version of *scenario planning* was used in the creation of the concepts for 2026. Some of the participants raised the difficulties of taking on such big a project in the limited time frame, and with a group of individuals not used to working together. In general, however, the participants expressed enjoyment at what they perceived as a free and

imaginative creative space and pride when seeing the summary of the scenarios they had created. The scenario work was supported by a series of tools and techniques, such as the 'removal' of constraints to enable a free envisioning space and a checklist to help focus and add detail to the scenarios. In terms of the latter, the question of location – 'Where is the concept geographically located?' – proved especially helpful when discussions stilted, confirming the obvious; that it is difficult to design in a void. As soon as some tangible aspects had been decided upon, the groups all managed – in the space of one and a half hours – to generate some extraordinary visions for fashion and sustainability.

"It was a bit difficult to get started... with our brainstorm... It felt too big... And broad... Too broad a subject and we didn't really know how to attack the problem so it was actually... the hardest part... Then it felt like it stagnated a little bit... But then, you helped us and made it more and more focused on a shop for example... And that got everybody started." (Designer A, 2006: 2)

Narratives and *metaphors* played a significant role in the generation of the scenarios. As described previously in this chapter, websites and computer programmes proved especially important reference points for the imagining of new services and systems for fashion.

The SWOT analysis was not mentioned in any of the follow-up interviews, and so did not make any lasting impression.⁸⁴ However, its role – to provide a point for focused critical evaluation and reflection is still regarded as vital. Because the participants were aware of there being a slot for 'no, no, no' put in place, the rest of the time could be devoted to relatively uncensored imagination, an uninterrupted flow of 'yes, yes, yes.'

In order to support a creative atmosphere and encourage visual records of the process, simple *drawing* and *making* materials were made available to the groups. In reality these were rarely used, except for in the task of drawing the objects brought in. The reason for this was partly time limitations, but I also experienced that the participants got so involved in the discussions that drawing or making was not a priority. However the presence of such materials may have helped in generating the create space, but more as *props* than actual tools.

In the interviews many participants commented on the *workshop as a whole*, generally in very positive terms. Their accounts evidence a good understanding of the sequence of the session. Virtually every individual workshop element was somebody's favourite aspect. A couple of participants experienced that the session was somewhat hurried. Several participants expressed how 'time just flew' and that they could have had sustained the conversations for much longer.

⁸⁴ Only with a few groups was there time to formally conduct a SWOT analysis. In the other groups e.g. strengths and weaknesses were elicited in a more organic fashion, towards the end of the discussion.

"I thought it was a good line up. I thought that all the parts were interesting and necessary in order for one to understand it all... You need to have... both the background to, some fashion design trends but also... how the whole environmental awareness has grown amongst... people in general... And then, just the very lifecycle of the product, that there were many steps and that in each step the environment is affected in one way or another." (Project Leader A, 2006: 2)

"it was very well planned, I mean well thought through, I think... It absolutely did not feel like something was unnecessary but incredibly efficient and concentrated and that during this time period a lot of things happened. There were no dead points at all... I thought it was very interesting to participate. It was great fun. And rewarding." (Fashion Educator A, 2006: 1-2)

'Interesting, inspiring, fun, playful, imaginative, creative, free, thought provoking, enlightening, new, important, rewarding, current, clear, forward thinking' were some of the adjectives the participants used to describe the workshop experience. These adjectives show quite clearly that, in the main, what I had set out to create – a shared and free space for an uncontaminated exploration of fashion in the context of sustainability, actually materialised.

"Eh, but then I always find things like that scary. Where one has to bring things in and one doesn't quite know what is. But I think that's in one's own mind..." (User B, 2006: 2)

"I didn't know, but maybe that's because I had not properly read through, if there were going to be journalists there as well... People from other companies... because that may have influenced the discussion... So I didn't know, that's really what I think... If that had been clear from the beginning, I think it could have helped us quite a lot." (CSR B, 2006: 2)

There were aspects of *facilitation*, however, where I did not quite meet the aims. Only a small number of participants actually raised it, but my own experiences confirm that there were instances where the initial communication to the participants ought to have been clearer, which could have made them feel safer.⁸⁵ Already when designing the workshop, I was aware of the fact that a significant amount of information and activities were scheduled in a very short space of time. While I do not believe that the workshop experience was significantly compromised because of it, a longer session would have afforded more space for reflection.

"I think that it was a really good, it was a very good presentation that you gave, and you had the imagery and sort of the manner and, your relaxed way of talking about it, you know. It felt so engaging." (CSR A, 2006: 6)

Whilst listening to the transcripts of the sessions, I realised that as the series progressed my facilitation grew lighter. Trusting the process, allowed me to tune into the flow, to keep silent at poignant but awkward moments. It also enabled me to be a more involved participant and

⁸⁵ Here a problem was that I was sometimes not able to communicate directly with the participants before the workshop, but had to go through a gatekeeper. Yet I should have ascertained that all information was promptly forwarded and sufficiently clear.

fully enjoy the shared learning experience. As I grew more confident, I learnt to let the processes unfold in a quite organic way.

Throughout the interviews following the workshops, I realised how important *presentational knowing can be*. (See e.g. Heron and Reason, 2001 and Chapter 5, 5.4.1) Both the participants and I appeared to have gained new insights from these conversations. Of particular interest were the ideas that were generated regarding possible future directions of the work to implement more sustainable practices in the fashion industry. These were:

- A series of workshops continuing the mix of creative and analytical tasks, and an added focus on case studies;
- A newsletter or website with frequent and succinct updates on research, practical examples of sustainable fashion initiatives;
- A permanent forum for accessible discussions of fashion and sustainability and beyond;
- The implementation of more interdisciplinary work within the industry;
- Pilot projects testing in reality the ideas from the scenarios and other;
- A tool kit with for e.g. material examples and hands on exercises that CSR representatives can use in their work with designers, buyers and other colleagues;
- A handbook, or other accessible resource, that provides step-by-step guidelines for the shift to more sustainable practices;
- An easily accessible, informative and inspiring database drawing together case studies, key texts and current research.

6.4.5.4 Evaluating quality criteria in this inquiry

The final part of the evaluation of the study concerns the quality criteria that were developed, to complement or replace conventional academic research standards, in order to embody and promote my understanding⁸⁶ of a paradigm of sustainability. (See Table 6.1) Aspects of the quality criteria have been addressed in previous accounts of, for example, the success of a particular tool. Here I will seek to draw out more specifically to what extent the participants – in so far as they provided relevant responses – and I regard that the quality criteria were honoured. The participants' responses were organised on a scale from Small to Extra Large. This data has been treated qualitatively. (See Appendix B, B.12)

Firstly, I sought to at every stage of the inquiry be *reflexive*, and in this narrative to provide a clear account of the research process. However, it is evident that as the text is a linear dissemination format and sometimes turns whispers of an idea into a blunt statement, some of the intuitive aspects are lost, and the process appears far more linear and asserted than it in effect was. In fact, at many times only in hindsight did I realise the significance of a choice based seemingly on a hunch, and could I understand the connections I had made between,

⁸⁶ An understanding informed by literature and professional and personal experiences.

for example, my readings and experiences in the field. As a whole, though, with the aid from the quotes from the participants and my journal, I trust that the reader may get a sufficiently vivid understanding of the research journey.

This is an important aspect of ensuring *credibility*, as was the constant dialogue with peers in the fashion, sustainability and research communities whilst conducting the study. In general, I think my communications with the participants were transparent, although I failed to make some of the practicalities of the workshop sufficiently clear. (See *Facilitation* above.) All participants were invited to validate the summaries of the scenarios, and to make sense of the workshop experience in a follow-up interview. All participants took part in the study out of their own will and accepted with informed consent to all recordings that took place. In addition, an independent researcher coded ten percent of the interview transcripts to ascertain that the coding system was robust.

I knew from the very beginning that the research process only to an extent would be participatory, as I brought in the agenda. It was evident that there existed a power imbalance in that sense, and therefore the study was not entirely *democratic*. However, it was made clear to participants that their input into the process was welcomed and desirable, and the workshop design was flexible enough to accommodate varying foci in the dialogue and activities. In that sense a certain *relevance* was ensured for individuals. In the choice of approaches, language and the very focus of the inquiry, I endeavoured to meet the participants' needs and interests. The conversations with the participants elicited that they – in the main - had indeed experienced the workshop as meaningful and relevant to them.

The overarching question I sought to answer through this research was 'how can trend-forecasters be helpful friends to fashion designers on their shared journey towards sustainability?' I still view this pursuit as very relevant. Although there has been significant development in terms of more sustainable strategies in the fashion industry's mass-market segment since the beginning of the project, they still do not sufficiently target the scale and speed of the industry, they do not realise the potential of design involvement, nor have they exhaustively – or indeed at all – explored alternatives to top-down drivers and more creative approaches to implementing sustainable practices. For me, both professionally and personally, the research has constituted a very meaningful process.

The context of this inquiry was specific, the mass-market segment of the fashion industry. However, some of the findings, especially those concerning the communication of sustainability are deemed to be *translatable* to a wider audience. As fashion is arguably one of the fastest moving layers of commerce, addressing it in the context of sustainability should provide insights and encouragement to other sectors of fast moving goods imbued with status and a precious link to time and space. Moreover, fashion has a strong presence in

popular culture and is also increasingly influencing other design fields, wherefore lessons from this study should have wider applications. Indeed, the dissemination of aspects of the findings in conferences has led to invitations from audiences beyond the remit of fashion.

“The talk that you did. Did feel extremely relevant... but that is also one of those things where I don't know, I mean if someone else had done a talk on the same theme and I hadn't been sort of there for a particular reason... then I honestly don't know... if I had come to it... I doubt it because there has evidently been talks that I haven't... even noticed... That's the personal sort of, I would say... You are the link to this for me so to speak.” (Journalist B, 2006: 5-6)

The quote above from a participant highlights another dimension of translatability, which concerns my role in the study and two key ensuing questions:

- To what extent was the study dependent on *me* being the interface between fashion and sustainability?
- Are the approaches that I developed and facilitated transferable to other trend-forecasting practitioners?

Because of my particular professional background, experiences and network I had the access, and the credibility that enabled me to conduct the study. However, the fashion industry is networked based – virtually all collaborations include individuals who went to the same fashion college, or were colleagues at some point in time, which means that my role as an insider/outsider, or interface can be described as authentic and representative of the operations of the field. Because of the *insider/outsiderness* that I represented; as a person with a solid fashion perspective *and* knowledge about sustainability, I could communicate the sustainability imperative being empathetic to the fashion industry stakeholders' particular situation and challenges. I shared a degree of their language, was uninterested in dichotomies and placing blame, and we could therefore focus on modes of integration. Another trend-forecaster – of a new paradigm of sustainability – would certainly need similar modes of introductions that I had, which would indeed be needed for any type of consultancy. Such a professional could employ the approaches and tools developed for and through this study. It needs to be recognised, however, that the methodological approaches that were developed from placing trend-forecasting in a paradigm of sustainability, consists of *partial* approaches and tools.⁸⁷ They are partial because only in use, with a particular group, and with a particular facilitator, do they become *whole*, and this whole – the completed approach or tool – will be different every time. Similarly, the paradigm of sustainability that served a context for these methodological approaches is simply one interpretation of many possible, wherefore other consultants might suggest shifts in emphasis.

⁸⁷ I am grateful to John Backwell for the notion of a partial tool, which he proposed in the context of Benchmarking Synergies for Meta-Design project at Goldsmiths, University of London, 2008.

As has been described earlier in the chapter, responses from the participants evidence that they found the workshop experience *creative* and *visionary*. However, the study also confirmed the difficulty of stepping outside a current paradigm when envisioning, and in particular how conditioned we are to the dominant commercial framework.

Finally, the study can be described as being true to its ultimate purpose – to integrate the fashion industry with the sustainable imperative - and therefore *authentic* since it did provoke engagement with a broader range of perspectives in a sample of fashion industry stakeholders. My own personal and professional need to situate fashion and trend-forecasting within a new paradigm of sustainability has sustained the inquiry over several years. Over time, the added interest, enthusiasm and encouragement from my peers and the participants proved that the topic was far larger than I, and also that research can indeed constitute activism.

6.5 Conclusion and discussion

This section concludes the report of the second empirical study of this PhD project. It summaries some of the major findings, and draws out significant themes in terms of further research and practice.

6.5.1 Answers to the research proposition and question

The inquiry was guided by one overarching question, the validity of which dependent on the answer to a question.

Proposition: A modified version of trend-forecasting can serve as a driver for environmental improvement at systemic level in the fashion industry's mass-market segment.

Question: How can trend-forecasting be re-designed to fit and serve a paradigm of sustainability?

The proposition was tested through a series of workshops with fashion industry stakeholders. The workshops constituted an introduction to various aspects of sustainability, by means of the modified version of trend-forecasting. The key way in which the validity of the proposition was addressed was the quantification and qualification of attitudinal change. As the scope of the intervention for practical reasons was restricted in time and space, it can be considered as a sample of what such an approach might entail. Therefore the anticipated level of change was also modest.

The study shows that trend-forecasters can indeed be helpful friends to fashion designers on their shared journey towards sustainability. Attitudinal change was evident in both the quantitative and qualitative analysis of the data. In the main, the intervention provoked a

broader rather than *deeper* engagement with fashion in the context of sustainability. This is consistent with the project's aim of introducing a systemic and holistic perspective. The workshop took on different meanings for different individuals. For example, the CSR representatives experienced having had their focus and values confirmed and validated, and were encouraged by the interest and enthusiasm for the subject of sustainability evidenced by their colleagues. The designers drew inspiration from the creative possibilities of design for sustainability. In general the workshop resulted in a new sense of hope - that positive change is possible, a realisation that the individual's contribution matters, and a new interest in sustainability and most importantly, that fashion and sustainable could be integrated.

"It gave me hope - the environmental concern was more manifest than I had thought. I discovered that there was more than I had thought amongst our designers as well. I found that very interesting... it was exciting and we have discussed it more afterwards as well, this inspiration that they also felt." (CSR, 2006: 4)

The second study confirmed the findings of the first study, and thus validated the appropriateness of the brief for the new trend-forecasting approaches, which were based on these findings. For example, the alienation processes that I had found were staged in the fashion industry provoked the simple but effective idea of setting up mixed stakeholder groups. The one most successful approach of the workshop design was indeed the interdisciplinary teams, which spurred a new sense of community and empowerment amongst the participants.

The generative level of the scenarios – the *Lucky People Forecasts* - that the groups created was high, many of which merit further exploration and development. However the study also showed how difficult it is to transcend our current paradigm and move from *what is* to *what if* when envisioning. Participants found it especially difficult to leave behind the keen commercial awareness, which is of course a desirable sensibility in a fashion industry context, and part of the *fashion pitch*. (See Giertz-Mårtensson, 2006 and Chapter 5, 5.6.9) Interestingly, the commercial alertness was not exclusive to fashion professionals, and not more pronounced by buyers than designers or CSR representatives. In fact, at times a 'cross-championing' of issues took place, where suddenly in a group the buyer became the strongest advocate of environmental principles, and the manager of CSR of financial viability. This is regarded as a highly positive feature and evidence of increasing empathy and a shared sense of ownership taking place in the groups.

When putting the observations of commercial attunement into the context of Edris's notion of a vision hierarchy, where visions are ultimately informed by religion (in a wide sense), regulated by politics and sustained by economics, two questions emerge. (Edris, 1987, see Chapter 5, 5.5.2) Has professional practice (and perhaps even contemporary Western lifestyle) conditioned us to a commercial stance to the point where it hinders envisioning processes? Does our acute commercial awareness impede envisioning processes, which

might, ironically, if left unconstrained, generate ideas of financial as well as environmental and ethical viability?

The underlying proposal of the inquiry 'what if fashion and sustainability were compatible or even synergistic' did spread beyond the remit of the workshop. Participants continued conversations with colleagues and friends, and the study has led to invitations to conduct several other workshops and lectures with the fashion industry and beyond.

In terms of the implementation of sustainability in the fashion industry three key findings emerged:

- Firstly, the study showed that niche does not necessarily permeate mass-market. Careful translation processes must be in place to ensure that lessons from academic research and advanced practitioners reach a broader audience. The self-referential nature of the fashion industry, and its high reliance on sales figures for confirmation make the process of 'legitimising' new ideas and practices for this audience complex. Ways of negotiating such precarious ground might be to initiate dialogue at a more strategic level between key fashion organisations, and to initiate pilot projects on, for example, product service systems with leading fashion brands. It appears crucial that working examples of systemic approaches are realised in the mass-market domain in order for further adoption to take place.
- Secondly, the study showed that the most auspicious condition for a prolonged engagement with sustainability to take place is when several participants, of different roles, from the same organisation are involved in the learning situation. It is vital that professionals can experience sharing values and commitment with their colleagues. This is an important insight for the further development of pedagogical models of sustainability for industry.
- Thirdly, the study showed that the singular most important aspect in terms of achieving a broadened engagement with sustainability is the experience of *agency*. Even a small degree of experiencing agency opens up to new areas of engagement at factual, subjective and relational levels.

The conversations with the participants generated a series of recommendations for further initiatives, including a web resource and development of a workshop series. Although literature now exists in the domain of fashion and sustainability, there appeared to be a gap in terms of easily accessible and 'hands-on' material. Further efforts should be dedicated to assimilating hand-books, tool-kits, data-bases and courses that directly address the fashion organisation's particular needs, and that recognises their particular modes of interacting with information.

6.5.2 Sustainable communication

Some of the most interesting findings generated through the inquiry concerned the way that sustainability can be communicated to an audience of fashion industry stakeholders. The following presents emergent themes that highlight some significant aspects in terms of the further development and implementation of sustainable strategies and practices.

Portable stories

"And then, this thing with the lifecycle, I have described that to... everyone I know, that sort of 80 percent of the environmental destruction has to do with our usage of clothes. That was really a proper eye opener." (Designer C, 2006: 2)

From the interview responses it was clear that some concepts and examples were especially powerful triggers for a shift in perception, such as the lifecycle model. It brought a broadened understanding of the systemic complexity of the fashion industry while the ecological footprint (Rees and Wackernagel, 1996) and rucksack concepts (Schmidt-Bleek, 1993) helped individuals to grasp their own and the fashion industry's role in unsustainability. The example of 'No Wash' – a top designed never to need washing (Fletcher and Earley, 2003) was successful in highlighting the user stage's impact of the fashion lifecycle, to the point where several participants described how they had changed personal laundry habits. Finally, 'local' was an idea that appealed to many participants and that they had immediately translated into their own lives in terms of, for example, shopping for food. In the case of all these concepts, not only had they stayed with the participants; the participants had also spread them beyond the remits of the workshop to colleagues, friends and family.

The relative success of these concepts and examples in conveying notions of sustainability merits an exploration of what might constitute their staying power or "stickiness." (Gladwell, 2000; see Chapter 5, 5.3.5) What made some stories 'portable' and others not? The success of the lifecycle map can partly be explained by its immediate, visual and simple quality; it was presented as a circle with lifecycle stages marked up and a product in the middle. When participants were presented with it, it meant that they had a visual framework within which they could integrate both knowledge they already possessed and new information they were given on the day.⁸⁸ Whilst the ecological footprint and rucksack concepts were presented in a less immediately visual format, they provoke strong mental images. The account of these concepts also included quite astounding statistics, which arguably contributed to their 'stickiness', as they may have been perceived as dramatic enough to store and even narrate further. In the case of No Wash, again the fact that the laundry of a garment may account for up to eightyfive percent of its total energy cost is dramatic. (Fletcher, 1999 after Franklin Associates 1993) Added to this is the idea of a garment that is never washed, which significantly breaks with common notions of hygiene and aspirational culture. Finally, and arguably most importantly, both No Wash and the concept of local offer immediate *agency*

⁸⁸ The importance of visual communication in relation to designers was discussed in Chapter 4, 4.6.1.1.5.

as well as being informative.⁸⁹ Their associated actions do require some extra effort – to go against the predominant appreciation of cleanliness, and to spend a little extra money – but they are not insurmountable, and the effort put in – the sacrifice – is probably significant in the individual's appreciation of herself or himself as taking part in something important and new, and in the narrative she or he presents to others. As a first proactive and positive step has been taken, and thus a threshold of apathy has been passed, these concepts may even constitute a springboard for further action. The concepts of No Wash and local provided doors straight into the reality of individuals' lives.

For the successful communication and implementation of sustainability the notion of 'portable stories' should be significant. Narratives that stimulate a visual image of otherwise abstract or complex information have the power to not only gain entrance to and potentially be integrated with an individual's personal body of knowledge and experiences, they also – because of their immediacy and – on the surface – simplicity, lend themselves to being passed on from one individual to another and thus become viral. (Some benefits of story-telling were addressed in Chapter 5, **5.9.3.2** which also gave a brief introduction to the related concepts of memes, **5.3.4**, and viral marketing, **5.3.5**)

Information and agency

The dynamic relationship between conveying information and agency in communicating sustainability is equally significant to acknowledge. The body of information about sustainability, in terms of literature, film, media coverage, is rapidly growing – information often focusing on the problem of unsustainability and the threat it poses to humanity. Late in my research process I came across a set of recommendations to communicate climate change, where exactly the need for agency "when people know what to do, decide for themselves to do it, have access to the infrastructure in which to act, and understand that their contribution is important" is stressed. Futerra, the sustainable communications organisation behind the guidelines, also emphasises that "fear without agency" can be counter productive by only achieving to foster apathy in an audience. (Futerra, 2005)⁹⁰

The success of the, on the surface, very simple concepts introduced above, can therefore be explained by their immediate visual aspects and the agency they embody. Equally enlightening were the accounts from the participants of situations where they did *not* know what to do, the result of which was that the workshop unfortunately in some aspects

⁸⁹ Both the former – to wash clothing less and at lower temperature and the latter – to buy local produce (an idea already promoted by the media and prestigious restaurants as a good and even luxurious choice) have intrinsic suggestions of actions immediately translatable to the individual's own, personal life.

⁹⁰ In another report Futerra studied the language of sustainability and found that many commonly used terms, such as 'renewable energy' were confusing to, or ignored by the sample. (Futerra, 2007)

disempowered them. In my eagerness to offer a rich introductory map of the area, hands-on suggestions – and thereby sufficient *agency* - were sometimes neglected.

Doors to sustainability

“It feels as if these papers that are lying around at [design industry body], I mean they are really good but they are also highly limited in terms of their range. It feels like they preach to those that are already saved... It is perhaps a communication problem... and something that also demands perhaps that one... gets to see how it works in practical terms too... Because it feels like, when one sees these individual designers, when they talk about eco... I am sorry to say this but it is a bit like this nineties eco... I mean that is the way the garments look in any case... And... she [fashion student] markets herself like that too with... images of nature and you know cows and there is nothing wrong with that but... I don't think that one gains any new followers perhaps.” (Journalist B, 2006: 8-9)

The quote above from a participant highlights the importance of carefully considering the language used when communicating sustainability to a fashion industry audience and beyond. In Chapter 3, 3.7.1, it was suggested that the still unsustainable condition of the fashion industry at mass-market level – *still* because there does exist a body of research disseminated through academic and industrial reports, and through the design of (mainly) niche designers – is due not to a lack of knowledge, but a lack of a successful knowledge ecology. The fashion industry has a considerably detrimental role in the sinister situation we face, and a potentially pivotal role in terms of making positive changes - because of the scale and the speed of the industry, and because of its direct and indirect influence over and presence in people's lives. In light of this situation our efforts should be turned to fine-tuning our communications. My appreciation is that the sustainability lobby has possibly been too insular and (bizarrely) self-sufficient, and relied too much on the rightness of its cause, to properly reach those areas where environmental impacts is at its highest, and also the scope for positive change is huge – such as the fashion industry's mass-market segment. I argue that in order to address such audiences, to successfully invite them into the paradigm of sustainability, we must truly understand and seek to engage with the paradigm in which they reside today.

The results of the workshops show that such a simple idea, to really engage with a particular audience's needs and interests – the fashion industry's familiarity with and interest in visual, experiential, emotive and inspirational language – can suddenly open doors which were shut when only quantitative, problem focused, constraints-orientated language was used.

Experiencing sustainability

“But... then suddenly modernity enters it all and that makes it also more attractive, to dedicate oneself to this area... However insane it might be that one should have... to feel that in order to get involved, but... thinking about how many other things... that one has to form an opinion about, where there are much bigger resources behind that... influences public opinion, I think that this [sustainability] would need exactly

the same level of professionalism... the same sort of minds with which one handles all other propaganda." (Journalist B, 2006: 12)

The quote above, from a fashion journalist who participated in the study, speaks of the need to employ a level of professionalism in the communication of sustainability that matches the one used in the commercial framework, and in other penetrating communications. In recent years such communication, engineered by marketers and branding experts, has been focusing on the *experiential* – promoting to end-users foremost the experience of goods, services and brands. (See e.g. Pine and Gilmore, 1999) This development follows a long trajectory of the commodification of every day life, and can be said to be part of an alienation process where users have become consumers, and are increasingly removed - geographically and mentally from the very actions and sites of production. The critique against such a society is well rehearsed, part of which is reflected in Chapter 3 (3.6), and is one of the commonly raised reasons for unsustainability. Yet, when we envisage a different society, a sustainable society, must not communicating the experience of it be vital?

"There was a strange stillness. The birds, for example – were had they gone? Many people spoke of them puzzled, and disturbed. The feeding stations in the backyards were deserted. The few birds seen anywhere were moribund; they trembled violently and could not fly. It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens, and scores of other bird voices there was now no sound; only silence lay over the fields and woods and marsh. (Carson, 1962: 2)

In *Silent Spring* from 1962, Rachel Carson's narrative of the eminent danger of a spring devoid of bird song was both so poetic and so informative that she evoked a generation's interest in ecology, and has been called the founder of the modern environmental movement. She also inspired artists such as Marvin Gaye. Arne Naess, another environmental pioneer, wrote about a "Simplicity of means and richness of ends" and that the sustainability imperative entailed a focus on *quality* rather than quantity of life. (Naess, 1989: 33) His early understanding of the supremacy of the experiential over – or at least along with – the factual, is evoked in recent developments of benchmarks such as the Happy Planet Index where a nation's environmental imprint is cross referenced with its population's well-being. (Friends of the Earth, New Economics Foundation, 2006) In Chapter 3 (3.4.3), the flawed assumption of a positive correlation between economic growth and happiness or well-being was discussed. (See e.g. Max-Neef, 1992)

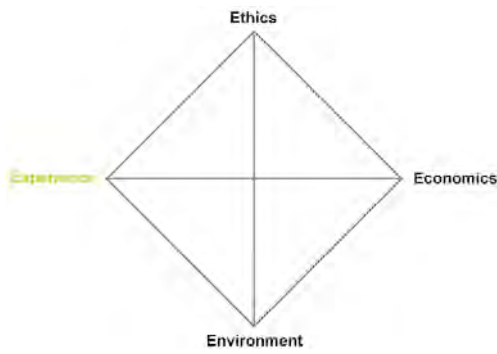


Figure 6.41 A quadruple bottom line: Priorities for the fashion industry and trend-forecasting (Adapted from Lundebye, 2003)

The figure above illustrates a framework of sustainability where the experiential aspect is added to the 'triple bottom line' of ethical, environmental, and economical concerns, which is a frequently used model in sustainability communications. Arguably the main-stream fashion industry at present resides in the horizontal field, between experience and economics. Its primary role is to ensure profit to shareholders, and to do this it needs to provide a delightful experience (appropriately priced) to users through the goods, services and brand offer. The fashion industry at mass-market level is ingenious at delivering slightly 'new' experiences to the user, at least twice yearly, by tuning into zeitgeist. As described in Chapter 5 (5.8.5), it takes its explorations into what inspires a particular audience at a particular time very seriously, conducting extensive research throughout the conceptualisation, design and marketing processes. Its audience is spoilt for choice of tantalising experiences delivered by the fashion industry, and a variety of other sectors catering to lifestyle. In recent jargon these all operate within the *experience* industry or economy.

Yet, for all the knowledge we possess about aspirational culture, about the need to reach people at an emotive level, and the need to focus on positive agency, in the main sustainability communications is devoid of experiential language. It asks us to be more energy efficient – using the term climate change to rally our efforts. What is the *experience* of carbon neutrality? How does zero waste to landfill *feel*? What is the *sensation* of biodegradability? These are abstract notions, terms where the negative or the reduction is in focus, and which do little to evoke an image of an increased quality of life, a vision of a better society for the individual and larger community on Earth. I argue that communication of sustainability must acknowledge the reality of experiential culture – which is surely nothing new, although only recently we call it such – and transcend the fixation with quantitative language. Let us try to envisage the positive experience of a carbon neutral – or carbon negative – city; let us evoke the social benefits of local life; let us bring out the intriguing stories of a cradle-to-cradle garment.

"A social movement is not scientific, its articulation must be permeated throughout with declarations of values and values priorities - norms, rules, imperatives... Is not the value-laden, spontaneous and emotional realm of experience as genuine a source of knowledge of reality as mathematics and physics?" (Naess, 1989: 32)

Sustainability as a research area – research as activism

There does exist pockets of academic dissemination where the experiential has found its place, such as in the 5 Ways project, which uses creative writing alongside factual accounts. (Fletcher and Earley, 2003) A rapidly growing number of websites, such as Treehugger.com and Inhabitat.com, engage their visitors in environmental discourse by coming from a lifestyle perspective and mimicking the journalism of for example fashion magazines. Yet, these are still fringe occurrences and, in the case of the websites, mainly employ their efforts at product level - 'replace you I-Pod with a greener MP3 player' – not at a systemic level. This brings about a question concerning the dissemination of research: how can it be brought out from dusty shelves into a design studio, a marketing meeting, and a teenager's bedroom? In cruder and more immediate terms: how can research be as sexy as a fashion show?

At the end of the PhD project, I started getting emails and phone calls from students wanting to do projects on eco-fashion and therefore interview me. These students had conducted plenty of research, and their questions were insightful and clever. I described to them the lifecycle perspective, and the need for systemic action, and involvement from a multitude of stakeholders. At the end of a long phone conversation with one of them, the seventeen year old girl said "but isn't it rather stupid that this information is not available to everyone?" "Yes," I said, "You are absolutely right. Isn't it stupid?"

This PhD thesis has, at one level, offered a critique of the current paradigm of research. I have challenged methodological frameworks, through my writings, and in my practice, and have insisted that it is possible to conduct robust research from a particular value position. I have, again in my writings and practice, considered research as activism. I argue that the sustainable imperative places particular responsibilities on the academic community, as well as on the commercial one. Sustainability should never be of purely academic interest; those findings that we generate should be made available, and *accessible* in a timely fashion to a lay audience. This in turn requires serious consideration of the language and media with, and through which the academic community disseminates.

"Yes, I mean, I have thought quite a lot about that one has to change one's attitude and that it so insane that it was so easy to get us to think differently but I suppose we are interested in it, but in any case... That every person and all school children and everybody ought to be given that information because then people would change a lot quicker but now it will take like another fifty years." (Student B, 2006: 2)

It also raises questions about the openness in terms of findings in process of both the academic and commercial community. In the light of the sustainability imperative, we cannot afford to be competitive or secretive about our research. The sustainability imperative requires that we share and build upon each other's findings and knowledge. It requires that we actively disseminate and exchange knowledge in any context where it may be potentially helpful and useful, whether prestigious or not.

There are many cases of a shared interest in sustainability fostering unusual co-operations. The Earth Day movement, which originated in the early 1970s, has rallied people across political party boundaries and nations (EDN, 2006), the very summit (World Commission on Environment and Development, 1987) at which the term 'sustainable development' was coined, arose from the recognition that sustainability requires global cooperation. In the realm of industry, the sustainability imperative has fostered such networks as Näringslivets Miljöchefer (Environmental Leadership Network, *my translation*) in Sweden, of which several Swedish fashion companies are members. Yet the existing knowledge ecology is not efficient enough to give a student, or a designer easy access. This has prompted me to reflect upon alternative dissemination channels, which might complement the papers, books and reports (and more recently websites). For a fashion audience the website medium is an obvious opportunity, however with the amount of information designers constantly access, the message risks getting lost. A more immediate channel may be that of a short film, strategically shown at fashion weeks, and of course on the Internet.

6.5.3 Sustainable professionals

The designer participants of this study confirmed the *education/reality gap* that was found in the first study of this PhD project. Expectations raised in an education, which focuses on creativity, individual expression and independent thinking, were not perceived to be met in the reality of (at least) the mass-market fashion industry, where the designer role is far more operational and sits within a far less flexible structure.⁹¹ It appears that this is yet another area where the fashion industry is unsustainable. It ought to be a matter of great importance to both fashion education and industry to create a climate that fosters *sustainable professionals*, in the sense that they may maintain and develop their curiosity in the long-term.

⁹¹ In Sweden, the reality of small designer labels is that they rarely survive more than three years. (Sundberg, 2006) These designers do not manage to reach large enough an audience willing to pay for original fashion; and they work very long hours, often also having to sustain a second job. In contrast, throughout the interviews I have conducted, and in informal conversation, those designers employed by the mass-market companies have often expressed frustration at how their work, to a large extent, consists of administrative, as opposed to creative work. These professionals, after the first buzz from being employed and getting to go on exciting trips has settled, as they reach their late thirties, question their future in the industry.

The mismatch poses questions about both the focus of fashion education and about how industry is organised. It appears that in the light of the sustainability imperative, fashion degrees ought to have a stronger focus on collaboration, and on being a team player, alongside fostering critical thinking and imagination and creativity. Again, in terms of the industry, the sustainable imperative demands creative professionals, who can be imaginative in both the short and long term perspectives.⁹²

The study suggests that currently the potential of fashion designers is not fully realised. It has also shown that fashion designers are very much open to the creative challenge that considering sustainability and the fashion offer systemically represents, and that their contribution in this area, alongside that of their buyer and CSR colleagues might be very valuable. Paradoxically fashion, arguably the fastest layer of civilization (see Brand, 1999, as described in Chapter 3, 3.1.3), in some aspects – such as the organisation of work, is conservative. Here, again, it may be fruitful to conduct pilot studies with industry exploring alternative ways of working, which embrace fashion designers' creative skills, which support ethical and environmental concerns, and which are financially viable.

6.5.4 A shared learning experience

From a pure egotistical perspective, it has been a tremendous privilege to, with different audiences, repeat the same workshop, and to receive feedback on the format, contents and facilitation. The workshop series proved very educational in terms of refining presentational skills, facilitation, tools and approaches. The experience of keenly observing and participating in, again and again, a creative process allowed me to articulate aspects of the tacit knowing that I had accumulated through teaching and commercial practice. Most importantly, I found that when I started taking my practice as a trend-forecaster, designer and educator from a commercial framework to one of sustainability, I found a new sense of purpose and grew much less focused on *me*, I could suddenly employ all my skills, experiences and efforts to a context far larger and important than I.

⁹² In Brand's terms we need both 'on-line and cathedral thinkers.' (Brand, 1999)

CHAPTER 7. CONCLUSIONS - How can trend-forecasters be helpful friends to fashion designers on their shared journey towards sustainability?

7. CONCLUSIONS - How can trend-forecasters be helpful friends to fashion designers on their shared journey towards sustainability?

“People who manage to intervene in systems at the level of paradigm hit a leverage point that totally transforms systems. You could say paradigms are harder to change than anything else about a system... But there's nothing physical or expensive or even slow about paradigm change. In a single individual it can happen in a millisecond. All it takes is a click in the mind, a new way of seeing. Of course individuals and societies do resist challenges to their paradigm harder than they resist any other kind of change.” (Meadows, 1997: part 1)

7.1 Introduction

This chapter presents the conclusions of the research aimed at answering the question in the chapter title, bringing together the findings introduced in the previous chapters. The section starts by discussing the relevance of this research in the light of the current situation, as regards fashion and sustainability, it goes on to present a synthesis of the findings of the secondary (Chapters 2, 3 and 5) and primary (Chapters 4 and 6) research. This concluding chapter finally draws together some reflections on the research process and lays out recommendations for further study.

7.2 The current situation and the relevance of this research

Since the start of this research, almost six years ago, the concept of sustainability has become increasingly visible both in the public domain generally and in the specific area of fashion.

Examples of key events and developments:

- *An Inconvenient Truth*, former United States Vice President Al Gore’s documentary film on climate change from 2006, contributed in popularising the carbon footprint concept (Guggenheim, 2006);
- The *Stern Report* added kudos and political force behind the economic argument for large and immediately implemented strategies for environmental improvement (Stern, 2006)
- New benchmarking frameworks, such as the Happy Planet Index (Friends of the Earth and New Economics Foundation), have been developed that cross-reference environmental footprint and human well-being with GDP;
- Sustainability, and in particular environmental issues have reached the front pages of national news papers, and popular TV shows are dedicated to ‘green life’¹;
- In spring 2007 Marks & Spencer became the first major retailer to announce and commit to a drastic and systemic five year process and 100 point strategy of

¹ See e.g. the launch of *Planet Green*, a round the clock environmentally conscious lifestyle show (Beautyman, 2008), and in the immediate context of fashion Mairie Claire, UK devoting an issue to the theme of eco-fashion. (O’Riordan, 2008)

environmental improvement under the strap-line of “Plan A because there is no Plan B” (M&S, 2007);

- Between 2005 and 2008 fashion shows and events dedicated to the area of sustainability were staged in fashion metropolis such as London, Paris and New York²;
- Sustainability, and environmental and ethical issues in the context of fashion and design, is an increasingly targeted research area, which has resulted in a body of new literature.³

Thus, on the surface the adoption of sustainable thought and action appears much further ahead than it was six years ago. However, the public sustainability discourse, although expanded, has yet to adopt systemic, holistic approaches. The promise of niche fashion practitioners, and cutting edge researchers working with lifecycle approaches, and of product service systems being piloted in other design fields, has yet to be fulfilled in the mass-market segment of the fashion industry. While all the emerging environmental strategies in fashion must be viewed as highly positive developments, they do not constitute the systemic approach needed to reverse the alarming effects of a consumerist and producerist society. (See e.g. Stern, 2006; and Lovelock, 2006) Moderate environmental improvements are easily eaten up by the astounding scale and speed of fashion.

Unfortunately, and contrary to popular belief (such as that currently held by those working in sustainable fashion), this study indicates that approaches of niche eco-fashion do not as a matter of course eventually filter through to the mass-market scene. While mass-market designers express a level of curiosity about these niche products, it takes much more persuasion to convince the buyers and other finance related staff. Whilst Marks & Spencer’s initiative is important and should be inspiring to competitors, it is another matter whether they constitute a sufficiently strong brand, from a fashion point of view, to spur on the fashion industry. The situation is one of a catch-22 where without a sufficient body of inspiring examples in the mass-market domain, there will not be a sufficient body of inspiring examples in the mass-market domain... The self-referential nature of fashion has been a strong theme all through this thesis.

Therefore, environmental improvement at systems level in the mass-market segment of the fashion industry is as urgent as it was when this project started, as is the need for drivers with credibility and access to the industry. The timeliness and relevance of this piece of research remains significant.

² See e.g. Ethical Fashion Show, Paris, organised by Universal Love Association; RE: Fashion, London, organised by Anti-Apathy and Future Fashion, New York, organised by Verdopolis.

³ See e.g. how at the International Fashion conference, Dressing Rooms, Oslo University, May 2007, sustainable approaches to fashion constituted the biggest theme, and the new books by Fletcher (2008) and Black (2008).

7.3 Synthesis of the research findings

This thesis, *Lucky People Forecast*, proposes that a futures perspective in general, and the trend-forecasting approach in particular, can empower environmental improvement at systemic level in the fashion industry's mass-market segment.

The focus of the initial exploratory research, which constituted both a literature review and empirical research, was to generate knowledge in the domain of the organisation and knowledge ecology of the fashion industry at mass-market level, in terms of the patterns of co-existence between trend-forecasting, fashion design and environmental work. The research sought greater understanding of the rationales behind the resistance to, and engagement with environmental principles and practices in the fashion industry, and what constitutes important drivers for change in this context. The study aimed to establish the scope and the requirements of trend-forecasting as an alternative soft driver to complement formal drivers, as exemplified by legislation. The more specific nature of this driver was explored through additional theoretical research, which was followed by the design of a shared learning experience facilitated by the new trend-forecasting methodology. Finally the new driver was tested in a substantive empirical research study.

7.3.1 Summary of the exploratory research – literature review and first empirical study

A first pillar of the study constituted exposing a gap in existing formal, top-down driving forces, by comparing their reach with the relative impacts of each stage of the fashion product lifecycle. The research showed that formal drivers fail to address those stages where the impact is potentially the highest (the user stage) and where the scope for improvement is utmost (the conceptualisation and design stages). The research also identified that existing literature on environmental impact and strategies for improvement as regards fashion (and in general) is not easily accessible to fashion designers. This is due to the texts' scientific language and quantitative focus and their general failure to target fashion designers' priorities.

The thesis suggests that the reasons behind the omission of legislators and researchers in terms of seeking ways of engaging fashion designers in environmental improvement are complex. The conventional perception of fashion as a women's area, and the 'fashion smirk' - belittling of fashion's significance as a design field in comparison with for example architecture, may contribute to it being neglected as an area for improvement. Additionally, when the need for environmental strategies in the field of fashion first started becoming recognised, in the late 1980s, such work often came to fall on professionals responsible for quality control. The field of environmental improvement came to be developed as a series of constraints, as exemplified by the ubiquitous chemical restrictions list, instead of an area of opportunity that might benefit from designers' creative input. The theoretical exploration of

the fashion industry's limited engagement with sustainability thus point to both *cultural* and *organisational* barriers.

The literature revealed alienation processes to be an overarching explanation behind unsustainability. Alienation between human beings and nature (Merchant, 1982) and producers and consumers (following Marx, see e.g. Avineri, 1968) is described as a predominantly Western set of separations or dualisms brought on and exemplified by the Scientific Revolution, industrialisation, the rise of a symbolic economy and a surrogate society (following Max-Neef, 1991, 1992), and individualisation. This research suggested that the fashion industry or organism can be understood as symptomatic of system with severed or missing feedback loops.

The first empirical study showed that the theoretical proposition of alienation is indeed staged in the fashion industry at mass-market level, which offers further rationales behind the resistance to adopting strategies for environmental improvement at systemic level, beyond what legislation currently requires.⁴

Some key deeply rooted myths or beliefs emerged at the forefront of resistance to sustainability work, such as perceptions of a) socio-environmental concerns – not perceived as a priority for consumers and therefore below the financial radar; and b) how successful business is conducted – perceived as relying upon specialised roles and short-term priorities.

However this empirical research also offered hope in that:

- The level of interest that fashion designers expressed in sustainability was higher than their knowledge level;
- Some fashion organisations were characterised by what in systems terms is called *bounded instability*, an auspicious combination of flexibility and stability which indicates scope for fashion professionals to pursue individual interests; and
- Although their actual practice often did not allow much space for it, the fashion designers declared their key interests to be in the realm of creativity and 'the bigger picture'.

The conclusion of this part of the research was that the best way to affect environmental improvement at systemic level in the fashion industry, i.e. change, is to focus on *information and knowledge transfer, motivation/inspiration* and *futures oriented thinking*.

⁴ The empirical research revealed that alienation was staged in: a) the high degree of specialisation in the fashion organisation; b) the very fragmented understanding of sustainability amongst designers, an understanding clouded by stereotypes; c) the geographical and psychological remoteness of production from designers; d) the hectic schedule of fashion professionals and the focus on short-term results; e) the discrepancy between personal and professional value systems in fashion professionals.

A significant opportunity was identified in that trend-forecasting was found to occupy an integral role in the fashion design process. The study showed that alongside previous sales figures, trend-forecasting is the most important driver of fashion at mass-market level, and therefore a potentially viable agent of change. It was established that trend-forecasting offers a set of language, methods and processes familiar and relevant to the fashion industry. The findings from the first empirical study provided guidance in terms of the requisites and desirables for adapting trend-forecasting to a new role of supporting designers and the fashion industry in the larger context of sustainability.

This resulted in a brief specifying that the new trend-forecasting methodology should:

- Offer interdisciplinary and participatory processes;
- Focus on opportunities rather than constraints;
- Invite designers into a strategic and visionary realm;
- Use creative and image led approaches; and
- Introduce fashion and sustainability as compatible instead of polarities.

7.3.2 Summary of the exploration of change and methodological approaches

So far the research had established the inadequacy of formal driving forces at affecting necessary changes as regards speed, scale and focus; and subsequently the need for and the requisites of an alternative driver. The theoretical research that followed explored the efficacy and sensitivity of various systemic approaches to change, in order to further inform the new driver. From *interdependence* and *co-evolution*, central tenets of systems theory, followed the understanding that design both responds to and forms context. It was found that the most powerful change is paradigmatic i.e. directed at the - perception of - the entire system. Here the notion of *envisioning* as the core of futures studies and trend-forecasting (Sardar, 1999) posed the question of how we might have glimpses into other possible paradigms. A critical exploration of the field of trend-forecasting and Futures Studies confirmed the circular argument that they can constitute, and therefore their potential power of perpetuating a biased worldview further emphasised the need to introduce into the new driver multiple stakeholder dialogue, structure and space for reflexivity, and methods to access 'new' visions.

A 'what if?' approach, i.e. research into the future poses epistemological questions, not least because of its intrinsically speculative nature and because it may imply self-fulfilling prophecies. Both aspects were considered positive for this research: the former, as stated above, important in exploring alternative paradigms for fashion; the latter came to be part of the proposition of research as activism and was therefore built into the study. However, research from a particular value position and conceptual framework demands a high degree of care and reflexivity. To maintain academic rigour and secure the integrity of the research

from the perspective of a paradigm of sustainability, a series of quality criteria were developed to guide the inquiry. These encompassed notions of:

- Generative quality – creative and visionary level (following Kajzer, 2004);
- Relevance and meaningfulness - for all participants, and in terms of the ultimate aims;
- Inclusivity – participation in and democracy of process; and
- Transparency – the accessibility of the research process and outcomes to participants and beyond.

The exploratory research on change also unveiled a series of approaches that might theoretically meet the requirements stated in the previous paragraphs. Action oriented research is described as both informative and transformative, and because of the emphasis on an extended epistemology - including theoretical, experiential, practical and presentational knowing (see e.g. Heron and Reason, 2001), it was considered especially relevant for the field of design. So far action-oriented approaches have mainly been tried out in the fields of health care and education and no evidence could be found of its application to fashion. There does exist a substantial body of work recommending research and design approaches that are participatory, cooperative and interdisciplinary. However, there is very limited evidence of such approaches applied in practice and, again, none in the domain of mass-market fashion. A significant contribution of this research is therefore the tailoring, applying to and evaluating these approaches in the fashion industry context.

7.3.3 Designing creative workshops as a shared learning experience – Welcome to three hours in 2026

The substantive empirical research explored the viability of the modified version of trend-forecasting as a soft driver for (design led) environmental improvement at systemic level in the mass-market segment of the fashion industry. The proposition '*What if fashion and sustainability were compatible or even synergistic?*' underpinned this inquiry, and both its transformative and generative quality was explored. This experimental approach came to encompass a rich process of designing a shared learning experience, with a delicate enough balance of structure and flexibility to meet the demands of academic rigour, the research agenda, and the particular quality criteria of this inquiry.

The outcome of the design process was a series of interdisciplinary workshops that brought together fashion designers, buyers, environmental officers, trade body representatives, journalists, educators, students and users. The workshops mixed informative, analytical and creative approaches, drawing on language, methods and processes from the fields of a) fashion/design/research; b) trend-forecasting and Futures Studies; and c) sustainability and eco-literacy. The workshops were set twenty years ahead in time, in order to provide an 'uncontaminated', relatively free space of exploration, and to draw upon fashion

professionals' stated interest in the future. They generated scenarios for mass-market fashion in year 2026, exploring aspects such as user experience, retail outlets, emerging technologies, innovative products and services – all from within a framework of sustainability.

7.3.4 Summary of the experimental Stage 2 study

The workshops, and the subsequent interviews with each participant, generated a series of interesting insights. In the analysis that followed changes were drawn out in terms of:

- Perception as regards the compatibility of fashion and sustainability and the 'brand' of sustainability;
- Knowledge and awareness of sustainability in general, and of environmental improvement in the fashion industry in particular;
- Understanding of relationships, such as how the fashion industry and the individual's personal and professional practice is located in the larger system of sustainability;
- Action and activism - personal and professional practice, and a potential spread of the proposition of the study beyond the remit of the workshops.

Most participants came to the sessions expressing a clear dichotomy (on the one hand *fashion* – 'a creative, dynamic pursuit, where I can situate myself', and on the other hand *sustainability* – 'outside my professional realm and with value associations alien to fashion'). However, by the end of the session, in the scenarios that the groups generated, such a dichotomy no longer existed. After having defined what sustainability meant for the particular group, e.g. claiming ownership through identifying particular relationships, the creative process synthesised sustainability with fashion. The mixed stakeholder format was met by an overwhelming response because it invited a shared commitment across the role boundaries that lasted after the session. Likewise, there was great excitement at having a forum for discussion (albeit temporary) on the topic of sustainability; participants were empowered by the realisation that their colleagues cared. The participants responded very well to the creative and visionary approaches. The insider/outsiderness of the researcher/facilitator/participant was deemed positive by the participants. Evaluation of the workshop process showed that an adaptation of the cultural probes approach proved especially important in this "minding of the gap" between personal and professional value positions, and between professional roles. (See also Sadowska and Tham, 2004; 2005)

Whilst the focus of the workshops was a scenario for fashion in 2026, this was largely intended for the purposes of facilitation; the workshops were designed to be process rather than outcome oriented. However, the level of the ideas that emerged was higher than expected. Coming (in the main) from a limited and fragmented understanding of sustainability, with distinct product focus, the groups generated concepts that targeted fashion and sustainability at systemic level, and with a keen sense of the lifecycle. Analysis

of these creative processes highlighted how significant a role metaphors can play in enabling groups to make this leap. Not only did the metaphors ensure a level of shared understanding across a group, they also invited the participants into new spaces of understanding and new design territories.

7.4 New knowledge generated through this inquiry

Stated below are the key contributions of this research. The work has brought new insights in the following domains:

7.4.1 Knowledge

Increased understanding of the knowledge ecology in the fashion industry

The novel approach of combining and exploring the potential synergies between the three areas of trend-forecasting/Futures Studies, fashion theory and practice, and sustainability and environmental literacy has furthered the understanding of the information flow in the fashion industry's mass-market segment, and in particular how the strands of trend-forecasting, fashion design and environmental work interact.

Directives for sustainability communications

The drawing out of the rationales behind barriers to and engagement with environmental improvement in the realm of the fashion industry at mass-market level has resulted in directives for communication of sustainability in this context.

Insights for synergy between the fashion moment and sustainability

The conceptualisation of the difference between clothing and fashion in the context of the sustainability imperative, and the identification of the opportunities this distinction offers, has generated key insights that can forward the development of environmental strategies for fashion. (Following Fletcher and Tham, 2004)

7.4.2 Strategies

A new driver for environmental improvement

The new (in its combination of language, methods and processes) methodology can further the implementation of systemic environmental improvement in the fashion industry at mass-market level, and the fashion and sustainability discourse.

Tools for multiple stakeholder dialogue

The approaches and tools for multiple stakeholder dialogue that emerged from the study are considered of particular value, as the sustainability imperative requires cooperation at many levels.

Approaches to sustainability pedagogy

Through its design led engagement with the implementation of sustainability in the realm of the fashion industry, the study generated insights into and approaches for sustainability pedagogy in the context of fashion design.

7.4.3 Research

Design led perspectives for transformative research

By challenging the conventional research framework the study has contributed with design led perspectives for transformative searching, and research from within a particular value system.

The epistemological leap, from '*what if?*' to '*what is?*', and the endeavour to embody and support a paradigm of sustainability generated approaches to the design of a study, the quality criteria guiding it, and its analysis framework.

It is considered possible that the methodological approaches developed through this study may inform research beyond the scope of fashion, and be of value to other researchers interested in exploring an area - and bringing change to it - from within.

7.4.4 Vision

New imagery and legends

Finally, the scenarios that were generated offer new imagery and legends where the visions of fashion and sustainability are expanded from constraints to opportunities, from product to systems level, and where the fashion designer role is both strategic and operational.

<i>Knowledge</i>	<p>A synthesis of Futures Studies/trend-forecasting, fashion design, and sustainability/eco-literacy.</p> <p>Guidelines for communication of sustainability in the context of fashion.</p> <p>Insights for synergy between the fashion moment and sustainability and environmental strategies.</p>
<i>Strategies</i>	<p>A methodology to implement systemic environmental improvement and to further fashion and sustainability discourse.</p> <p>Approaches and tools for multiple stakeholder dialogue.</p> <p>Approaches to sustainability pedagogy.</p>
<i>Research</i>	<p>Design led perspectives for transformative searching, from within a particular value system.</p>
<i>Vision</i>	<p>New imagery and legends of fashion in the context of sustainability.</p>

Figure 7.1 Contributions

7.5 Summary of the knowledge contribution

'Lucky people' signifies the conviction that hope, inspiration and creativity have an important role to play in the fashion and sustainability discourse. 'Lucky People' also signifies an agility of mind; in moving between the present and the future, and making interconnections between a variety of fields and stakeholders.

Through its synthesis of the three areas of trend-forecasting and Futures Studies, fashion design, and sustainability and environmental literacy, this study has generated insights into the implementation of sustainability and developed design led approaches to research from a particular value position, and research that is both informative and transformative.

Together these approaches constitute a new driver for environmental improvement at systemic level in the fashion industry's mass-market segment.

Lucky People Forecast is limited in its scope, and the interventions - a series of workshops - were for practical reasons short. However, the overwhelming response from the participants made very clear the "hunger" (in one participant's words) for knowledge and skills in the area of sustainability that the fashion professionals felt. When they were given a forum to explore the relationships between fashion and sustainability, and approaches that resonated with their realities, they were quick to start adapting their existing 'casts' and legends. The very simple idea of bringing different stakeholders together, and the resulting expanded knowledge ecology, brought empowerment, and stretched the boundaries of our visions and creativity.

Sustainable fashion does require a wealth of expertise in terms of resourcing and processing. I argue that at least as important is how we organise fashion, our learning and communication. In modernity a Fordist legacy of specialisation appeared efficient and timely. Now we must seek to harness creativity in systems that transcend professional boundaries for quality instead of quantity of fashion.

7.6 Reflections on the research process

The conceptual or imaginary journey that is the object of this study is a journey that I have shared with many others. I started out looking at fashion and sustainability as polarities but came to see the study as an integration project. While initially fearful of being evangelical, I gradually began to see my research as a piece of activism. The journey has been transformative for me as a researcher, educator, designer, trend-forecaster and individual in the world. I have experienced how at least trying to work from a particular value position - a paradigm of sustainability - can offer a meaningful perspective and lead to a highly enriching process. I am especially grateful for the generosity of all participants that contributed to the shared learning experience that I merely designed the seeds for.

7.7 Recommendations for further research

Lucky People Forecast has furthered the knowledge in the area of how environmental practices at a systems level can be implemented in the fashion industry's mass-market segment. The knowledge generated through this inquiry is by no means exhaustive; there is considerable scope for further research into the issues that the work brought out. The following paragraphs lay out some recommendations of suitable directions for subsequent research.

- The success of the introduction of the new trend-forecasting methodology indicates the usefulness of trying it out in a larger study. Such a study might be more interdisciplinary in nature and include stakeholders from for example the production end and encompass other design industries with products of a high fashion level.
- The sustainability imperative demands new knowledge, practices and roles for professionals in the fashion industry and the design industry at large. New requirements include more strategic thinking, systemic thinking and interdisciplinary approaches. It is recommended that subsequent research explore how fashion education does and can prepare students for these demands. Subsequent research should also address how the fashion industry can employ and further designers' interests, knowledge and skills within the context of sustainability.
- The viability of such concepts as the lifecycle approach and Product Service Systems was tested through scenario work in this study. It is recommended that subsequent research builds on the findings and further explores these concepts' viability in a real practical context, through pilot studies.
- The specific scenarios that were developed show great potential for further development and practical application. Subsequent research may focus on developing these further and trying out their applicability to industry in pilot studies.

Finally it is recommended that research building on the knowledge generated through this inquiry might note how the product of this thesis is very much interconnected with its process. I have dedicated considerable efforts to trying to understand the implications of conducting research from within a particular value system and from a futures perspective. It is my experience that such an approach can empower and enrich research, but it also challenges a conventional epistemological framework. It is hoped that the epistemological and methodological insights I gained can be helpful to other researchers.

Imagine a fashion forecast set far into the future, or perhaps not so far away after all. What do we see, what can we smell, touch and hear? Perhaps a team of designers, ecologists and users are working together on a new concept; considering how old garments can be refutured, and designing a virtual play-list of the most immediate and short-lived trends. Perhaps a group of teenagers are visiting their local fashion library, laughing while experimenting with identity and style. Perhaps fashion has refound and redefined itself within a context of sustainability.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Aaltonen, M., and T. Barth. 2004. How Do We Make Sense of the Future? An Analysis of Futures Research Methodology – V2.0. In 2004 Mid-Year Planning Committee Meeting, edited by A. U. M. Project. Washington: American Council for the UNU - Millennium Project.
- Allan, J., Fairlough, G. and B. Heinzen. 2002. *The Power of the Tale: Using Narratives for Organisational Success*. London: John Wiley and Sons.
- Allen. R., ed. 2001. *The New Penguin Dictionary*. London: Penguin Books
- Allinson, C.W., and J. Hayes. 1996. The cognitive style index: A measure of intuition-analysis for organisational research. *Journal of Management Studies* 33 (1): 119-135.
- Allison, L. 2005. Lyocell. *The Costume Gallery: Textile Reference Manual 2002* [cited 12 October 2005]. Available from <http://www.costumegallery.com/Textiles/lyocell.htm>.
- Allwood, J. M., Ellebaek Laursen, S., Malvido de Rodriguez, C. and N. M. P. Bocken. 2006. *Well Dressed? The present and future sustainability of clothing and textiles in the United Kingdom*. Cambridge: University of Cambridge Institute for Manufacturing.
- Ames, S. C. 1997. *Community Visioning: Planning for the future in Oregon's local communities*. Paper read at American Planning Association conference, June 1997, at San Diego.
- Arcadia. 2005. CSR. Arcadia Group. [cited 13 July 2005]. Available from <http://www.arcadiagroup.co.uk>
- Armstrong, J. S., ed. 2001. *Principles of Forecasting: A handbook for researchers and practitioners*. Norwell, Massachusetts: Kluwer Academic Publishers.
- Armstrong, M. 2006. *A handbook of Human Resource Management Practice*. London: Kogan Page.
- Arnold, R. 2001. *Fashion, Desire and Anxiety: Image and morality in the 20th century*. London: I.B. Tauris.
- Atkisson, A. 1999. *Believing Cassandra*. Melbourne: Scribe.
- Avineri, S. 1968. *The Social and Political Thought of Karl Marx*. Cambridge: Cambridge University Press.
- Ballard, D. 2005. Using Learning Processes to Promote Change for Sustainable Development. *Action Research* 3 (2): 135-156.
- Barthes, R. 1983. *The Fashion System*. Berkley: University of California Press.
- Bassey, M. 1991. Creating Education Through Research. *British Educational Research Journal* 18 (1): 3-16.
- Batchelor, D. 2000. *Chromophobia*. London: Reaktion Books.
- Bateson, G. 1979. *Mind and Nature: A necessary unity*. New York: Ballantine.
- Bateson, G., ed. 2000. *Steps to an Ecology of Mind: Collected essays in anthropology, psychiatry, evolution and epistemology*. Chicago: University of Chicago Press.
- Baudrillard, J. 1970. *The Consumer Society - myths and structures*. London: Sage Publications.
- Beach, L.R., and T.R. Mitchell. 1987. Image theory: Principles, goals and plans in decision. *Acta Psychologica* 66 (3): 201-220.
- Beavan, C. 2008. Our problem, you see, is insufficient materialism. *No Impact Man* 2008 [cited March 2 2008]. Available from <http://noimpactman.typepad.com/blog/2008/02/is-materialism.html>.
- Beck, U. 2000. *World Risk Society*. Cambridge: Polity Press.
- Bell, J. 1999. *Doing Your Research Project: A guide for first-time researchers in education and social science*. Buckingham Philadelphia: Open University Press.
- Bell, W. 1996. What do we mean by futures studies? In *New Thinking for a New Millennium*, edited by R. A. Slaughter. London: Routledge.
- Bell, W. 1997. *The Foundations of Future Studies*. Vol. 1 and 2. NJ: Transaction Publishers.
- Bell, W., and J.A. Mau. 1971. Images of the future: Theory and research strategy. In *The sociology of the future: Theory, cases, and annotated bibliography*, edited by W. Bell and J. A. Mau. New York: Russell Sage.
- Benyus, J. M. 1997. *Biomimicry: Innovation Inspired by Nature*. New York: Harper Collins.
- Berger, P. L., and T. Luckmann. 1967. *The Social Construction of Reality: A treatise in the sociology of knowledge*. London: Penguin Publishers.
- Bey, H. 1985. *T.A.Z. Temporary Autonomous Zone*. New York: Automedia.
- Birkeland, J. 2002. *Design for Sustainability: A sourcebook of integrated eco-logical solutions*. London: Earthscan Publications.

- Black, S. 2006. *Interrogating Fashion*. London College of Fashion, University of the Arts London 2005 [cited 16 November 2006]. Available from <http://www.interrogatingfashion.org/web/serv/if/web/pages/home/index.html>.
- Black, S. 2008. *Eco-chic: The fashion paradox*. London: Black Dog Publishing.
- Blackler, C., Denbow, R., Levine, W., Nemsick, K. and R. Polk. 1995. *A Comparative Analysis of Perc Dry Cleaning and an Alternative Wet Cleaning Process*. MA Dissertation, University of Michigan School of Natural Resources and Environment, Michigan.
- Blackmore, S. 1999. *The Meme Machine*. Oxford: Oxford University Press.
- Blankenship, S. 2005. *Outside the Center: Defining Who We Are*. *Design Issues* 21 (1): 24-31.
- Blumer, H. 1969. *Fashion: From class differentiation to collective selection*. *Sociological Quarterly* (10): 275-291.
- Bohm, D. 1995. *Wholeness and the Implicate Order*. London: Routledge.
- Bourdieu, P. 1984. *Distinction: A social critique of the judgement of taste*. Translated by R. Nice. Cambridge, MA: Harvard University Press.
- Bourdieu, P. 1993. *The Field of Cultural Production. Essays on Art and Literature*. Cambridge: Polity Press.
- Borgmann, A. 1984. *Technology and the Character of Contemporary Life*. Chicago: University of Chicago Press.
- Borgmann, A. 1995. *The Depth of Design*. In *Design: Exploration in Design Studies*, edited by V. M. a. R. Buchanan. Chicago: University of Chicago Press.
- Brand, S. 1999. *The Clock of the Long Now: Time and Responsibility*. London: Weidenfeld and Nicolson.
- Brannon, E. L. 2005. *Fashion Forecasting*. New York: Fairchild Publications.
- Bras-Klapwijk, R., and M. Knot. 2000. *Environmental Assessment of Future-scenarios in the Sushouse Project; illustrated for clothing care*. Paper read at International Sustainable Development Research Conference, 13-14 April 2000, at Leeds.
- Bray, J. N., Lee, J., Smith, L. L., and L. Yorks. 2000. *Collaborative Inquiry in Practice: Action, reflection and making sense*. Thousand Oaks, CA: Sage Publications.
- Breds, D., Hjort, T. and H. Krüger. 2002. *Guidelines: A handbook on the environment for the textile and fashion industry*. Translated by A. V. Christense. Copenhagen: Sustainable Solution Design Association.
- Briscoe, J., and D. Fox. 2003. *Clothes maketh the businesswoman*. All about Yves- and Gucci. Review of Wardrobe and work Tom Ford. *Financial Times*, September 21, 5, 6.
- Broby-Johansen, R. 1968. *Body and Clothes*. Translated by K. Rush and E. I. Friis. London: Faber.
- Brooks, D. 2000. *Bobos in Paradise: The new upper class and how they got there*. New York: Simon and Schuster.
- Brown, Jeremy. 2004. *Trends*. Sense Worldwide [cited 5 November 2007]. Available from <http://www.senseworldwide.com>.
- Brown, S. 2007. *Play Science: The patterns of play*. The National Institute for Play 2006 [cited 30 July 2007]. Available from http://www.nifplay.org/states_play.html.
- Brunnström, L. 2006. *Telefonen: En designhistoria*. Stockholm: Atlantis.
- Bruzzi, S., and P. Church Gibson, eds. 2000. *Fashion Cultures: Theories, Explorations and Analysis*. London and New York: Routledge.
- Bryman, A. 2001. *Social Research Methods*. Oxford: Oxford University Press.
- Buchanan, V., and R. Margolin. 1989. *Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice*. In *Design Discourse*, edited by V. Margolin. Chicago: University of Chicago Press.
- Burgess, R. G. 1984. *In the Field: An Introduction to Field Research*. London: Allen and Unwin.
- Calzado, J. S. M., and M. Ruiz. 2002. *Planet Zara*. Canal Plus.
- Campbell, C. 1998. *Consumption and the Rhetoric of Need and Want*. *Journal of Design History* 3 (11): 235-246.
- Campbell, C. 2003. *I Shop Therefore I Know That I am: The Metaphysical Basis of Modern Consumerism*. In *Elusive Consumption: Tracking New Research*, edited by K. Ekstrom and H. Brembeck. Oxford: Berg.
- CAOS. 2007. *Color Association: A history of its formation and development*. Color Association of the United States 2007 [cited 22 July 2007]. Available from <http://www.colorassociation.com/site/aboutus.html>.

- Capra, F. 1996. *The Web of Life: A New Synthesis of Mind and Matter*. London: Flamingo An Imprint of Harper Collins Publishers.
- Carey, J, ed. 1999. *The Faber Book of Utopias*. London: Faber.
- Carson, L. 2006. Avoiding Ghettos of Like-Minded People: Random selection and organizational collaboration. In *Creating a Culture of Collaboration: The International Association of Facilitators Handbook*, edited by S. Schuman. San Francisco, CA: Jossey-Bass, John Wiley & Sons.
- Carson, R. 1962. *Silent Spring*. Boston: Houghton Mifflin Co.
- Chapman, J. 2005. *Emotionally Durable Design: Objects, Experiences and Empathy*. London: Earthscan.
- Chenail, R. J. 1995. Presenting Qualitative Data. *The Qualitative Report* 2 (3).
- Chermack, T. J. 2005. Studying Scenario Planning: Theory, research suggestions, and hypotheses. *Technological Forecasting and Social Change* 72 (1):59-73.
- Chermack, T. J., Lynham, S. A., and W. E. A. Ruona. 2001. A Review of Scenario Planning Literature. *Futures Research Quarterly*:7-29.
- Coker, J. 1997. World Textile and Clothing Consumption: Forecasts to 2005. *Textile Outlook International* (March): 35-76.
- Commission of the European Communities. 2003. *Evolution of Trade in Textile and Clothing Worldwide: Trade figures and structural data*. Brussels.
- Cooper, P. 1995. The Consequences of New Environmental Legislation on the UK Textile Industry. *Textiles Horizons International* 12 (10): 30-38.
- Cooper, R. N., and R. Layard. 2003. *What the Future Holds: Insights from social science*. Cambridge, Massachusetts: The MIT Press.
- Corning, P. 1998. The Synergism Hypothesis: On the concept of synergy and it's role in the evolution of complex systems. *Journal of Social and Evolutionary Systems* 21 (2).
- Corning, P. 2003. *Nature's Magic: Synergy in evolution and the fate of humankind*. Cambridge, MA: Cambridge University Press.
- Corning, P. A. 1983. *The Synergism Hypothesis: A theory of progressive evolution*. New York: McGraw-Hill.
- Corning, P. A. 1995. Synergy and Self-organization in the Evolution of Complex Systems. *Systems Research* 12 (2): 89-121.
- Cornish, E. 2005. *Futuring: The exploration of the future*. Bethesda, Maryland: The World Future Society.
- Cortese, A. 2005. Wearing Eco-Politics on Your Sleeve. *Verdopolis 2005* [cited 12 October 2005]. Available from <http://www.verdopolis.org/pdf/nyt-eco-fashion-03-20-05.pdf>.
- Coupland, D. 1991. *Generation X: Tales for an accelerated culture*. London: Abacus.
- Crane, D. 1999. Clothing Behavior as Non-Verbal Resistance: Marginal women and alternative dress in the nineteenth century. *Fashion Theory* 3 (2): 241-268.
- Crane, D. 1999. Diffusion Models and Fashion: A Reassessment. *Annals of the American Academy of Political and Social Science* 566: 13-24.
- Crane, D. 2000. *Fashion and its Social Agenda: Class, gender and identity in clothing*. Chicago: The University of Chicago Press.
- Cresswell, J. W. 1994. *Research Design: Qualitative and Quantitative Approaches*. London: Sage.
- Cresswell, J. W. 1998. *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. London: Sage.
- Crichton, M. 1995. *The Lost World*. New York: Ballantine Books.
- Cupit, M.J. 1996. *Opportunities and Barriers to Textile Recycling*. Abingdon, Oxfordshire: AEA Technology.
- Davidson, R. 2006. Ethical Fashion or Fashionable Ethics? *New Consumer*, 5 April 2006.
- Davies, F. 1992. *Fashion, Culture and Identity*. Chicago: The University of Chicago Press.
- Davis, F. 1991. Herbert Blumer and the Study of Fashion: A reminiscence and a critique. *Symbolic Interaction* 14 (1): 1—21.
- Davis, F. 1992. *Fashion, Culture, and Identity*. Chicago: The University of Chicago Press.
- Dawkins, R. 1976. *The Selfish Gene*. Oxford: Oxford University Press.
- de Jouvenel, B. 1964. *The Art of Conjecture*. New York: Basic Books.
- de la Haye, A., and S. Tobin. 2006. *Chanel: The Couturiere at Work*. London: The Victoria & Albert Museum.
- de la Haye, A., and E. Wilson, eds. 1999. *Defining Dress: Dress as object, meaning and identity*. Manchester: Manchester University Press.

- DeGraf, J., Wann, D. and T. H. Naylor. 2001. *Affluenza: The All-Consuming Epidemic*. San Francisco: Berrett-Koehler Publishers.
- Denscombe, M. 1998. *The Good Research Guide: For Small-scale Research Projects*. Buckingham: Open University Press.
- Denzin, N. K., and Y. S. Lincoln, eds. 1994. *Handbook of Qualitative Research*. Thousand Oaks: Sage Publications.
- Dewberry, E. 1996. *Eco Design: Present attitudes and future directions*. Doctoral Thesis. The Design Discipline, Technology Faculty, Open University, London.
- Diane, T., and T. Cassidy. 2005. *Colour Forecasting*. Oxford: Blackwell Publishing.
- Dittmar, H. 1991. *The Social Psychology of Material Possessions: To Have Is to Be*. Brighton: Harvester Wheatsheaf.
- Domjan, M., Cusato, B., and R. Villarreal. 2000. Pavlovian Feed-Forward Mechanisms in the Control of Social Behavior. *Behavioral and Brain Sciences* 23 (2): 235-282.
- Drury, K., and K. Slater. 1996. Fibres and the environment. *Textile Trends* (June):29-33.
- DTI. 2005. *Plastics Recycling*. Department of Trade and Industry 2002 [cited 13 October 2005]. Available from <http://www.dti.gov.uk/>.
- Drury, K., and K. Slater. 2005. *Textile Recycling*. Department of Trade and Industry 2002 [cited 13 October 2005]. Available from <http://www.dti.gov.uk/>.
- Duncombe, S., ed. 2001. *Cultural Resistance Reader*. London: Verso.
- Dutton, T. A. 1991. *Voices in Architectural Education: Cultural Politics and Pedagogy*. 1 ed. New York: Bergin and Garvey.
- Edelkoort, L. 2006. *Trend Union ss 08*. London, 27 November 2006.
- Edris, K. E. 1987. *Vision eller Vanmakt: En tolkning av den västerländska civilisationens historia och tankar inför framtiden*. Uppsala: Hallgren & Fallgren.
- Elkins, P., Hillman, M., and R. Hutchinson. 1992. *Wealth Beyond Measure: An Atlas of New Economics*. London: The Gaia Futures Series.
- Entwistle, J. 2000. *The Fashioned Body: Fashion, dress and modern social theory*. Cambridge: Polity Press.
- Environment Agency. 2008. *WEEE: Waste Electrical and Electronic Equipment*. Environment Agency [cited 2 February 2008]. Available from <http://www.environment-agency.gov.uk/business/1745440/444663/1106248/>.
- Erlich, P., and A. Erlich. 1990. *The Population Explosion*. London: Hutchinson.
- EU. 2005. *The Commission presents the European Awards for the Environment 2000*. European Union 2000 [cited 12 October 2005]. Available from <http://europa.eu.int/comm/ebs/index.html>.
- Evans, C. 2000. *Yesterday's Emblems and Tomorrow's Commodities: The return of the repressed in fashion today*. In *Fashion Cultures: Theories, Explorations and Analysis*, edited by S. Bruzzi and P. Church Gibson. London and New York: Routledge.
- Evans, C. 2003. *Fashion at the Edge: Spectacle, modernity, and deathliness*. New Haven, Connecticut; London: Yale University Press.
- Fairclough, K. 2007. *EcoMimetics. Attainable Utopias 2006* [cited 10 April 2007]. Available from <http://attainable-utopias.org/tiki/tiki-index.php?page=EcoMimetics>.
- Farrell Krell, D., ed. 1978. *Basic Writings: Martin Heidegger*. London: Routledge.
- Feyerabend, P. 1975. *Against Method*. London: New Left Review.
- Feyerabend, P. 1978. *Against Method : Outline of an anarchistic theory of knowledge*. London: Verso.
- Fletcher, K. 1999. *Environmental Improvement by Design: an investigation of the UK textile industry*. Doctoral Thesis. Chelsea College of Art & Design, Chelsea College of Art & Design, London.
- Fletcher, K. 2008. *Sustainable Fashion and Textiles: Design Journeys*. London: Earthscan.
- Fletcher, K., and B. Earley. 2003. *5 Ways*. London: Chelsea College of Art and Design.
- Fletcher, K., and M. Tham. 2003. *Clothing Lives!* Paper read at Product Life and the Throwaway Society, 21 May 2003, at Centre for Sustainable Consumption.
- Fletcher, K., and M. Tham. 2004. *Clothing Rhythms*. In *Eternally Yours: Time in Design*, edited by E. v. Hinte. Rotterdam: 010 publishers.
- Florida, R. 2002. *The Rise of the Creative Class: And how it's transforming work, leisure, community and everyday life*. Cambridge, MA: Basic Books.
- New Economics Foundation. 2007. *An Index of Human Well-being and Environmental Impact*. Friends of the Earth, New Economics Foundation 2006 [cited 7 August 2007]. Available from <http://www.happyplanetindex.org/index.htm>.

- Franklin Associates, LTD. 1993. Resource and Environmental Profile Analysis of a Manufactured Apparel Product: Woman's Knit Polyester Blouse. Prairie Village, Kansas/Washington, D.C: American Fiber Manufacturers Association.
- Fromm, E. 1956. *The Sane Society*. London: Routledge and Kegan Paul.
- Frosch, R. A. 1992. *Industrial Ecology: A philosophical introduction*. Paper read at National Academy of Sciences of the United States of America.
- Fry, T. 1999. *New Design Philosophy: An Introduction to Defuturing*. New South Wales: New South Wales Univ Pr Ltd.
- Fuad-Luke, A. 2007. Redefining the Purpose of Sustainable Design: Enter the design enablers, catalysts in co-design. In *Designers, Visionaries and Other Stories*, edited by J. Chapman and N. Gant. London: Earthscan.
- Fukuyama, F. 1992. *The End of History and the Last Man*. London: H.Hamilton.
- Fulford, R. 1999. *The Triumph of Narrative: Storytelling in the Age of Mass Culture*. Toronto: Broadway Books/Random House.
- Fuller, R. B. 1972. *Utopia or oblivion : The prospects for humanity*. Harmondsworth: Penguin.
- Fuller, R. B. 1981. *Critical Path*. New York: St. Martin's Press.
- Fuller, R. B., and E. J. Applewhite. 1975. *Synergetics : Explorations in the geometry of thinking*. New York: Collier Macmillan.
- Futerra. 2007. *Words that Sell*. London: Futerra.
- Future Laboratory. 2007. Lifesigns Network. The Future Laboratory 2007 [cited 22 July 2007]. Available from <http://www.thefuturelaboratory.com/about-lifesigns.html>.
- Gabriel, Y., and T. Lang. 1995. *The Unmanagable Consumer: Contemporary Consumption and Its Fragmentation*. London: Sage.
- Gates, J. 2000. *Democracy at Risk*. Cambridge, Massachusetts: Perseus Publishing.
- Gaver, W. 2001. *Cultural Probes: Probing People for Design Inspiration*. Paper read at SIGCHLDK, Interaction Design, at Århus, Denmark.
- Gergen, K. J. 1999. *An Invitation to Social Construction*. Thousands Oaks, CA: Sage Publications.
- Giaccardi, E. 2005. Metadesign as an Emergent Design Culture. *Leonardo* 38 (4):342-349.
- Giddens, A. 1990. *The Consequences of Modernity*. Stanford, CA: Stanford University Press.
- Giddens, A. 1991. *Modernity and Self-Identity*. Cambridge: Polity Press.
- Giertz-Mårtenson, I. 2006. *Att Se in i Framtiden: En undersökning av trendanalys inom modebranschen*. Master Thesis, Etnologi, Stockholms Universitet, Stockholm.
- Gladwell, M. 2000. *The Tipping Point*. Boston: Little, Brown and Company.
- Glavas, A., Jules, C., and E. Van Oosten. 2006. Use of Self in Creating a Culture of Collaboration. In *Creating a Culture of Collaboration: The International Association of Facilitators Handbook*, edited by S. Schuman. San Francisco, CA: Jossey-Bass, John Wiley & Sons.
- Gleick, J. 1988. *Chaos*. London: Cardinal.
- Gleick, J. 1999. *Faster: The Acceleration of Just about Everything*. London: Abacus.
- Glenn, J. C., and T. J. Gordon, eds. 2003. *Futures Research Methodology*. Washington: The Millennium Project World Federation of UN Associations.
- Goodwin, R., Ackerman F., and D. Kiron, eds. 1997. *The Consumer Society*. Washington D.C.: Island Press.
- Gordon, D. 2004. Trends. *Look Look* [cited 5 November 2007]. Available from <http://www.look-look.com>.
- Graedel, T. E., and B. R. Allenby. 1995. *Industrial Ecology*. New Jersey: Prentice Hall.
- Graedel, T. E., Reaves Comrie, P., and J. C. Sekutowski. 1995. *Green Product Design*. *AT&T Technical Journal* (November/December): 18-25.
- Greenwald, J. 2005. *Learning at Mother Nature's Knee*. *Fortune*, August 2005.
- Greer, B. 2004. *Taking Back the Knit: Creating communities via needlecraft*. MA Thesis, Sociology, Goldsmiths, University of London, London.
- Griffiths, J. 1999. *Pip Pip: A Sideways Look at Time*. London: Harper Collins Publishers.
- Guba, E. G., and Y. S. Lincoln. 1994. Competing paradigms in qualitative research. In *Handbook of Qualitative Research*, edited by N. K. Denzin and Y. S. Lincoln. Thousand Oaks: Sage.
- Gunderson, L. H., and C. S. Holling, eds. 2002. *Panarchy: Understanding transformations in human and natural systems*. Washington: Island Press.

- Gunderson, L. H., Holling, C. S., and S. S. Light. 1994. *Barriers and Bridges to the Renewal of Ecosystems and Institutions*. New York: Columbia University Press.
- Guy, A., Green, E., and M. Banim, eds. 2001. *Through the Wardrobe: Women's relationships with their clothes*. Oxford and New York: Berg.
- H&M. 2005. *Annual Report 2004*. Stockholm: H&M.
- H&M. 2005. *Corporate Social Responsibility Report 2004*. Stockholm: H&M.
- H&M. 2008. *Om H&M*. H&M 2008 [cited 24 May 2008]. Available from http://www.hm.com/se/omhm__aboutm.nhtml.
- H&M. 2008. *CSR Strategy*. H&M 2008 [cited 20 May 2008]. Available from http://www.hm.com/se/fretagsansvar/csrrapportering/csrreport2007__csr_report_2007.nhtml.
- Haken, H. 1983. *Synergetics, an Introduction: Nonequilibrium phase transitions and self-organization in physics, chemistry, and biology*. New York: Springer-Verlag.
- Haken, H. 1993. *Advanced Synergetics: Instability hierarchies of self-organizing systems and devices*. New York: Springer-Verlag.
- Hallström Bornold, S. 2003. *Det är Rätt att Göra Uppror : Mah Jong 1966-1976*. Stockholm: Modernista.
- Halpern, P. 2000. *The Pursuit of Destiny: A history of prediction*. Cambridge, MA: Perseus.
- Hardin, G. 1968. *The Tragedy of the Commons*. *Science* 162: 1243-48.
- Haug, W. F. 1987. *Commodity Aesthetics, Ideology & Culture*. New York: International General.
- Hawken, P. 1993. *The Ecology of Commerce*. New York: HarperCollins Publishers.
- Hawken, P., Lovins, A. B., and L. H. Lovins. 1999. *Natural Capitalism: The Next Industrial Revolution*. London: Earthscan Publications.
- Heath, C., and D. Heath. 2007. *Made to Stick: How some ideas take hold and others come unstuck*. New York: Random House.
- Hebdige, D. 1979. *Subculture: The meaning of style*. London: Routledge.
- Heeley, J. 1997. *Environmental Conscious Design and Manufacture in the UK Textile Industry*, Doctoral Thesis, Department of Textiles/Fashion, Manchester Metropolitan University, Manchester.
- Heidegger, M. 1971 (1935). *The Origin of the Work of Art*. In *Poetry, Language, Thought*. New York: Harper & Row.
- Heidegger, M. 1975. *Poetry, Language, Thought*. Translated by A. Hofstadter. New York: HarperCollins Publishers.
- Heidegger, M. 1977. *The Question Concerning Technology*. In *The Question Concerning Technology and Other Essays*. New York.
- Herbert, G. 2007. *Land of Plenty? Global Agricultural Restructuring and the Production of Hunger and Obesity Paper read at International Studies Association 48th Annual Convention, February 2007, at Hilton Chicago, Chicago*.
- Heron, J. 1996. *Co-operative Inquiry: Research into the Human Condition*. London: Sage Publications Ltd.
- Heron, J., and P. Reason. 2001. *The Practice of Co-operative Inquiry: Research with rather than on people*. In *Handbook of Action Research: Participative Inquiry and Practice*, edited by P. Reason and H. Bradbury. London: Sage Publications.
- Hester, R. 2005. *Design Activism... For Whom? Frameworks 1 (1): 8-15*.
- Heylighen, F., and C. Joslyn. 2001. *Cybernetics and Second-Order Cybernetics*. In *Encyclopedia of Physical Science & Technology*, edited by R. A. Meyers. New York: Academic Press.
- Hill, C. 2006. *Ethical fashion: The Facts*. *Western Mail*, 10 January 2006.
- Hines, A. 2003. *The futures of futures: a scenario salon*. *Foresight, the journal of future studies, strategic thinking and policy* 5 (4):28-35.
- Hines, A. 2003. *An audit for organizational futurists: ten questions every organizational futurist should be able to answer*. *Foresight, the journal of future studies, strategic thinking and policy* 5 (1):20-33.
- Hollander, A. 1995. *Sex and Suits: The evolution of modern Dress*. New York: Kodansha.
- Hollway, W., and T. Jefferson. 2000. *Doing Qualitative Research Differently*. London: Sage.
- Holmgren, D. 2000. *Permaculture Principles and Other Ideas*. Hepburn, VIC: Holmgren Design Service.
- Holmgren, D. 2002. *Permaculture: Principles and pathways beyond sustainability*. Victoria: Holmgren Design Services.

- Hopper, R. 1988. Speech, for Instance. The exemplar in studies of conversation. *Journal of Language and Social Psychology* 7 (1):47-63.
- Horowitz, T. 1975. From Élite Fashion to Mass Fashion. *Archives Européennes de Sociologie/European Journal of Sociology* 16:283-295.
- Howies. 2007. Our Beliefs. Howies 2007 [cited 6 June 2007]. Available from <http://www.howies.co.uk/content.php?xSecId=20>.
- Huizinga, J. 1970. *Homo Ludens : A study of the play element in culture*. London: Paladin.
- Hull, D. L. 1988. Interactors versus vehicles. In *The Role of Behaviour in Evolution*, edited by H. C. Plotkin. Cambridge, MA: MIT Press.
- Huss, W. R., and E. J. Honton. 1987. Scenario Planning: what style should you use? *Long Range Planning* 20 (4):21-29.
- Illich, I. 1973a. *Deschooling Society*. Harmondsworth: Penguin.
- Illich, I. 1973b. *Tools for Conviviality*. London: Calder & Boyars.
- ILO. 2000. *Labour practices in the footwear, leather, textiles and clothing industries*. Geneva: International Labour Organisation.
- ILO. 2006. *Global Employment Trends Brief*. Geneva: International Labour Organisation.
- Inayatullah, S. 1996. Framing the Shapes and Times of the Futures. In *The Knowledge Base of Futures Studies*, edited by R. A. Slaughter. Melbourne: Futures Study Centre.
- Inayatullah, S. 1998. Causal Layered Analysis: Poststructuralism as method. *Futures* 30 (8):815-829.
- Inayatullah, S. ed. 2004. *The Causal Layered Analysis (CLA) Reader*. Taipei: Tamkang University Press.
- Indiska. 2005. CSR. Indiska Kompaniet. [cited 13 July 2005]. Available from <http://www.indiska.se>
- ISAC. 1993. *Survey of cotton production practices*. New Delhi: International Cotton Advisory Committee.
- Jackson, T., Jager, W., and S. Stagl. 2004. Beyond Insatiability: Needs Theory, Consumption and Sustainability. *Working Paper Series* (2):34.
- Jacobs, B. 2002. Eco-fashion. *Metro*, March 25, 15.
- Janesick, V. J. 2004. "Stretching" Exercises for Qualitative Researchers. Thousand Oaks, London and New Dehli: Sage Publications.
- Jessel, J. 2004. Communicating to Designers: A Case History. The Netherlands Design Institute 1998 [cited 2004]. Available from <http://www.presenceweb.i3net.org/papers/right.php3?id=117>.
- Johnson, K. K. P., Torntore, S. J., and J. B. Eicher. 2003. *Fashion Foundations : Early writings on fashion and dress*. Oxford: Berg.
- Jordan, T. 2002. *Activism! Direct Action, Hacktivism and the Future of Society*. London: Reaktion Books.
- Jowit, J. 2007. Deal agreed in Bali climate talks. *The Guardian*, December 15, 2007.
- Kahane, A. 2000. Changing the winds. In *Gone Today, Here Tomorrow: Millennium Previews*, edited by R. A. Slaughter. Prospect: Sydney.
- Kajzer, I. 2004. *An Inquiry into the Taken-for-granted and Emergent paradoxes: Exploring the Idea of the Living product*. Doctoral Thesis, Department of Marketing, Strathclyde University, Glasgow.
- Kane, G. 2003. Beating the Rebound Effect: Eco-Efficiency vs Ecological Models. Paper read at Product Life and the Throwaway Society, May 21, at Sheffield Hallam University.
- Kaner, S. 2006. Five Transformational Leaders Discuss what they've Learned, edited by S. Schuman. San Francisco, CA: Jossey-Bass, John Wiley & Sons.
- Kaner, S., Lind, L., Toldi, C., Fisk, S., and D. Berger. 1996. *Facilitator's Guide to Participatory Decision-Making*. Gabriola Island, BC and Philadelphia, PA: New Society Publishers.
- Kauffman, S.A. 1993. *The Origins of Order: Self-organization and selection in evolution*. New York: Oxford University Press.
- Kawamura, Y. 2005. *Fashion-ology: An introduction to fashion studies*. Oxford: Berg.
- Kemerling, G. 2004. Kant: The Moral Order. *Philosophy Pages* 1997 [cited 4 May 2004]. Available from <http://www.philosophypages.com/hy/5i.htm>.
- Keoleian, G.A., and D. Menerey. 1994. Sustainable development by design: review of lifecycle design and related approaches. *Air and Waste* (44):645-668.
- Kerven, R. 1996. *The Mythical Quest: In search of adventure, romance & enlightenment*. London: Pomegranate Artbooks.

- KeyNote. 2008. Clothing Footwear Industry Market Review 2008. Hampton, Middlesex: Key Note.
- Kirk, M. 2002. Fledgling Activists or Fashion Models? Wiretap, 4 November 2002.
- Kirton, M. J. 2003. Adaption and innovation in the context of diversity and change. London: Routledge.
- Klein, N. 2000. No Logo. London: Flamingo.
- Klein, N. 2002. Fences and Windows. London: Flamingo.
- Knorr-Cetina, K. 1999. Epistemic Cultures : How the sciences make knowledge. Cambridge, MA: Harvard University Press.
- Koestler, A. 1967. The Ghost in the Machine. London: Hutchinson.
- König, R. 1973. The Restless Image, A Sociology of Fashion. London: George Unwin..
- Krauss, J. 1999. Your Private Sky: R. Buckminster Fuller. Switzerland: Lars Muller.
- Krippendorff, K. 1995. On the Essential Contexts of Artefacts or on the Proposition the "Design Is Making Sense (of Things)". In The Idea of Design: A Design Issues Reader, edited by V. M. a. R. Buchanan. Cambridge, MA: The MIT Press.
- Krishnamurti, J. 1992. On Right Livelihood. New York: HarperCollins.
- Kuhn, T. S. 1957. The Copernican Revolution: Planetary astronomy in the development of Western thought. Cambridge, MA: Harvard University Press.
- Kuhn, T. S. 1962. The Structure of Scientific Revolutions. Chicago: University of Chicago Press.
- Lacey, H. 2002. Storyville. View Point 12, 62-66.
- Lakoff, G., and M. Johnson. 1980. Metaphors We Live By. Chicago ; London: University of Chicago Press.
- Lane, D.C. 1998. Can we have confidence in generic structures? J. Opl Res. Soc. (49): 936-947.
- Langrish, J. 1993. Case Studies as a Biological Research Process. Design Studies 12 (4): 357-364.
- Lasn, K. 1999. Culture Jam: The uncooling of America. New York: Eagle Brook.
- Lasswell, H. D. 1977. Harold D. Lasswell on Political Sociology Series: (HOS). Edited by D. Marvick. Chicago: Heritage of Sociology Series, The University of Chicago Press.
- Latour, B. 1991. We Have Never Been Modern. Translated by C. Porter. Cambridge, MA: Harvard University Press.
- Latour, B. 1992. Where are the Missing Masses? Sociology of a Few Mundane Artefacts. In Shaping Technology, Building Society: Studies in Sociotechnical Change, edited by W. Bijker and J. Law. Cambridge, MA: MIT Press.
- Latour, B. 1999. Pandora's Hope: Essays on the reality of science studies. Cambridge, MA: Harvard University Press.
- Laursen, S. E., Hansen, J., Bagh, J., Jensen, O. K., and I. Werther. 1997. Environmental Assessment of Textiles. Copenhagen: Danish Environment Protection Agency.
- Laursen, S. E., Hansen, J., Knudsen, H. H., Wenzel, H., Larsen, H. F., and F. M. Kristensen. 2006. EDIPTEX - Environmental assessment of textiles. Working Report no 3: Danish Environmental Protection Agency.
- Layard, R. 2005. Happiness: Lessons from a New Science. London: Penguin Books.
- Lazar, D. 1998. Selected issues in the philosophy of social science. In Researching Society and Culture. London: Sage Publications.
- LBL and CCC. 2006. Who pays for the Cheap clothes: five questions the low cost retailers must answer: Lable Behind the Labour and Clean Clothes Campaign.
- Leaman, J. 2006. Climate Change: Latest trends in public opinion. London: Ipsos Mori.
- Lee, J. A. 1984. Cotton as a world crop. In Cotton, edited by R. J. Kohel and C. F. Lewis. Madison, Wisconsin: American Society of Agronomy Inc, Crop Science Society of America Inc, Soil Society of America Inc.
- Lee, M. 2003. Fashion Victim: Our Love-Hate Relationship with Dressing, Shopping, and the Cost of Style. New York: Broadway Books.
- Lehmann, U. 2000. Tigersprung: Fashion in Modernity. London: The MIT Press.
- Levi's. 2005. CSR. Levi Strauss & Co. [cited 13 July 2005]. Available from <http://www.levistrauss.com>
- Libovetsky, G. 1994. The Empire of Fashion, Dressing Modern Democracy. Princeton, NJ: Princeton University Press.

- List, D. 2005. Scenario Network Mapping: The development of a methodology for social inquiry. Doctoral Thesis, School of Management, University of South Australia, Adelaide.
- The Observer, author not listed. 2003. Fashion's Power (part one). The Observer, 9 February 2003.
- Lorenz, E. 2000. Predictability: Does the flap of a butterfly's wings in Brazil set off a tornado in Texas? In *The Chaos Avant-garde: Memories of the early days of chaos theory*. Singapore: World Scientific.
- Lovelock, J. 1979. *Gaia: A new look at life on earth*. Oxford: Oxford University Press.
- Lovelock, J. 1991. *Gaia: The practical science of planetary medicine*. London: Gaia Books.
- Lovelock, J. 2006. *The Revenge of Gaia: Why the earth is fighting back - and how we can still save humanity*. London: Allen Lane.
- Futerra. 2005. *The Rules of the Game*, edited by DEFRA. London: Climate Change Communications Working Group.
- Luiken, A. 1997. Strategies for Textile Waste Recycling. Paper read at Recovery, Recycling, Re-integration, February 4-7, 1997, at Geneva, Switzerland.
- Lundebye, A. 2003. *Senseness*. MA Thesis, Design, Goldsmiths, University of London.
- Lupton, E., and J. Abbott Miller. 1992. *Bathroom, the Kitchen, and the Aesthetics of Waste*. New York: Kiosk.
- Lutz, M. A., and K. Lux. 1988. *Humanistic Economics: The New Challenge*. London: Intermediate Technology.
- Lyotard, J. F. 1984. *The postmodern condition : A report on knowledge*. Translated by G. Bennington and B. Massumi. Manchester: Manchester University Press.
- MacArthur, R., and E. O. Wilson. 1967. *The Theory of Island Biogeography*. Princeton, N.J.: Princeton University Press.
- Mackenzie, D. 1997. *Green Design: Design for the Environment*. London: Laurence King Publishing.
- Macy, J. 1991. *World as Lover, World as Self*. Berkeley: Parallax Press.
- Macy, J., and M. Brown. 1998. *Coming Back to Life*. Gabriola Island, BC: New Society.
- Mahaffie, J. B. 2003. Professional futurists reflect on the state of futures studies. *Foresight, the journal of future studies, strategic thinking and policy* 5 (2):3-4.
- Manzini, E. 1989. *The Material of Invention: Materials and design*. Translated by A. Shugaar. London: Design Council.
- Manzini, E. 1990. The New Frontiers: Design must change and mature. *Design* (501).
- Manzini, E. 1994. Design, Environment and Social Quality: From "Existenzminimum" to "Quality Maximum". *Design Issues* 10 (1):37-43.
- Manzini, E. 2004. Solution oriented partnership. How to design industrialised sustainable solutions. Edited by L. Collina and S. Evans. Cranfield: Cranfield University.
- Manzini, E., and C. Vezzoli. 2003. *Product-service Systems and Sustainability: Opportunities for sustainable solutions*. Paris: United Nations Environment Programme.
- Margolin, V., and S. Margolin. 2002. A "Social Model" of Design: Issues of Practice and Research. *Design Issues* 18 (4): 24-30.
- Marks & Spencer. 2007. Plan A. Marks & Spencer 2007 [cited 5 February 2007]. Available from <http://www.marksandspencer.com/gp/node/n/50890031>.
- Marx, K. 1975. *Early writings [of] Karl Marx*. Marx, Karl, 1818-1883. Translated by R. Livingstone and G. Benton. London: Harmondsworth: Penguin New Left Review.
- Masini, E. B. 1999. Rethinking Futures Studies. In *Rescuing All Our Futures* edited by Z. Sardar. Twickenham: Adamantine Press.
- Maslow, A. H. 1943. A Theory of Human Motivation. *Psychological Review* 50: 370-396.
- Mason, J. 2002. *Qualitative Researching*. London: Sage.
- Maturana, H. 1978. Biology of Language: The epistemology of reality. In *Psychology and Biology of Language and Thought: Essays in honor of Eric Lenneberg*, edited by G. A. Miller and E. Lenneberg. New York: Academic Press.
- Maturana, H., and F. J. Varela. 1980. *Autopoiesis and Cognition : The realization of the living*. Holland: Dordrecht.
- Maturana, H., and F. J. Varela. 1987. *The Tree of Knowledge: The biological roots of human understanding*. Boston: New Science Library.
- Maturana, H., Verden-Zoller, G., Opp, G., and F. Peterander. 1996. *Biology of Love*. Munich/Basel: Focus Heilpädagogik, Ernst Reinhardt.
- Maughan, E., and P. Reason. 2001. A Co-operative Inquiry into Deep Ecology. *ReVision* 23 (4): 18-24.

- Max-Neef, M. 1991. *Human Scale Development - conception, application and further reflection*. London: Apex Press.
- Max-Neef, M. 1992. *Development and Human Needs*. In *Real-life Economics: Understanding Wealth Creation*, edited by P. Ekins and M. Max-Neef. London: Routledge.
- Max-Neef, M. 1995. *Economic Growth and Quality of Life - A Threshold Hypothesis*. *Ecological Economies* 15:115-118.
- May, T. 2001. *Social Research: Issues, Methods and Process*. Buckingham: Open University Press.
- McClintock, D., Ison, R., and R. Armson. 2003. *Metaphors for Reflecting on Research Practice: Researching with people*. *Journal of Environmental Planning and Management* 46 (5): 715-731.
- McDonough, W., and M. Braungart. 2002. *Cradle to Cradle: Remaking the way we make things*. New York: North Point Press.
- McKay, G., ed. 1998. *DiY Culture: Party & protest in Nineties Britain*. London; New York: Verso.
- McKenzie, D. 1991. *Green Design: Design for the environment*. London: Lawrence King.
- McLuhan, M., and Q. Fiore. 2001. *The Media is the Massage*. Corte Madera: Ginko Press. Original edition, 1967.
- McMaster, M. D. 1996. *The Intelligence Advantage: Organising for complexity*, Long Range Planning. Newton, MA: Butterworth-Heinemann.
- McNeill, J. 2000. *Something New under the Sun: An Environmental History of the 20th Century*. London: Penguin Books.
- McRobbie, A., ed. 1989. *Zoot Suits and Second-Hand Dresses: An anthology of fashion and music*. London: Macmillan.
- McRobbie, A. 1997. *A New Kind of Rag Trade?* In *No Sweat, Fashion, Free Trade and the Rights of Garment Workers*, edited by A. Ross. London: Verso.
- McRobbie, A. 1999. *In the Culture Society*. London: Routledge.
- Meadows, D. H. 1997. *Places to Intervene in a System*. *Whole Earth Review* (91).
- Meadows, D. H., Meadows, D. L., Randers, J., and W. Berhens. 1972. *The Limits to Growth*. London: Earth Island.
- Meadows, D.H., Meadows, D. L., and J. Randers. 1992. *Beyond the Limits*. London: Earthscan Publications.
- Melliand. 1996. *Fibre World Production 95*: Melliand International.
- Merchant, C. 1982. *The Death of Nature: women, ecology and the scientific revolution*. London: Wildwood House.
- Mesure, S. 2008. *The £20bn Food Mountain: Britons throw away half of the food produced each year*. *The Independent*, 2 March 2008.
- Meyerson, D. E. 2001. *Tempered Radicals: How people use difference to inspire change at work*. Boston: Harvard Business School Press.
- Midleton-Kelly, Eve. 1998. *Organisations as Complex Evolving Systems*. Paper read at OACES Conference, 4-5 December 1998, at Warwick, Coventry.
- Mikhailov, A. S. 1994. *Foundations of Synergetics: Distributed Active Systems*. New York: Springer-Verlag.
- Miles, M. B., and A.M. Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. London: Sage.
- Miraftab, M., and A. R. Horrocks, eds. 2007. *Ecotextiles: The way forward for sustainable development in textiles*. Vol. 60, Woodhead Textiles Series. Cambridge: Woodhead Publishing.
- Miller, K. 1994. *Constructing future realities*. *WFSF Bulletin* 69 (21,1): 1-16.
- Mitchell, A. 2005. *Dancing at the Dead Sea: Journey to the heart of environmental crisis*. London: Eden Project Books.
- Mitleton-Kelly, E. 1998. *Organisations as Complex Evolving Systems*. Paper read at OACES, 4-5 December 1998, at Warwick.
- Mitleton-Kelly, E. 2003. *Ten principles of complexity and enabling infrastructures*. In *Complex Systems and Evolutionary Perspectives on Organizations: The Application of Complexity Theory to Organizations*, edited by E. Mitleton-Kelly. Oxford: Pergamon.
- Mollison, B. 1996. *Permaculture: A Designer's Manual*. 5 ed. Tyalgum, NSW: Tagari Publications.
- Mollison, B.C., and D. Holmgren. 1978. *Permaculture 1: A perennial agricultural system for human settlements*. London: Corgi Books.

- Montillaud-Joyel, S. 2003. Time in Design. Eindhoven, 17-18 October.
- More, T. 1981. Utopia. Translated by P. Turner. Harmondsworth, Middlesex: Penguin Books.
- Morgan, D. L. 1998. The Focus Group Guide Book. 6 vols. Vol. 1, Focus Group Kit. London: Sage Publications.
- Morgan, D. L. 1998. Planning Focus Groups. 6 vols. Vol. 2, Focus Group Kit. London: Sage Publications.
- Morgan, D. L. 1997. Focus Groups as Qualitative Research. Thousand Oaks, CA: Sage.
- Morgan, G. 1986. Images of Organization, Sage, Beverly Hills, CA.
- Mulgan, G., Ali, R., and B. Sanders. 2007. Social Innovation: What It Is, Why It Matters and How It Can Be Accelerated. London: The Young Foundation.
- Myers, D. 1999. Organic Cotton: from field to final product. Edited by D. Myers and S. Stolton. London: Intermediate Technology Publications.
- Naess, A. 1989. Ecology, Community and Lifestyle. New York: Cambridge University Press.
- Nancy, J. L. 1991. The Inoperative Community. Minneapolis: University of Minnesota Press.
- Nancy, J. L. 2000. Being Singular Plural. Translated by R. Richardson and A. O'Byrne. Stanford, CA: Stanford University Press.
- Nandy, A. 1996. Shamans, savages and the wilderness. In The Knowledge Base of Futures Studies, edited by R. A. Slaughter. Melbourne: Futures Study Centre.
- NCC. 2006. I will if you will, Towards sustainable consumption. London: National Consumer Council.
- NEF. 2007. The Happy Planet Index. New Economics Foundation, Friends of the Earth 2006 [cited 1 June 2007]. Available from <http://www.happyplanetindex.org/>.
- Earth Day Network. 2006. History of Earth Day. Earth Day Network 2006 [cited 5 July 2006]. Available from <http://www.earthday.net/resources/history.aspx>.
- OECD. 2007. Polluter-Pays-Principle 2001 [cited 2 May 2007]. Available from <http://stats.oecd.org/glossary/detail.asp?ID=2074>.
- Ogilvy, J. 1996. Future studies and the human sciences: the case for normative scenarios. In New Thinking for a New Millennium, edited by R. A. Slaughter. London: Routledge.
- Organic Exchange. 2007. Organic Cotton Market Report. Berkeley, CA: Organic Exchange.
- Ornstein, R., and P. Ehrlich. 1989. New World, New Mind: Moving toward conscious evolution. New York: Doubleday.
- Orr, D.W. 1992. Ecological Literacy. New York: Suny Publications.
- Oxfam. 2008. Supporting Cotton Workers to Claim their Rights in Southern India. OxfAM 2008 [cited 2 May 2008]. Available from https://www.oxfam.org.uk/oxfam_in_action/direct/pgs_projects/india08/assets/project_India08.pdf.
- Packard, V. O. 1960. The Waste Makers. New York: David McKay.
- Papanek, V. 1985. Design for the Real World: Human ecology and social change. London: Thames and Hudson.
- Papanek, V. 1995. The Green Imperative: Natural design for the real world. New York: Thames and Hudson.
- Patagonia. 2005. PCR. Patagonia.com 2005 [cited 12 October 2005]. Available from <http://www.patagonia.com/enviro/pcr.shtml>.
- Pavitt, J. editor. 2000. Brand. New. London: V&A Publications.
- Pepper, D. 1996. Modern Environmentalism. London: Routledge.
- Perna, R. 1987. Fashion Forecasting: A mystery or a method. New York: Fairchild Publications.
- Philips, D. 1996. Environmentally friendly, productive and reliable: priorities for cotton dyes and dyeing processes. Journal for the Society of Dyers and Colourists 112:183-186.
- Phillips, L , and M. Philips. 1993. Facilitated Work Groups: Theory and practice. J. Opl Res. Soc. (44): 533-549.
- Pimbert, M. P., and J. N. Pretty. 1995. Parks, People and Professionals: Putting 'participation' into protected area management. In Discussion Paper No 57. Geneva: United Nations Research Institute for Social Development.
- Pine, J. B., and J. H. Gilmore. 1999. The Experience Economy: Work is theater & every business a stage. Boston: Harvard Business School Press.
- Plant, S. 1992. The Most Radical Gesture: The Situationist International in a postmodern age. London: Routledge.
- Polak, F. L. 1973. The Image of the Future. New York: Elsevier.
- Polhemus, T. 1994. Streetstyle: from sidewalk to catwalk. London: Thames & Hudson.

- Popcorn, F. 1992. *The Popcorn Report: Revolutionary trend predictions for marketing in the 90's* London: Arrow.
- Pountain, D., and D. Robins. 2000. *Cool Rules: Anatomy of an attitude*. London: Reaktion Books.
- Poynor, R. 2001. *Obey the Giant*. London/Basel: August/Birkhäuser.
- Première Vision. 2005. Results of the September 2005 session. Paris: Première Vision.
- Pretty, J. N. 1994. Alternative Systems of Inquiry for Sustainable Agriculture. *IDS Bulletin*, special issue on 'Knowledge is Power? The use and abuse of information in development.' 25 (2):37-49.
- Pretty, J. N. 1995. *Regenerating Agriculture: Policies and Practice for Sustainability and Self*. New York: Joseph Henry Press.
- Pringle of Scotland. 2005. CSR. Pringle of Scotland. [cited 13 July 2005]. Available from <http://www.pringleofscotland.co.uk>
- Quart, A. 2003. *Branded. The Buying and Selling of Teenagers*. London: Arrow Books Random House.
- Railla, J. 2004. *Get Crafty*. London: Random House.
- Rainey, M. 1994. *Textile and Clothing*. Stockholm: Swedish Standards Institution.
- Razak, V. 2000. Anticipatory anthropology. *Futures* 32 (8).
- RCA. 2007. *Inclusive Design*. RCA Helen Hamlyn Centre 2007 [cited 10 December 2007]. Available from <http://www.hhc.rca.ac.uk>.
- Reason, P., ed. 1994. *Participation in Human Inquiry*. London: Sage.
- Reason, P. 2003. Pragmatist Philosophy and Action Research. *Reading and Conversations with Richard Rorty. Action Research* 1, 1:103-123.
- Reason, P. 2006. Choice and Quality in Action Research Practice. *Journal of Management Inquiry* 15 (2): 187-203.
- Reason, P., and H. Bradbury, eds. 2001. *Handbook of Action Research: Participative inquiry and practice*. London: Sage Publications.
- Reason, P., and J. Heron. 2001. The Practice of Co-operative Inquiry: Research with rather than on people. In *Handbook of Action Research: Participative Inquiry and Practice*, edited by P. Reason and H. Bradbury. London: Sage.
- Reason, P., and W. R. Torbert. 2001. The Action Turn. *Toward a Transformational Science: a further look at the scientific merits of action research. Concepts and Transformations* 6 (1):1-37.
- Rees, W. E., and M. Wackernagel. 1996. *Our Ecological Footprint: Reducing Human Impact on the Earth*. Gabriola Island, BC: The New Catalyst Bioregional Series.
- Rescher, N. 1998. *Predicting the Future: An Introduction to the Theory of Forecasting*. New York: State University of New York Press, Albany.
- Riddlestone, S. 1998. The Potential for Hemp: Locally Produced Organic Textiles. Paper read at Ecotextile'98: Sustainable Development, 7-8 April, at Bolton.
- Ringland, G. 1998. *Scenario Planning: Managing for the future*. Chichester: John Wiley.
- Rittel, H., and M. Webber. 1984. Dilemmas in a General Theory of Planning. In *Developments in Design Methodology*, edited by N. Cross. Chichester: J. Wiley & Sons.
- Robertson, J. 1999. *The New Economics of Sustainable Development: A Briefing for Policy Makers*. Basingstoke: Palgrave Macmillan.
- Robson, C. 1994. *Real World Research*. Oxford: Blackwell.
- Rogers, E. M. 1962. *Diffusion of Innovation* New York: Free Press.
- Rosenhead, J. 1998. *Complexity Theory and Management Practice* [cited 5 June 2005]. Available from <http://human-nature.com/science-as-culture/rosenhead.html>.
- Rosenhead, J. 1998. *Complexity Theory And Management Practice*. Working Paper Series, LSEOR 98.25.
- Rosenhead, J., and T. Horlick-Jones. 2002. Investigating Risk, Organisations and Decision Support Through Action Research. *Risk Management: An International Journal* 4 (4): 45-63.
- Ruskin, C. 1988. *The Quilt: Stories from the NAMES Project*. New York: Ursus.
- Ryan, P. 2001. *Earthscore for Artists: A systemic approach to collaboration*. In *Earthscore*. New York: Media Studies, New School University.
- Sadowska, N., and M. Tham. 2004. The Stored Wisdom: Artefacts as gap minders between the 'professional self', the 'personal self' and other individuals. *Working papers in art and design* 3:1-9.
- Sadowska, N., and M. Tham. 2005. Minding the Gap: Using artefacts to navigate private, professional and academic selves in design. In *Beginnings: Experimental Research in*

- Architecture and Design, edited by K. Grillner, P. Glebrandt and S.-O. Wallenstein. Stockholm: AKAD/AXL Books.
- Sale, K. 1995. *Rebels Against the Future: The Luddites and Their War on the Industrial Revolution: Lessons for the Computer Age*. New York: Addison Wesley.
- Salen, K., and E. Zimmerman. 2003. *Rules of Play: Game Design Fundamentals*. Cambridge, MA: MIT Press.
- SAM. 2007. Dow Jones Sustainability Indexes. SAM Indexes GmbH 2006 [cited 2 June 2007]. Available from <http://www.sustainability-index.com>.
- Sardar, Z. 1996. Other Futures: Non-Western cultures in futures studies. In *The Knowledge Base of Futures Studies*, edited by R. A. Slaughter. Melbourne: Futures Study Centre.
- Sardar, Z., ed. 1999. *Rescuing All Our Futures: the future of futures studies*. Twickenham: Adamantine Press.
- Schlosser, E. 2001. *Fast Food Nation*. London: Allen Lane, The Penguin Press.
- Schmidt-Bleek, F. 1993. *The Fossil Makers*. Basel, Boston, Berlin: Birkhäuser.
- Schmidt-Bleek, F. 1996. The Factor 10. Fourth High Level Seminar on Cleaner Production. Oxford: UNEP-IE.
- Schmidt-Bleek, F. 1998. *Das MIPS Konzept - Faktor 10*. Munich: Droemer Knauer.
- Schor, J. 2004. *Born to Buy: The Commercialized Child and the New Consumer Culture*. New York: Scribner.
- Schumacher, E.F. 1973. *Small is Beautiful: A study of economics as if people mattered*. London: Blond and Briggs.
- Schuman, S, ed. 2006. *Creating a Culture of Collaboration: The International Association of Facilitators Handbook*. San Francisco, CA: Jossey-Bass, John Wiley & Sons.
- Schwartz, P. 1996. *The Art of the Long View: Paths to strategic insight for yourself and your company*. New York: Doubleday.
- Seale, C., ed. 1998. *Researching Society and Culture*. London: Sage Publications.
- Sense Worldwide. 2007. The Sense Network. Sense Worldwide 2007 [cited 22 July 2007]. Available from http://www.senseworldwide.com/?page=network_viewprofile&ID=2138.
- Shiva, Vandana. 2000. *Stolen Harvest*. Cambridge, MA: South End Press.
- Shiva, Vandana. 2005. *Earth Democracy: Justice, Sustainability, and Peace*. Cambridge, MA: South End Press.
- Shove, E, and A Warde. 2002. Inconspicuous Consumption: The Sociology of Consumption, Lifestyles, and the Environment. In *Sociological Theory and the Environment*, edited by R. E. Dunlap. Boston: Ronman and Littlefield.
- Sieden, L.S. 2000. *Buckminster Fuller's Universe: His life and work*. New York: Perseus Book Group.
- Silva Parker, C., Guinee, L. N., *et al.* 2006. Collaboration for Social Change: A theory and a case study. In *Creating a Culture of Collaboration: The International Association of Facilitators Handbook*, edited by S. Schuman. San Francisco, CA: Jossey-Bass, John Wiley & Sons.
- Simmel, G. 1957 (1904). Fashion. *American Journal of Sociology* 62 (6): 541-558.
- Simmel, G. 1997 [1905]. The philosophy of fashion. In *Simmel on culture*, edited by D. Frisby and M. Featherstone. London: Sage.
- SKAL. 1994. *Skal-standards for sustainable textile-production: Standards for the processing of textile fibres*. Zwolle, Holland: SKAL.
- Skrbina, D. 2001. *Participation, Organization, and Mind: Toward a participatory worldview*. Doctoral Thesis, Centre for Action Research in Professional Practice, University of Bath, Bath.
- Slade, G. 2006. *Technology and Obsolescence in America*. Cambridge, MA: Harvard University Press.
- Slaughter, R. A., ed. 1996a. *The Knowledge Base of Futures Studies*. Melbourne: DDM Media Group.
- Slaughter, R. A. 1999. *Futures for the Third Millennium: Enabling the Forward View*. Sydney: Prospect.
- Slaughter, R. A. 1999. Transcending flatland. *Futures* 30 (6): 341-368.
- Slaughter, R. A. 1999. A new framework for environmental scanning. *Foresight, the journal of future studies, strategic thinking and policy* 1 (5): 387-397.
- Slaughter, R. A. 2001. Knowledge creation, future methodologies and the integral agenda. *Foresight, the journal of future studies, strategic thinking and policy* 03 (05):407-418.

- Slaughter, R. A. 2002. From forecasting and scenarios to social construction: changing methodological paradigms in futures studies. *Foresight, the journal of future studies, strategic thinking and policy* 4 (3):26-31.
- Slaughter, R. A. 2004. *Futures Beyond Dystopia: Creating Social Foresight*. London: Routledge Falmer.
- Sloterdijk, P. 1983. *A Critic of Cynical Reason*. London: Verso.
- Soper, K. 1996. Nature/"Nature". In *FutureNatural, Nature Science and Culture*, edited by G. Robertson, M. Mash, L. Tickner, J. Bird, B. Curtis and T. Putnam. London: Routledge.
- Spencer, A. 2006. *The Crafter Culture Handbook*. London: Marion Boyars Publishers.
- Stables, K. 1997. Critical Issues to Consider When Introducing Technology Education into the Curriculum of Young Learners. *Journal of Technology Education* 8 (2).
- Stacey, R.D. 1992. *Managing The Unknowable: Strategic boundaries between order and chaos in organizations*. San Francisco: Jossey-Bass.
- Stacey, R.D. 1993. *Strategic Management and Organisational Dynamics*. London: Pitman.
- Stacey, R.D. 1996. *Complexity and Creativity in Organizations*. San Fransisco: Berrett-Koehler.
- Steele, V. 2000. Fashion: Yesterday, today & tomorrow. In *The Fashion Business: Theory, practice, image*, edited by N. White and I. Griffiths. Oxford: Berg.
- Sterling, B. 2006. *Shaping Things*. Cambridge, MA: MIT Press.
- Stern, N. 2006. *Stern Review Report on the Economics of Climate Change*. Cambridge: Cabinet Office, HM Treasury.
- Stewart, D.J. 2007. An essay on the Origins of Cybernetics. The Cybernetics Society 2000 [cited 14 April 2007]. Available from <http://www.hfr.org.uk/cybernetics-pages/origins.htm>.
- Stewart, I. 1989. *Does God Play Dice?* London: Penguin.
- Stoller, D. 2003. *Stitch 'N Bitch: The knitter's handbook*. New York: Workman.
- Strömdahl, I. 2008. *Vem känner till Sveriges miljömål?* Stockholm: Confederation of Swedish Enterprise.
- Sundberg, G. 2006. *Mode Svea: En genomlysning av området svensk mode design*. Stockholm: National Council for Architecture, Form and Design.
- Sutton-Smith, B. 1997. *The Ambiguity of Play*. Cambridge, MA: Harvard University Press.
- Taiwo, O. O. E. 1998. The Return Beat. In *The Virtual Embodied: Practices, theories and the new technologies*, edited by J. Wood. London: Routledge.
- Taiwo, O. O. E. 2006. *Interfacing with my Interface*. Doctoral Thesis, University of Winchester, Winchester.
- Tarrow, S., ed. 1994. *Power in Movement: Social Movements, Collective Action and Politics*. Cambridge: Cambridge University Press.
- Taylor, C. 1994. Interpretation and the Sciences of Man. In *Readings in the Philosophy of Social Science*, edited by M. Martin and L. C. McIntyre. Cambridge, MA: MIT Press.
- Textile View Magazine. 2005. Autumn 2005. *Textile View Magazine* 71. Amsterdam: Metropolitan Publishing.
- Terra Plana. 2007. Ethical Policy. Terra Plana 2007 [cited 6 June 2007]. Available from <http://www.terraplana.com/ethicalpolicy>.
- Thackara, J. 2005. *In the Bubble: Designing in a complex world*. Cambridge, MA: MIT Press.
- Tham, M. 2003. *Design med agenda på 2000-talet*. Stockholm: Riksställningar/Furniture.
- Tham, M., and H. Jones. 2008. *Metadesign Tools: Designing the seeds for shared processes of change*, 10-12 July, at *Changing the Change*: Turin.
- Tham, M., and G. Sundberg. 2004. *Fashion Fear Factory*. Paper read at Design Future Days, at Stockholm Design Fair.
- Thorpe, A. 2003. *Time & Design*. Paper read at Product Life and the Throwaway Society, at Centre for Sustainable Consumption, Sheffield Hallam University: Sheffield.
- Thorpe, A. 2004. *Time and Design*. In *Eternally Yours: Time in Design*, edited by E. v. Hinte. Rotterdam: 010 publishers.
- Thorpe, A. 2007. *The Designer's Atlas of Sustainability*. Washington: Island Press.
- Tibbs, H. 2000. Global scenarios for the millennium. In *Gone Today, Here Tomorrow: Millennium Previews*, edited by R. A. Slaughter. Sydney: Prospect.
- Tilly, C. 1995. Contentious Repertoires in Great Britain, 1758-1843. In *Repertoires & Cycles of Collective Action*, edited by M. Traugott. Durham: Duke University Press.
- Tilly, C. 2004. *Social Movements, 1768-2004*. Boulder, CO: Paradigm.
- Toffler, A. 1970. *Future Shock*. London: Bodley Head.

- Toffler, A. 1978. Foreword. In *Cultures of the Future*, edited by M. Maruyama and A. M. Harkins. The Hague: Mouton.
- Toffler, A. 1980. *The Third Wave*. London: Collins.
- Tomlinson, J. 1991. *Cultural Imperialism*. London: Pinter Publishers.
- Tonkinwise, C. 2003. *Interminable Design: Techné and time in the design of sustainable service systems*. Paper read at 5th European Academy of Design Conference: *Techne Design*, 28 April 2003, at University of Barcelona, Spain.
- Tracey, D. 2007. *Guerrilla Gardening: A manual festo*. Gabriola Island, BC, Canada: New Society Publishers.
- Trainer, T. 2002. *Limits to Growth and Design of Settlements*. In *Design for Sustainability: A sourcebook of integrated eco-logical solutions*, edited by J. Birkeland. London: Earthscan Publications.
- Treehugger. 2005. *Ingeo*. Treehugger.com 2004 [cited 12 October 2005]. Available from http://www.treehugger.com/files/2004/12/salewas_jummy_i.php.
- Treehugger. 2005. *Ecolog Outdoor Clothing by vauDe*. Treehugger.com 2004 [cited 12 October 2005]. Available from http://www.treehugger.com/files/2004/11/ecolog_outdoor.php.
- Treehugger. 2005. *Ethical Fashion Show*. Treehugger.com 2005 [cited 12 October 2005]. Available from www.treehugger.com.
- Tseëlon, E. 1995. *The Masque of Femininity: The presentation of woman in everyday life*. London: Sage.
- Uitdenbogerd, D. E., Brouwer, N. M., and J. P. Groot-Marcus. 1998. *Domestic energy saving potentials for food and textiles- An empirical study*. Wageningen: Agricultural University Wageningen, Household and Consumer Studies.
- UN. 1992. *Multilateral Convention on Biological Diversity*. In *Treaty Series*, edited by U. Nations. Rio de Janeiro: The Convention on Biological Diversity.
- UNEP. 2007. *Global Environmental Outlook 4: Environment for development*. Valleta, Malta: United Nations Environment Programme.
- UNFCCC. 2008. *The road to Copenhagen 2009*. United Nations Framework Convention on Climate Change 2008 [cited 2 May 2008]. Available from http://unfccc.int/meetings/cop_13/items/4049.php.
- van der Heijden, K. 1996. *Scenarios: The art of strategic conversation*. Chichester: John Wiley & Sons.
- Van der Ryn, S., and S. Cowan. 1996. *Ecological Design*. Washington, D.C: Island Press.
- van Notten, P., Rotmans, J., van Asselt, M. B. A., and D. S. Rothman. 2003. *An Updated Scenario Typology*. *Futures* 35 (5): 423-443.
- Veblen, T. 1899. *The Theory of the Leisure Class*. New York: MacMillan.
- Verdopolis. 2005. *Future Fashion Show*. [cited 6 October 2005]. Available from http://www.verdopolis.org/welcome/future_fashion.
- Vezzoli, C. 1998. *Clothing Care in the Sustainable Household*. Paper read at Partnership and Leadership Building Alliances for a Sustainable Future, Greening of industry Network Conference, 15 November 1998, at Rome/Enschede.
- Vinken, B. 2005. *Fashion Zeitgeist: Trends and cycles in the fashion system*. Translated by M. Hewson. Oxford: Berg.
- Volvo. 2008. *Eco-driving*. Volvo 2008 [cited 20 May 2008]. Available from <http://www.volvo.com/financialservices/sweden/sv-se/news/NewsItem.htm?ItemId=37642&sl=sv-se37642&sl=sv-se>.
- von Busch, O. 2005a. *The Reform Manual* [cited 2006 3 May]. Available from www.selfpassage.org.
- von Busch, O. 2005b. *Re-forming Appearance: Subversive Strategies in the Fashion System - Reflections on Contemporary Modes of Production* [cited 2006 3 May]. Available from www.selfpassage.org.
- von Glasersfeld, E. 1995. *Radical Constructivism: A way of knowing and learning*. London & Washington: The Falmer Press.
- von Glasersfeld, E. 1997. *Distinguishing the Observer: An Attempt at Interpreting Maturana*. *Oikos* 1997 [cited 11 April 2007]. Available from <http://www.oikos.org/vonobserv.htm>.
- Von Hippel, E. 2005. *Democratizing Innovation*. Cambridge, MA: MIT Press.
- von Weizsäcker, Ernst Ulrich, Amory B. Lovins, and L. Hunter Lovins. 1997. *Factor Four: Doubling wealth, halving resource use*. London: Earthscan.
- Wack, P. 1985. *Scenarios: Uncharted waters ahead*. *Harvard Business Review* 63 (5):72-79.

- Wackernagel, M. 2007. Global Footprint Network 2007 Annual Report. Oakland, CA: Global Footprint Network.
- Walker, S. 2006. Sustainable by Design: Explorations in Theory and Practice. London: Earthscan.
- Walsh, J. A. H., and M. S. Brown. 1995. Pricing environmental impacts: a tale of two T-shirts. *Illahee* 11 (3 and 4): 175-182.
- Walsh, M. 1979. The Democratization of Fashion: The emergence of the women's dress pattern industry. *Journal of American History* 66:299-313.
- Watson, J. 1991. Textiles and the Environment. London: The Economist Intelligence Unit.
- WCED. 1987. Our Common Future. Oxford New York: Oxford University Press.
- Welford, R. 1995. Environmental Strategy and Sustainable Development. London: Routledge.
- Westley, F., Carpenter, S. R. Brock, W. A., Holling, C. S., and L. H. Gunderson. 2002. Why Systems of People and Nature are not Just Social and Ecological Systems. In *Panarchy: Understanding Transformations in Human and Natural Systems*, edited by L. H. Gunderson and C. S. Holling. Washington, DC: Island Press.
- WFS. 2007. Reasons for Using Futures Studies. World Futures Society 2007 [cited 19 July 2007]. Available from <http://www.wfs.org/faq.htm>.
- WWF. 2006. Living Planet Report 2006. Gland, Switzerland: WWF International.
- Wheatley, M. J. 1992. Leadership and the New Science: Learning about organization from an orderly universe. San Francisco: Berrett-Koehler.
- Whiteley, N. 1987. Toward a Throw-Away Culture. Consumerism, 'Style Obsolescence' and Cultural Theory in the 1950s and 1960s. *Oxford Art Journal* 10 (2): 3-27.
- Whiteley, N. 1993. Design for Society. London: Reaktion Book.
- Wiener, N. 1961. Cybernetics: or control and communication in the animal and the machine. Cambridge, MA: M.I.T Press.
- Wilber, K. 1996. A Brief History of Everything. Melbourne: Hill of Content.
- Wilber, K. 1998. The Marriage of Sense and Soul: Integrating Science and Religion. New York, NY: Random House.
- Wilber, K. 1999. Eye to Eye: the quest for the new paradigm. In *The collected works of Ken Wilber*. Colorado: Shambhala.
- Williams, E. R., and M. Wackernagel. 1996. Our Ecological Footprint. Gabriola Island: New Society Publishers.
- Williams, M., and T. May. 1996. Introduction to the Philosophy of Social Research. London: UCL Press.
- Williams, R. 1976. Keywords: A vocabulary of culture and society. London: Fontana Press, Harper Collins Publishers.
- Willmott, M. 2001. Citizen Brands. Chichester: John Wiley & Sons.
- Wilshire, D. 1989. The Uses of Myth, Image and the Female Body in Re-Visioning Knowledge. In *Gender/Body/Knowledge*, edited by A. Jaggar and S. Bordo. London: Rutgers University Press.
- Wiseman, B. W. 1996. Production of organic cotton. Texas: Organic Certification Program. Texas Department of Agriculture.
- Wiseman, R. 2003. The Luck Factor. *The Sceptical Inquirer. The Magazine For Science And Reason* 27 (3).
- Wiseman, R. 2004. The Luck Factor: The scientific study of the lucky mind. London: Random House.
- Witzenmann, H. 1976. The Origin and Overcoming of the Materialistic World Outlook: The natural-scientific attitude of consciousness as world danger and hope for the future. London: Living Art Publishing.
- Wood, J. 2007. Design for Micro-utopias: Making the Unthinkable Possible, Design for Social Responsibility. London: Ashgate.
- Wood, J., and O. Nieuwenhuijze. 2006. Synergy and Sympoiesis in the Writing of Joint Papers; anticipation with/in imagination. *International Journal of Computing Anticipatory System* 10: 87-102.
- WTO. 2005. International Trade Statistics 2005. Geneva: World Trade Organisation.
- Yin, R.K. 1989. Case Study Research. London: Sage Publications.
- Yin, R.K. 1994. Case Study Research: Design and Methods. 2 ed. London: Sage.
- Yin, R.K, P.G Bateman, and G.B Moore. 1983. Case Studies and Organisational Innovation: Strengthening the Connection. Washington DC: COSMOS Corporation.

Yunus, M. 2007. *Creating a World Without Poverty: How Social Business Can Transform Our Lives: Social Business and the Future of Capitalism*. New York: PublicAffairs.

Åhléns. 2005. CSR. Åhléns. [cited 13 July 2005]. Available from <http://www.ahlens.se>

APPENDIX A. Documents supporting the first empirical study

APPENDIX A.1 Interview questions

A.1.1 Question for designers/buyers

Professional background

What is your area of responsibility and job title?

For how long have you been with the company?

Where did you work before?

What is your educational background?

Project plan

Prompt: Explain what happens from when you start a new season and onwards. Use last season's collection as an example. We will draw a plan together, and include dates. At each stage also describe with whom you collaborated or exchanged information.

Conceptualisation/research

How did you find information and inspiration for the collection? What sources did you use?

(Check for the following)

- Fairs
- City or other trips
- Seminars
- Trend material - web sites, trend magazines, trend books
- Consultants
- Other research

What kind of information were you looking for?

(Check for the following)

- Lifestyle trends, consumer attitudes and demographics and other market research
- Fashion trends, colours, fabrics, prints, styles
- Environmental and ethical issues
- Economic concerns
- Other

What did you use the information for?

Who did you work or exchange information with during this stage, for what purpose?

Was the research for this collection typical of how you normally work?

To what extent could you plan your own research?

How did you feel about the process: what worked well, could work better? (Time, resources, access to people, quality and extent of teamwork....)

Design

What constitutes the design brief?

Who phrases the design brief?

What rationales inform the design brief?

What happens and which rationales inform the development and selection of:

- General themes
- Colour chart
- Styles
- Material selection
- Finishes, dyes, other process and production choices

What was the timeline of the design process?

Who did you work or exchange information with during this stage, for what purpose?

Which other sources of information did you consult, for what purpose?

Was the design process for this collection typical of how you normally work?

To what extent could you plan your own design process?

Feelings about the process, what works well, could work better? (Time, resources, access to people, quality and extent of teamwork....)

Other stages

What happens next? Draw time-line with actions as far as you know.

What is your involvement in these stages?

Who did you work with, were you consulted by, did you consult?

What rationales inform these phases?

To what extent are you involved in strategic decisions, new concepts etc?

Are you satisfied with your involvement/ others' involvement in your work?

- Sales
- Production
- Marketing/PR
- Distribution
- Retail
- Use
- End-of-life

Environmental

What are the major environmental issues associated with fashion production?

Where do you think environmental issues arise?

What is the best way to address these issues?

How are they addressed in your organisation?

Who is working with the environment in your organisation?

How can designers improve the environmental profile of products?
 What is required of designers to do this? If you think it would not be possible, why?
 What is environmentally responsible design?
 Are environmental issues important?
 What drives changes in environmental practices in your company? From outside, inside the company?
 What are the barriers to more environmentally sound practices?
 To what degree are you involved in environmental improvement?
 To what extent do you work with environmental officers? (when, how...)
 Are you satisfied with your own involvement?
 Why are you not more involved in environmental work?
 What would make you more involved in environmental issues?
 What training have you received in environmental issues and practices?
 Do you talk about the environment with colleagues (or friends)? Reflect the debate.

The designer role

Is your organisation typical in the fashion industry? Explain why or why not.
 What do you like most and least about being a fashion designer?
 Is there something else you think I should ask about?

Conclusion

Is there anything that I have forgotten to ask, that you would like to add?
 Other things you think are important?
 I will send a transcript for you to check. Please feel free to add, adjust.
 Thank you!

A.1.2 Questions for CSR staff

Professional background

What is your area of responsibility and job title?
 For how long have you been with the company?
 Where did you work before?
 What is your educational background?

Project plan

Describe how environmental work is conducted in your organisation.
 I understand that the environmental work that you do encompasses a variety of issues, such as retail interiors. Today however, the focus is on the environmental work in connection with clothes, across the lifecycle.

Involvement in the lifecycle

The lifecycle of a clothing product is often described in these stages.

Do they seem to fit work at your organisation, make adjustments if needed.

- Conceptualisation/trend research
- Design
- Sales
- Production
- Marketing
- Distribution
- Retail
- Use
- End-of-life

Which of these stages are you (as a team) involved in?

What is the nature of your involvement in each of these stages? I.e. who do you keep in contact with, how is the contact conducted?

Feelings about the process, what works well, could work better? (Time, resources, access to people, quality and extent of teamwork....)

Make a timeline, if applicable.

Lifecycle and environmental concerns

Going back to the fashion lifecycle chart.

Where do environmental issues arise?

What are the major environmental issues associated with fashion production?

What are your strategies for these stages?

Where is there most scope for improvement?

Describe possible improvements.

Driving forces

What drives changes in environmental practices in your company?

From outside, inside the company?

What are the barriers to more environmentally sound practices?

On what rationales do you define your environmental goals?

What sources do you consult?

What is the scope to do more than legislation (and other formal driving forces) requires?

Communication of environmental agenda in the organisation

What constitutes your brief to designers, buyers and others?

How is the environmental agenda communicated to the design department?

Who do you brief, keep in contact with?

To other departments? Other stakeholders? (marketing, sales, transport, retail, consumers)

Feelings about the communication of the environmental agenda, what works well, could work better?

Education

What kind of education do you offer to designers and buyers?

What issues does it include?

Who is it offered to? Accesses it?

Team work/information exchange

To what extent are designers and buyers involved in environmental work?

Are you satisfied with the nature and extent of their involvement?

What could make them more involved?

To what extent are you involved in the trend research and design process, i.e. with designers and buyers etc?

Are you satisfied with the nature and extent of your involvement?

What could make it possible for you to be more involved?

Proactive work and eco design principles

Are these principles, concerns addressed in your company? If so, how?

Organic cotton, PVC, fur?

Appropriate lifetimes

Dematerialisation

Reuse, recycle

Take back scheme

Future development

What do you see as the main challenges and opportunities for environmental work?

In your organisation? In general?

To what extent are you (your team) involved in strategic decisions in your company, new concepts...?

Other

Is your company's organisation typical in terms of how environmental work is conducted?

Is there something else you think I should ask about?

Specific project you want to talk about?

Conclusion

Is there anything that I have forgotten to ask, that you would like to add? Other things you think are important?

I will send a transcript for you to check. Please feel free to add, adjust.
Thank you!

A.1.3 Questions for trend-forecasters

Professional background

What is your area of responsibility and job title?
For how long have you been with the company?
Where did you work before?
What is your educational background?

The agency and the team

Can you give some background to your agency?
Describe your business?
What services do you provide?
What is your role at the agency?
Who do you work with? Who is on your team?

Research

If you think about the work on the previous season,
What sources of information did you use and when, for what purpose?
We will draw timeline together going through what happened during the work.
(Check for)

- Trend forecasting services such as websites, trend magazines, trend books
- Trend forecasting consultants
- Seminars
- Fairs/trend information at fairs
- City trips or other
- Other research

What type of information are you looking for? (Lifestyle trends, consumer attitudes and demographics, other market research? Fashion trends, colours, fabrics, prints, styles, environmental ethical, other?)

How is this work conducted on a practical level?

Dissemination/communication

What type of material do you produce?
What are your concerns when you plan presentations/books?
What type of material do you use in the presentations?

Interaction with clients

Who are your clients?

How do your clients use your services, and for what purposes?

How do you think they experience your services?

Do they use other trend-forecasting agencies as well?

How do you think they interact on a practical level with your services?

What do you think you do for them?

How important is trend information in terms of their designs?

What else informs their designs?

At what points in the fashion lifecycle do they use your services?

Environmental

What are the major environmental issues associated with fashion production?

Where do you think environmental issues arise?

What is the best way to address these issues?

How are they addressed in your organisation?

How do you see your role in this?

How can designers improve the environmental profile of products?

Are environmental issues important?

What drives changes in environmental practices in the fashion industry? From outside, inside the company?

What are the barriers to more environmentally sound practices?

To what degree are you involved in environmental improvement?

Are you satisfied with your own involvement?

Why are you not more involved in environmental work?

What would make you more involved in environmental issues?

What training have you received in environmental issues and practices?

Would you say that your agency is typical as a trend-forecasting agency?

How would you define a trend?

How would you define a fashion?

What is the best/least engaging aspect of your job?

Conclusion

Is there anything that I have forgotten to ask, that you would like to add? Other things you think are important?

I will send a transcript for you to check. Please feel free to add, adjust.

Thank you!

APPENDIX A.2 Sample transcript

Interview E, 30 March, 2005

The interview took place at Company E's offices, London

Professional background etc

What is area of responsibility and job title?

For how long have you been with the company?

Where did you work before?

What is your educational background?

I am the designer of skirts and casual jackets at [Company E]. I have only worked here for 9 months. Before that I was at [design company] for about 2 years, that was my first proper job. After college I also worked briefly for [design company], but that was unpaid work. I studied fashion design at [fashion design BA degree]. It is a three year course. I graduated in 2001.

Can you describe your role at [Company E] to me?

My role at [Company E] is more of a co-ordinator than a designer as such. We have such a big range that it would be impossible to design everything. We do around 400 skirts per season, and even though I do delegate some of the design work, I still do about 70% of the designing. Our suppliers have designers that do a lot of the design work for us. But I do try to get as involved as much as possible with the actual design, because it makes the job more interesting, and I enjoy it. The suppliers take care of big sellers that run from season to season, such as the tweed pencil skirt or a cotton poplin A-line. They mainly stay the same but for some tweaking. It would be too time consuming for me to do all that so I delegate.

Who do you work with? Who is on your team?

My team consists of a designer - myself, a senior buyer, junior buyer and the junior buyer's assistant for skirts. For casual jackets we only have a junior buyer and her assistant because the line is smaller. I share a design assistant with the 12 other designers, which means I can only use her for about half a day a week.

How many men's wear, women's wear designers, how many in the design studio are women and how many are men?

[Company E] only does women's wear, There are 12 designers in our studio, all of which are women. In a way the suppliers' designers are also part of the team, but they are obviously not here. My boss is the head of design, the line manager. She doesn't do any design, she organises the trends and co-ordinates the whole line and she makes sure everyone is happy. I ask her for advice and bounce ideas off her. She is in charge of all the 12

designers. All designers and buyers are in-house, here in this building. There is also the merchandiser side, with senior, junior and assistant merchandisers - the buyers work closely with them, I don't. There is also an economist I am rarely, but sometimes, in contact with to ask what I can afford to do.

Can you describe what happens from the start up of a new season until the next season starts?

We are still working on the Autumn Winter season [2005/2006 *my comment*].

In the next week [beginning of April *my comment*] or so we are going start working on the Spring Summer [2006 *my comment*] season. We start brainstorming, spend a few days out going to the library, to exhibitions, thinking about what is going to happen. In a couple of weeks (mid April, M comment) we meet up and brainstorm, show photographs, images from magazines.

Anything else?

New books that have inspired us, we talk about film, exhibitions, new collections that we have seen in Selfridges, Liberty's etc that we feel are exciting. We create boards with the stories we believe in.

What type of material do you put on these boards, can you give an example of a story, can be an old one?

We did a story board this summer called Folk Festival. It had images of people at festivals in the 70's, images of icons such as Janis Joplin, textile images such as crochet work, 70's T-shirt and poster graphics, modern images from magazines of shoots with hippie styling, and so on. We finalise the boards by the end of May.

Does this only include all the designers or are the buyers, or other people also involved?

Designers only. We start designing in the beginning of June. We present the story boards to everybody, the style advisors, buyers, merchandisers, managers, display, advertising.

Is this you and the buyer, do all designers present together or separately?

Designers only.

The catwalk shows in September [presenting Spring Summer 2006 *my comment*] are very important for us. We check what are the important stories and key items, what is right and we review the boards. We don't ditch stuff, but we add more, it might be a story we have missed that is on the catwalks.

How does the actual designing work?

As soon as I have completed a sketch, we send it off to the supplier. They send us a sample in 1 or 2 weeks. It is a very ongoing process, we have fittings twice a week and send off orders once or twice a week. This means that we have the actual clothes and not just sketches. It is very different from some companies such as Levis. We have such fast

turnover so it is important that we get back samples quickly. I like this way of working, it keeps the continuity going. It also means that we can react quickly, if something sells well we can put on more colours and update the style.

In fact already in May we are trying some of the autumn clothes to see the reaction. If a style sells well we can bulk up the order. We can also add products in season.

All through the design process we have reviews and show [Company E's] brand director. Once a month we present to her what is going on at the moment, we show the essence of the season, it would be impossible to show everything, we have 300 skirts. At these meeting the whole skirt team, not design team is involved.

If you think about the work on the previous collection, what sources of information did you use and when, for what purpose?

I use the WGSN website and we usually buy this French publication Peclers although we didn't for this season because we didn't think the last one was all that great. Other than that we don't really use trend-forecasting material, we do it all ourselves. We travel all the world, we are out there and see things ourselves, this is better. We travel to Tokyo, New York, Los Angeles, San Francisco, Paris, Belgium, Amsterdam, Sydney... We take photographs of people in the streets and buy vintage and new samples. I do around six trips per year. Tomorrow I am going to Hong Kong, Tokyo and Sydney. I have already been to Chamonix because I was doing something around skiing for the winter. I have also been to Paris, South Italy and Antwerp. I go to Première Vision, that is the only fair I go to. The jeans designer goes to Jeans Magic in Las Vegas.

At Première Vision I see all the normal suppliers but what is really exiting to me are the forums with all the new development. Because we are Company E we can't afford the fabrics, so I know it's a bit cheeky but I order the over headers and ask our suppliers if they can source a similar fabric.

I think Première Vision is really good for trend direction, to see where it is going. Like last season there was a lot of this girlie Chanel thing going on. Now the tweed is more traditional, more out-doorsey in checks and with muted colours.

The suppliers mostly source our fabrics. I go to the factories sometimes, I go because we can develop styles right away and to keep good relations. I go to Hong Kong and to Turkey, I don't go to India, but the dress designer does because of the embroideries. Hong Kong is very good for the things I need such as twill, denim and tweed. Tomorrow we are going to Tokyo – for inspiration and sourcing, then Hong Kong for 5 days to work with the suppliers and factories, then Sydney for more inspiration.

I don't find WGSN hugely helpful, but they are really good at shop reports, I print those out and bring to check out new shops when I go somewhere. WGSN are not so good at trend direction, I don't look at that anymore, I don't have time. It is a bit wishy-washy.

Mostly we look at fashion trends but we also try to think about lifestyle trends. We do lifestyle reports every season, like now there is this beatnik trend with Edie Sedgwick, with cropped macs, tights. We send out emails to everyone, the buyers and recommend films and books because it is important that they know what is going on, but I don't think much happens with it, there is so much to do.

When you do research city trips and look at for example WGSN, what do you mainly use it for? For example, confirmation, inspiration, information, to gather evidence to persuade someone else...

I use WGSN for their shop reports, they have great reports on city shopping... for eg, A report on Sydney would have places to eat and drink that have fashionable crowds, new shops, galleries, markets, etc...

Do you feel there is a gap in the market, i.e. trend information that would be useful to you but is not available at the moment?

I think first hand experience is best, that's why we travel so much. I like the idea of WGSN very much, it's so handy as it's on the computer, right in front of you, but its trend info isn't that great, if it was I'd use it all the time.

How do you develop the colour stories?

Mostly our print designers assemble the colour stories. We have recently decided to bring in a colour specialist, a colour analyst. She will help with the colour direction on a freelance basis. I pick colours for the all star store garments, these are pieces that go to all [Company E's] shops, such as in Birmingham, Oxford Street. We have our print designers, but we also source prints.

How do you work with environmental issues, do you for example use organic cotton?

We don't really work with these things. I mean, we have very high standards in the factories. They conduct all sorts of tests. There are inhouse nurses and doctors to make sure that everyone is safe. But we are too big to concentrate on the cotton and the bleaches, it doesn't fit with our price profile. It is different for Katharine Hamnett. She can afford to pay a hundred pounds. Even if it was possible, we have so much to do already.

Did your degree include environmental education? No.

Have you received environmental education at work, present or previous workplace?

No.

What do you think are the major environmental issues associated with fashion production?

I know the bleaching of cotton causes huge amounts of damage to the environment, contaminating the local water, which effects cattle and crops... other than that I am not educated in this area, unfortunately.

Where do you think environmental issues arise in the fashion cycle?

They arise because everybody including the customer wants the best price, to make the best profit margins if you are the buyer or to make the best saving if you are the customer. With this being everyone' priority, environmental issues are neglected as they cost money to improve!

What do you think is the best way to address these issues?

I really think the government in the country concerned should be the people that tackle this issue. People who own major companies are business people and most business people are more concerned with making money than helping the environment, with the exception of Katharine Hamnett of course.

What would make you more interested and involved in environmental issues? The freedom of having more time... I am always so incredibly busy that I don't have time to be involved in making any changes.

How much impact does trend forecasting services/ trends have on your designs?

Not much really. We drive our own trends. [Company E actually] dictates trends on the high street. But obviously it is important for us to be aware of what is going on. Especially the catwalk shows are important. They influence what we do, such as a key piece from Marc Jacobs and Chloé. We design around the catwalks. We employ [fashion journalist]. Every season she will come in and give us her interpretation of the catwalk trends. That is very interesting. We hire her as a consultant, she also works for other high street companies. But we gather our own information as well. We are always out there.

What else informs your designs?

Obviously the financial side of things is very important, and the buyers have to make sure that what we design sells. But there is never a struggle with the buyers here. Our buyers are very trendy. They probably also did a fashion degree but decided on a different direction. If I feel strongly about a style, they will always let me do it, but they might order 300 pieces rather than 3000 to try out first.

What is the best thing about being a fashion designer?

What do you like about your job?

I was always artistic, I like drawing, I am very tactile and like fabrics. I also like seeing different cultures when I travel. I never wanted to spend all my time in front of a computer.

Do you think [Company E] is a typical fashion organisation?

From my experience with for example [other fashion company], [Company E] is much more organised. We have a much more established infrastructure. I really appreciate this. At [other fashion company] it was a bit as if we were playing being a company.

APPENDIX A.4 Emergent themes and methodological approaches

Negative emergent theme	Theme in short	Scenario	Recommendations
Alienation	<p>Alienation occurred in two main areas:</p> <p>Organisation/practice: Specialisation of the organisation between designers and environmental staff and of related activities.</p> <p>Designers were removed from production, both in terms of role and associated tasks and in how production was situated far away geographically.</p> <p>The designers had limited involvement in the design of the actual products.</p> <p>Perception/practice: In both perception and practice environmental issues were located at product level rather than system level.</p>	<p>If a space could be created where designers were encouraged to reflect upon which their personal values are and to what extent they are embodied in their professional practice, a clearer picture of the underlying dilemma of clashing personal value system and professional practice might emerge. Such discussions should encompass both environmental issues, and issues concerning the concept of a 'high-status low-status job'. This in turn might act as a step towards a degree of reconciliation between the frameworks of fashion and environmental improvement.</p>	<p>Personal professional value quest.</p>
	<p>The designers had fragmented knowledge of environmental issues and practice related to fashion production.</p> <p>The companies prioritised humane over environmental issues and failed to view them as interconnected.</p>	<p>If a group of stakeholder were encouraged to share knowledge and experiences this may act as a step towards a fuller understanding of the fashion industry and its associated environmental impacts.</p> <p>If examples from industry, and in particular such examples that illustrate a proactive designer role, of how these two different frameworks can be reconciled were introduced, perhaps it could encourage further engagement with environmental issues.</p>	<p>Mixed stakeholder groups.</p> <p>Positive and relevant examples from industry.</p>
Constraint culture	<p>Constraint culture occurred in how:</p> <p>A buyer culture, which had both organisational and psychological manifestations, in reality and perception, constituted boundaries to creativity.</p> <p>Considerations of brand profile, price profile and target group, i.e. the commercial framework dictated the design work.</p> <p>The nature of the designer role, operational, limited the scope of conceptual work and limited designers' insight and participation in the companies' full range of activities.</p> <p>Environmental issues were regarded as constraints to creativity.</p> <p>The designers displayed a lack of confidence as regards environmental issues and practices.</p>	<p>Some of the constraints of a fashion company at this level seem to be directly related to its size and price profile, such as the Fordist and hierarchical organisation and the practice to place production where labour costs are at a minimum. If alternative solutions could be explored on a smaller scale, with a smaller team and with a more flexible budget and timeline, perhaps valuable lessons could be learnt that were adaptable back to the ordinary business framework.</p> <p>Again if the advantages of environmental improvement in economic terms and the advantages of designers' involvement at a more strategic level could be illustrated, perhaps a buyer-culture could also strive for environmental profits.</p>	<p>Pilot projects with fewer constraints in multi-disciplinary groups.</p> <p>Exploring synergy effects workshop</p>

	<p>The circular argument that the self-reference and the self-fulfilling prophecies presented in the trend-research and the prescribed timeline of the fashion cycle provided barriers to creativity.</p>		
	<p>Stress occurred on two levels:</p> <p>There was 'everyday stress' in relation to fitting a range of activities into a limited time schedule. There was 'conceptual stress' in relation to meeting the requirements of the fashion cycle; frequent and constantly new output in line with the demands of a commercial framework.</p> <p>Limited time was the most frequent explanation to designers' low present and future involvement in environmental improvement.</p>	<p>The issue of stress seems difficult to intervene in, especially since such an attempt may increase the experience of stress. Therefore any invitation to designers to participate in activity must have direct and immediate relevance on them.</p> <p>Ultimately stress appears to need being resolved on a systemic level, by the support of the organisation and allocation of appropriate resources.</p> <p>However, stress, although it may be caused by unrealistic demands, is also an experiential phenomenon.</p> <p>Therefore perhaps a more situated and holistic understanding of fashion and the fashion designer role and of environmental issues and practice, and accessible and suitable tools, could amend some of the designers' experience of stress. This in turn may empower designers towards more positive action.</p>	<p>Design of invitation to, and of activities that displays immediate and direct relevance to fashion designers. Short activities, easy access and flexible schedule.</p> <p>Introduction to, and relevant practical examples of fashion designer friendly tools.</p>
Stereotypes	<p>Stereotypes occurred in how:</p> <p>The designers viewed environmental issues, environmentally friendly fashion and environmental practices.</p> <p>In essence the designers could not reconcile fashion (of their high fashion content, high-street, mass-market, low price segment with environmental improvement.</p> <p>In addition the designers expressed stereotypical perceptions of what constitutes fashion and a fashion designer role: superficial, glamorous, operational and a certain type of creativity,</p>	<p>If some of the <i>stereotypes</i> could be refuted, or put into context, and countered by 'real' cohesive facts to replace isolated 'sample facts' and comfortable or uncomfortable assumptions perhaps environmental improvement would appear more feasible and desirable to designers. This again would need to include those stereotypes pertaining to fashion and the fashion designer role.</p>	<p>'Setting the record straight' through appropriate information.</p> <p>Exploration of fashion and the fashion designer role.</p> <p>Pilot project in industry on environmentally friendly fashion, far in look and communication from its failed predecessors.</p>
Cynicism	<p>The participants displayed cynicism about how financial gain is prioritised over morals at both producer and consumer levels.</p>	<p>If some of the <i>stereotypes</i> could be refuted, or put into context, and countered by 'real' cohesive facts to replace isolated 'sample facts' and comfortable or uncomfortable assumptions perhaps environmental improvement would appear more feasible and desirable to designers. This again would need to include those stereotypes pertaining to fashion and the fashion designer role.</p> <p>Again, appropriate information and not least, appropriate successful examples from industry, would appear to be the way to meet this attitude.</p> <p>The examples have to acknowledge that fashion in its nature is different</p>	<p>'Setting the record straight' through appropriate information.</p> <p>Design of invitation to, and of activities that displays immediate and direct relevance to fashion designers.</p> <p>Projects with short time span and immediate evaluation.</p>

		from for example the food industry. However, what the organic food movement has done, as has Eco-tourism, another growing field, is to tap into prevailing trends in the market, such as the overall interest in 'well-being'. With sensitive product development and clever marketing (skills that the fashion industry already possesses), it appears feasible that the fashion industry, and the fashion designers could also exploit such larger trends. The pursuit of future trends, although at a smaller and more specific level, is as has been shown, already intrinsic in the fashion process.	
Lack of knowledge	Current mainstream fashion education emphasised practical skills and creativity over critical analysis and excluded environmental concerns.	It seems essential that already in their studies, fashion designers are encouraged to make links between their professional practice, the larger context and with their personal value system, and to do this explicitly both verbally and through their practical work. It also appears important that they see the opportunity of continuing to do so within both fringe/conceptual and mainstream/commercial design areas, with the variety of constraints that both these frameworks entail. Therefore early collaborations with industry on such matters should be invaluable.	'Setting the record straight' through appropriate information. Design of invitation to, and of activities that displays immediate and direct relevance to fashion designers using appropriate media. Mixed stakeholder groups. Introduction to and relevant practical examples of fashion designer friendly tools.
	<p>The designers had no formal training in environmental issues and practice. Their knowledge was limited to isolated 'sample facts'.</p> <p>The designers displayed a lack of confidence about environmental issues and practice</p>	<p>However as pertains to those fashion designers already working in industry, that are the object of this study, creating fora for the communication of cohesive and situated information, along with relevant examples may encourage designers' involvement in environmental improvement. Such fora should emphasis the usefulness of knowledge, skills and practices that designers already possess.</p> <p>Such communication must consider both how fashion designers assimilate information and the general realm in which they operate. Therefore environmental information to fashion designers needs:</p> <ul style="list-style-type: none"> • A format and message that fashion designers find accessible, informative, relevant and inspiring; • A trustworthy channel through which such material could be introduced and conveyed; • The support, in terms of both time and financial resources and corporate culture for fashion designers to use such material. 	

Table A.4.1 Negative emergent themes, scenarios and recommendations

Positive emergent theme	Theme in short	Scenario	Recommendations
Inter-disciplinary teamwork	The designers did have contact with a range of colleagues but collaboration was located in only one layer of the hierarchy -	Although resources may limit designers' visits to factories, it seems possible to extend their network within the organisation. If small	Extra-ordinary fashion workshop with alternative brief and design activities.

	operational, concerned only direct design issues, and excluded environmental work, production and users.	groups, comprising representatives from all departments and also some local end-users, could be formed, a direct knowledge exchange could be facilitated and perhaps new proactive ideas would emerge. Such work would obviously need to be supported by the organisation, all participants would need to see the value of it and the groups would need to be facilitated in such a way that the meetings were experienced as useful (rather than yet another meeting to get through). Above all, common interests and agendas would need to be found so that each participant could share experiences and find new insights. This scenario, if it were to be realised, could arguably lead to a fuller and more situated understanding of the fashion product lifecycle for fashion designers as well as other stakeholders.	Pilot projects with fewer constraints in multi-disciplinary groups.
Creativity	<p>The designers enjoyed most those parts of their work that they perceived creative. The notion of creativity was restricted to visual, physical output.</p> <p>The designers found good sales rewarding.</p> <p>Current mainstream fashion education, that most of the designers had undergone, emphasised practical skills and creativity over critical analysis</p>	<p>If the notion of creativity could be expanded to include systemic analysis (and resultantly perhaps the design of non-material fashion output or nega-demand) the notion of creative fulfilment could also be expanded. It may include non-visual output, common rather than individual goals and expression, the reconciliation of personal and professional value systems and longer-term awards.</p> <p>Such a scenario asks for changes in attitude on a large scale. However on a more concrete note, perhaps a workshop could be organised where designers are encouraged to apply their skills in 'new' ways.</p>	<p>Extra-ordinary fashion workshop with alternative brief and design activities.</p> <p>Pilot projects with fewer constraints in multi-disciplinary groups.</p>
The big picture	<p>The designers enjoyed the 'conceptual' elements of their work most. However the conceptual work only constituted a small part of the overall tasks. Moreover, the conceptualisation was prescribed by a number of constraints.</p> <p>In the main the designers' role was one of a co-ordinator.</p> <p>Trend research formed an integral part of the design process, but again this work was directed by commercial constraints so that it mainly focused on concrete, fashion-specific trends.</p>	<p>Fashion designers' interest in the future may be a useful quality if the notion of the 'big picture' could be expanded. Perhaps the list of 'what to look for' that fashion designers bring into the research process could encompass environmental bullet points alongside commercial parameters so that it encouraged the interest in a wider range of 'fashion-opportunities'. Perhaps, as outlined above, the notion of creativity could be expanded to include wider fashion solutions than those solely product specific. Perhaps the excitement in the future could be expanded from the immediate future to a future further away, and visionary thinking be targeted beyond only fashion-specific dreams to include those concerning future lifestyles and habits. This would requisite a set of design-friendly tools, and goals divided into clearly defined and manageable steps.</p>	<p>Future research exercise, action and reflection cycles.</p> <p>Extra-ordinary fashion workshop with alternative brief and design activities.</p> <p>Pilot projects with fewer constraints in multi-disciplinary groups.</p>
	The designers were guided by intuition and had acquired tacit knowledge through living with the fashion cycle.	A heightened awareness (as outlined above) of the steps and language of the design process could offer fashion designers more confidence, and also offer insights beneficial to the area of environmental improvement. Moreover, perhaps	Research into practice workshop.

		such in-tuneness and tacit understanding that the designers evidenced, could be framed not only by commercial considerations but also by those of an ecological context.	
	The designers placed trend-research on a hierarchy where they valued 'visionary' type over the prescriptive, and their own 'original' research over commercially available trend material.	The designers' preference for 'visionary' rather than concrete trend-information and 'original' research over the secondary sources that trend-forecasting companies provided and their contradictory real reliance on specific commercially available material could be addressed if a diversity of trend-work was introduced. Such an approach could mix independent with secondary research and thus meet both the designers' aspirations and their reality.	Future research exercise, action and reflection cycles.
Wild West	Those participants working for H&M expressed their appreciation of "the freedom with responsibility" that characterised the corporate culture. Much was of up to the individual, who could, hypothetically, if she had a special interest in for example environmental improvement pursue it within the realm of the company. While there were examples of this, it was dubious whether employees were aware of these opportunities, and if their educational and professional background had prepared them for such proactive work and if the company would provide sufficient support.	The bounded instability that seemed to be a property of H&M's corporate culture offers opportunities for proactive design involvement <i>if</i> designers seek it out. In order for this opportunity to materialise a number of issues, previously outlined, need to be addressed. Not least does it seem imperative that an individual grasps the power she as a designer can yield - the potential to affect a product's environmental (and financial) profile by up to 90%. Therefore, again, relevant, specific and situated examples from industry, and introduction to design-friendly tools appear necessary.	Personal/professional value quest. 'Setting the record straight' through appropriate information. Positive and relevant examples from industry. It may be of interest to study those companies with successful CSR work and proactive environmental improvement at systemic level as there may be elements in company culture that support CSR work and that can be transferable to a 'tool-kit' of environmental improvement.

Table A.4.2 Positive emergent themes, scenarios and recommendations

Neutral emergent theme	Theme in short	Scenario	Recommendations
Intervention points	<p>Some activities, events and sources were accessed by most designer participants and thus emerged as potential intervention points. These were:</p> <p>Key events: <i>Première Vision</i> and the catwalk shows.</p> <p>Key points in time: the start-up phase of a season (access of formal trend-sources) and the final stages of design development (catwalk-shows used as check-point).</p> <p>Key actors: trend-forecasting companies <i>TrendUnion</i> and <i>Moderâdet</i> - whose material were mainly used at the start up phase and online service <i>WGSN</i>, which was used continuously through the process.</p>	<p>Key events and key actors: If actors, events and the reports on them were to champion sustainability and designed suitable presentations of environmental issues and practice, the message would be passed on to thousands of fashion designers.</p> <p>Key points in time: The suggestions would need to recognise and support the particular stage of the design process where the designers are at.</p>	<p>Lobby work towards trend-forecasting companies. See above recommendation for fashion designers.</p> <p>Trend work shops with designers that point to synergy effects of fashion/environmental work.</p> <p>Pilot project in industry on environmentally friendly fashion, far in look and communication from its failed predecessors.</p>

	<p>H&M appeared to have best practice in terms of environmental work in its field, mass-market, high-street, low price.</p>	<p>If H&M were to publicise its current (and perhaps future more advanced and visionary) practice, it seems likely that the company could tap into this practice of circular self-reference, and self-fulfilling prophecies for positive effects. Perhaps an initial small pilot project of environmentally friendly fashion, far in look and communication from its failed predecessors, could be developed and tested.</p>	
	<p>The fashion industry, at this level, was part of a circular argument that the self-fulfilling prophecies of trend-forecasting companies, because of their influence, seemed to present.</p>	<p>If sustainability were to be championed by major trend-forecasting companies the likelihood of their predictions turning into reality is high.</p>	
	<p>Company profile, i.e. retailer or wholesaler dictated which type of trend-sources that were accessed.</p> <p>Trend-forecasting material ranged from the visionary and open to the detailed and fashion-specific.</p>	<p>If key actors were to champion environmental improvement, recommendations would need to be differentiated to suit the respective company profiles and include both visionary and fashion-specific predictions appropriate as regards time-schedules and both trend-forecasting and fashion company profiles.</p>	
Language	<p>The designers used trend-sources for purposes of information and inspiration, to collate material for presentations, as sales arguments in presentations and as confirmation that what the designers themselves had thought was 'right'. Of special interest here is the particular type of language used in the communication of fashion trends. This language, or rhetoric, constitutes an intricate balance of information and inspiration, and relies heavily on emotive, verbal and visual elements.</p>	<p>Such predictions should acknowledge all the purposes they serve for fashion designers.</p> <p>It is of special note that the language of trend and fashion presentations could provide valuable inspiration for environmental communication.</p>	<p>Experiment with transferring trend and fashion rhetoric to environmental communication.</p> <p>Explore opportunity focused language.</p>
Gender	<p>There was a biased gender distribution in the sample which is though to be representative of the fashion industry at this level. Fashion and the fashion designer role appears permeated by gendered constructs.</p>	<p>In terms of the gender distribution in fashion professionals and gendered notion of fashion, there is for obvious reasons no immediate shift underway. However, gender should be a consideration in the advancement of this study's aims. One scenario that such consideration could immediately inform is the language used in the presentation towards the reconciliation of environmental issues and practice and fashion. The ecological paradigm implies a democratic process. The language should strike a note that embodies the concern for and empowerment of a variety of stakeholders.</p>	<p>'Setting the record straight' through appropriate information.</p> <p>Exploration of fashion and the fashion designer role.</p> <p>Experiment with transferring trend and fashion rhetoric to environmental communication.</p> <p>Mixed stakeholder groups.</p>

Table A.4.3 Neutral emergent themes, scenarios and recommendations

APPENDIX B. Documents supporting the second empirical study

APPENDIX B.1 Quality Criteria

B.1.1 Reflexivity

“quality in inquiry comes from awareness of and transparency about the choices available at each stage of the inquiry.” (Reason, 2006: 187)

Russell and Ison argue that responsibility should take the place of objectivity to ensure ethical research. (Russell and Ison, 2000) In an action oriented research framework (see Chapter 5, 5.4.1) research is cyclical and varies action with reflection. It proposes that the quality of research depends upon both awareness and transparency of all choices made throughout the inquiry. (See e.g. Heron, 2001) This reflexivity is crucial in securing that responsibilities are always addressed – to participants, to other stakeholders and to the agenda of the research.

Action research also advocates research *with* rather than *on* people, which means that the research process is participatory or co-operative and that the researcher’s input, observations and experiences are part of the data generated and that the researcher’s voice is important in the narration. (See e.g. Morgan, 1997 and Heron, 2001) A role combining facilitation, inquiry and participation demands a high degree of self-reflexivity. In this research, it was of particular importance to endeavour awareness about how my presence, and I as a person influenced the study. Furthermore, the ambition to conduct research that both embodied and promoted a paradigm of sustainability necessitated ongoing reflection and evaluation. ‘Do my approaches correspond to the conceptual paradigm? Am I striking an appropriate balance between the formal requirements of a thesis with the requirements to honour this particular conceptual framework?’ Finally ‘reflexivity’ asks for an engaging and transparent narrative that makes it possible for an outsider to follow and understand the research process. (See e.g. Hopper, 1988; Chenail, 1994; Janesick, 2004)

B.1.2 Credibility

Guba and Lincoln (1994) propose credibility as an important aspect of good research. Credibility, it is argued, is ensured by sound research practice, such as asking participants to read and comment on accounts of the research. Replacing objectivity with credibility has of course implication for the evaluation and validation of the research. The table below constitutes six criteria to ensure that research is trustworthy. (McClintock, Ison *et al.*, 2003 following Pretty, 1994)

Criteria for responsibility (evidence of)	How it can contribute to responsibility	Desirable attributes
Self-reflection	<ul style="list-style-type: none"> · being aware of ideas, assumptions and alternatives 	<ul style="list-style-type: none"> · research journal · document changes in ideas
Engagement in a research community	<ul style="list-style-type: none"> · by a 'dialogue' with other researchers · by contributing to a research community 	<ul style="list-style-type: none"> · collaboration · peer review · conferences
Adequate use of available resources	<ul style="list-style-type: none"> · being accountable 	<ul style="list-style-type: none"> · coherence and plausibility of argument · use of time
Immersion in context	<ul style="list-style-type: none"> · by a prolonged time with people in context · through relationship building 	<ul style="list-style-type: none"> · a 'rich' picture of that context · research is relevant to that context
Rigour	<ul style="list-style-type: none"> · by substantiating statements 	<ul style="list-style-type: none"> · quoting relevant literature and sources of material
Sincerity	<ul style="list-style-type: none"> · 'valuing' other people · consistency to aims of working with people 	<ul style="list-style-type: none"> · writing in the first person · learning described · developing appropriate skills

Table B.1.1 Criteria for evaluating responsible research (McClintock, Ison *et al.*, 2003: 722)

In this inquiry I have sought to follow these guidelines for responsible research to the extent that was possible. I have consulted my peers all through the process: through informal conversations, temporary collaborations, and contributions to conferences and seminars. The actual 'immersion in the context' was very limited in time, but initial contact and follow up interviews ensured that I was quite familiar with all participants. I have through my studies and professional practice several perspectives of, and a strong familiarity with the context of the fashion industry. Although it was not possible to run parallel inquiries run by different investigators, the series of similar interventions made triangulation of process and data possible. Within each intervention I also placed several data ports to generate data about the same question. During the sessions and in the follow-up interviews all participants were invited to make sense of and comment on the accounts of the process we had shared. All participants were informed of the aims of the research and consulted before any documentation took place. Finally, I have kept a self-reflexive journal of the research process and tried to be explicit of my own value position, and relevant personal and professional experience and used the first person in my account of the research process where appropriate. Another researcher was brought in to independently code 10% of the data in order to validate the analysis process.

B.1.3 Democracy

"the reality of the other is found in the fullness of our open relation... when we engage in our mutual participation. Hence the importance of co-operative inquiry *with* other persons involving dialogue..." (Heron, 1996: 4)

"The democratization of research management is as much a human rights issue as the democratization of government at national and local levels." (Heron, 1996: 21)

Heron (1996) states the participatory nature of action research to be crucial in both political and epistemological senses. Politically, it is necessary to fulfil a democratic framework; and epistemologically, it allows people to control, create and take ownership of their learning and transformation through action and reflection and meets the need for a pluralistic knowledge

ecology. (Heron, 1996; Pretty, 1994) Participatory or co-operative research therefore dissolves two distinctions of conventional academic research:

- The separation between the researcher and the research subjects;
- The separation between the researcher and those that will eventually use the research. (McClintock, Ison *et al.*, 2003)

In action research therefore the ideal is that all participants have awareness of both the concepts and the actions. (See e.g. Maughan and Reason, 2001) Although this research purported to inquire *with* rather than *on* people, (see e.g. Reason and Heron, 1986) it is clear that I came in with the agenda and there was thus an immediate power imbalance. However, I strived to design a research process that was flexible enough to allow participants to shape the events, and that yet had the stability to fulfil the needs of the research aims, and the participants' need to feel safe. Here, again it was important that I was transparent about the research process with the participants, and that they had the time and space to make sense of the inquiry. During the course of the research I grew increasingly aware of the significance of accessibility of research, and of power structures embedded in for example academic language. I have therefore tried to strike a balance between a language that is accessible and yet fulfils the criteria of a PhD document. (See recommendations, Chapter 7, for a reflection on alternative research output.)

B.1.4 Relevance

Reason and Bradbury urge us to ask ourselves whether the inquiry is "in search of a world worthy of human aspiration?". (Reason and Bradbury, 2001: 12) This 'so what?' question is crucial – research needs to be meaningful at both personal and higher levels. This research project stemmed from my appreciation of the urgency of environmental improvement at systemic level in the fashion industry, and contemporary society at large. This sense of urgency, and my personal need to find a relationship to the dilemma that fashion in the context of sustainability constitutes, has been the constant drive for this thesis. When I embarked on a participatory process I tried to ensure that the inquiry that I invited the participants into, should also have relevance for them, and be perceived as a meaningful pursuit. Additionally 'relevance' adheres to the process of reflexivity, where I sought to ascertain that the various choices I made supported the overall aim of the thesis and a paradigm of sustainability.

B.1.5 Translatability

Transferability is sometimes suggested as the equivalent of qualitative research to generalisability in quantitative research. (See e.g. Bryman, 2001) It is evident that research aimed at situated meaning does not afford statistical projections in the same way that quantitative data does. Instead the insights we generate from qualitative research may be transferred or translated to situations or conditions of affinity. Whereas this inquiry focuses

on a particular aspect of the fashion industry, and the study is limited to Sweden and the UK, there are insights and methodological approaches that may be translated to different research areas and industries; such as other design disciplines of high 'fashion level'. (See recommendations, Chapter 7.)

B.1.6 Creativity and vision

A central aim of the second study was to generate new legends and images (see e.g. Merchant, 1982) from the underlying proposition 'what if fashion and sustainability were compatible and even synergistic?' in order to replace the unhelpful perception of fashion and sustainability as anathema. Here it was not the practical viability of scenarios and design ideas that was at test, instead I explored the inspirational power of both the proposition and the new images it generated. Those images came to span from the realistic to the fantastic, and addressed different aspects of sustainability. Their value lies exactly in this very range of new images and legends, and in that they constitute the result of teamwork between different fashion industry stakeholders. Thus the space for 'uncontaminated envisioning' was a key factor in the success to meet this particular criterion. Heron and Reason speak of 'bracketing and reframing', advocating an openness in the research mind for multiple perspectives and realities.

"holding in abeyance the classifications and constructs we impose on our perceiving, so that we can be more open to its inherent primary, imaginal meaning. It is also about trying out alternative constructs for their creative capacity to articulate an account of people and a world; we are open to reframing the defining assumptions of any context." (Heron and Reason, 2001: 184)

6.1.7 Authenticity

Authenticity refers to the question – 'is the research true to its purpose?.'

Action oriented research proposes that research can be informative as well as transformative. In the latter definition an inquiry is *authentic* if it inspires and empowers the participants. (See e.g. Bradbury and Reason, 2001; Guba and Lincoln, 1994) Reason (2003) suggests that the authenticity of an inquiry is not dependant on grand gestures and monumental changes, instead a new recognition of plurality of perspectives, or a heightened awareness of habits can be sufficient 'evidence' that the inquiry is true to its purpose. It is important to note here that the very *doing in different ways* is a provocation that might lead to new future practises, as much as the concepts proposed. (See Reason and Torbert, 2001) This research is aimed at change, however it was not expected that the interventions I made would result in dramatic shifts – this was unrealistic in the light of limited resources and time. Instead I hoped to provoke some degree of curiosity, dialogue; that the process of participation, and the propositions that were made, should feel useful or at least interesting or 'simply' fun.

When I refer to this research as activism, I understand it from the perspective that even a small intervention can have a significant effect. Mine was a very small intervention in the world, but an intervention through which I appreciated that I could and should use my unique insider/ outsidership and skills. It is activism in the sense that the new, alternative images and legends of sustainability and fashion that the participants and I created have the potential to spread beyond the remits of the study and in turn generate other narratives. This approach resonates with two key themes of the thesis: the notion of circularity, and the significance of visions in shaping futures. I therefore came to regard the research activities as forecasts. These forecasts constituted of visions from the perspective of another paradigm. As we brought them to life, through words, images and sometimes action, they in fact became 'real' or 'true' in the sense of existing as shared new legends in the world.¹

"With the development of new theoretical languages, research practices, forms of expression and practices of intervention, we can invite cultural transformation. An inquiry into new visions and alternatives brings us in a fascinating way to the border of new frontiers." (Kajzer, 2004: 80)

For the purposes of the PhD framework, where change has to be considered as qualifiable or quantifiable data, evidence of change has been generated in several ways, and subjected to triangulation.

¹ From the 1st empirical study and the literature I had understood that a trend-forecast becomes true if the messenger and media are credible, the message inspiring and commercially promising and if enough of the 'right' people listen.

APPENDIX B.2 Workshop design

B.2.1 Invitation

The first point of contact was an invitation I sent via email to the gate-keeper of each organisation, to forward to suitable colleagues. The invitation was followed by a cover letter stating which roles to include, place, time, and a suggestion of dates, and contact details. The invitation (see below) was carefully designed to appeal to a range of stakeholders. I made sure to offer something – the trend presentation on fashion and sustainability, and I clearly stated the futures perspective, which I hoped would be attractive. I tried to make the tone of voice authoritative, yet accessible and friendly, and the visual language clean, yet welcoming.

INVITATION

Welcome to three hours in year 2026

In a small group of fashion experts, we will explore the future of fashion in the context of sustainability through a creative workshop. During three hours we will do a small design project about fashion in year 2026. As part of the session I will give a short trend presentation on fashion and sustainability.

This workshop is one in a series of eight where various people of the fashion industry (designers, buyers, CSR, marketing and users) in Sweden and the UK get together and discuss the future of fashion. The workshops form part of my PhD project at Goldsmiths College, London.

I look forward to seeing you there,
Mathilda Tham ●

Figure B.2.1 Invitation to workshop

B.2.2 Homework task

After an organisation had agreed to participate and we had settled on a date and a time, they were forewarned of a small preparatory task, which I sent out a week before the session, again to the gate-keeper to forward to relevant members of staff. This task was designed to start the reflection process before the workshop, since the session itself for practical reasons would be short. It was also hoped that starting the reflection process at home, would mean that participants explicitly brought both personal and professional value systems into the session. Early ideas of this 'homework' featured a simple data task, such as looking up the individual's carbon footprint. However upon reflection I found this was too prescriptive, and did not embody the positive stance I sought to communicate. Instead I settled on a show-and-tell approach, asking all participants to bring in two objects (object in its widest sense) that would illustrate or symbolise what fashion and sustainability² respectively meant to them. The participants were made aware that their objects would be discussed in a group.

² The Swedish equivalent to sustainability *hållbarhet* needed some further explanation (it was phrased as ethics and the environment) since it was not, at the time, as commonly used.

The use of artefacts as “doors to stored wisdom” was tried out and deemed successful in a previous research project.³ It was inspired by the cultural probes approach. (See e.g. Gaver, 2001) I piloted different ways of working with the objects as diagnostic tools for lifecycle analysis and as carriers and triggers of memories and stories. In early ideas the context of the objects, what they should embody, was not explicit. However I found that in order to achieve a focused discussion on the day, it was important to introduce fashion and sustainability as a pair already in the homework task. A couple of days before the workshop, another email was sent out to remind everybody of date, place and the task.

B.2.3 Facilitation in this inquiry

In the context of a workshop, facilitation can be described as a range of approaches, methods and skills used with the aim of enabling good collaboration. Facilitation played a significant part in this research design; it actually started before the workshop even began, through the early remote communication with gatekeepers and participants. The facilitation approaches used in this inquiry are informed by the specified requirements of the study, my own experiences - as facilitator and participant, approaches in action oriented research and other readings on facilitation. (See e.g. Bray, Lee *et al.*, 2000; Kaner, Lind, *et al.*, 1996; Morgan, 1998; Schuman, 2006)

The literature on facilitation generally agrees on some key roles of the facilitator:

- To create a safe space;
- To provide clear objectives;
- To manage the agenda;
- To help the group dynamics;
- To communicate a sense of urgency;
- To enable conclusions and action steps.

The following presents how these roles were manifested in this study. In combination these approaches can be defined as the endeavour of creating *bounded instability* – a condition that balances stability with flexibility. (See Chapter 5, **5.2.5**)

Facilitation and the shared, temporary, creative and visionary space

In order to achieve a *visionary, free and creative space*, physical spaces were chosen that I deemed as free of normal professional constraints as possible⁴, and the exploration set in the year 2026.⁵ In addition, tasks and tools associated with creativity and play were brought in. The strategy for creating a *shared and safe space* included setting up the room to allow

³ See Chapter 5, **5.9.3.1**, and Sadowska and Tham, 2004 and 2005.

⁴ The spaces were bright, large enough to accommodate the group but not too large to be intimidating. Both the London and Stockholm spaces have associations of creativity.

⁵ Again to allow us to free ourselves from present constraints, and for affinity with a fashion and trend-forecasting perspective.

as non-hierarchical a dialogue as possible and by emphasising, right from the first point of contact, and repeating throughout the session, that this was a participatory event, and that all contributions were valid and important. I also sought to be mindful of the group dynamics, and strike a balance of the space each individual took or was given. The activities were designed to cater to a range of cognitive styles. In the introduction, and throughout the session, it was made clear that I would honour my responsibilities for the session; such as time-keeping, levelling expectations, maintaining focus, and an inclusive and open atmosphere. A series of 'rules' (see *Introduction* further into the Chapter), made clear the participants' responsibilities during the session. I provided a structure for the tasks, the relative rigidity of which I deemed was necessary because of the short time frame, and because the groups had normally not worked together under similar circumstances before. However, the structure also allowed flexibility, and I was explicit about the possibility and desirability of the participants shaping the session with me.

Facilitation and vacuum design

“Even if you have a vision that is 100 percent clear, it really ends up being about 30 percent different from what you initially brought to the group. It ends up better, in other words, because of every-one’s unanticipated contributions.” (Deiglmeier as cited in Kaner, 2006: 10)

Although I brought in the agenda for the session, and had an understanding of a vision and a paradigm, the very point of the workshops was to challenge, expand on, further and situate these ideas. Therefore I had to be mindful of the extent to which I shaped the direction of the sessions, and thus forecast the outcomes. This required a careful balance between the needs of a viable study and the needs for openness and flexibility. I found the metaphor of *vacuum design* helpful for remembering the constructive aspects of the void that draws us into thinking. (See Chapter 5, **5.9.3.4**) I needed to practice my waiting and listening skills, and to accept moments of unease instead of jumping in and 'filling the gap'. I needed to trust that the framework I had set up would lead to a process; that *something* would happen. Kaner speaks about this productive uncertainty as “[living] in the question.” (Kaner, 2006: 2) It was crucial for me to remember that I had held my dilemma of fashion and sustainability for years, that living with it had caused me frustration, sorrow, joy and hope; now I must allow the participants to be in the question. I also needed to remember that there are many doors to sustainability, a range of ways of engaging with it. I must be open to a variety of responses (or seeming non-responses) to the propositions I brought in.

Facilitation and luck

According to Wiseman (2004) some characteristics of 'lucky people' are:

- A skill at generating and detecting opportunities;
- Trust in intuition for decision making;
- Positive expectations; and
- A “resilient attitude that transforms bad luck into good.”

(Wiseman, 2004; see also Chapter 5, **5.9.3.5**)

I called my intervention 'lucky people forecast.' I sought to make the workshops 'lucky' by building into the design flexibility so that the participants and I might harness unexpected opportunities and let our individual and collective intuition – our 'trend pitch' (Giertz-Mårtensson, 2006), be an important part of the decisions that we made. This openness was also manifested in the futures perspective; and a positive stance was communicated through the language and 'rules.' (These rules are explained further into the chapter.) Carson writes about the risk of "ghettos of like-minded" people and that a random selection of participants can foster a fruitful culture of collaboration. (Carson, 2006) Chapter 5 described the importance of bringing in and listening to a variety of stakeholders to envisioning processes, and how 'normal science' (Kuhn, 1962) can 'foreclose' (Sardar, 1999) the future. Multiple stakeholder perspectives were from early on a central tenet of this study. However, although my sample was interdisciplinary, I was aware that in the main, in terms of socio-cultural background and professional area, the sample was homogenous. In order to overcome the potential 'ghetto of like-minded people' I sought to invite a range of approaches and opinions, and both personal and professional value systems, both in the research design and through the actual process. Here it was again important to really listen with an open mind, and to accept and embrace diverging opinions in the group.

Facilitation and play

Play can enable a true search, not research to confirm covered ground, within 'normal science' but an authentic search for that which has never taken place before. In play we let our pitch guide – this is not naïve but informed and inspired by perhaps a lifetime of practice and experience, that allows us to enter this auspicious space. It is a free, yet directed search.

Through play we practice, embody and stretch our notions of reality, of the self and our relationships. It is an allowing space for interaction between people guided by curiosity and spontaneity. Making the workshop space playful was an important part of its notion of freedom and the visionary. I hoped that bringing in approaches, activities and tools associated with play, would contribute to making the session relaxed, creative and fun. I deemed the playfulness and humour – not to be read as flippancy or ridiculousness - as significant in the communication of sustainability as a positive opportunity for fashion. Moreover it was hoped that *play*, as search, would give us access to new spaces of understanding. (See also Chapter 5, **5.9.3.3**)

Facilitator as participant

In most of the literature I found on facilitation, the facilitator is presented as a helpful outsider, who is impartial in the discussion. However in action oriented approaches (see e.g. Bray, Lee *et al.*, 2000; Morgan, 1998) the facilitator is also researcher and participant. This

was also the approach taken in this inquiry, which meant that I had to be self-reflexive and keep in mind my several roles as researcher, participant, trend-forecaster and facilitator – a role that included facilitating myself. I had to strike a balance between for example making diagnostic judgements in the moment, making appropriate contributions, and building confidence in the group. The recordings of the sessions, my journal, and feedback from the participants during and after the session were invaluable in helping me to gauge my roles.

Facilitation in relation to my personality and skills

Glavas, Jules *et al.* (2006) propose that the use of self is one of the most important aspects of successful facilitation. It is evident that I brought into the sessions, just like the other participants, my professional as well as personal values, experiences, habits and skills. I needed to endeavour to be mindful of what they were and how they might inform the inquiry, and find ways to use my personality in the best possible way.⁶

Facilitation is a profession in its own right. The activities of the second empirical study were confined to what I as a researcher/trend-forecaster and relative facilitator novice could offer, facilitate and hold. For example, the sessions might at times tangent very personal issues, but it was important to be mindful of that it was outside the scope of my skills to hold deeply psychological conversations, and that such conversations may also violate the participants' privacy. What I could contribute with was a unique insider/outsiderness to the fashion industry at mass-market level, and knowledge at the convergence of trend-forecasting, fashion and sustainability. I could also share my personal curiosity, hope, and sense of urgency of engaging with systemic environmental improvement in the fashion industry.

B.2.4 Presentation techniques used in the workshop

All presentation elements of the workshop were supported by a PowerPoint presentation. This presentation was designed to be image led, and use verbal and visual language that resonates with a fashion and trend-forecasting context. When specialist terminology was used, I explained it in everyday language. Although the Stockholm based workshops were conducted in Swedish, I included some English terminology that is commonly used, such as 'recycling'. I also encouraged participants to ask questions and make comments and contributions under way. I was explicit about the presentation representing my understanding of fashion and sustainability, although this was supported by several citations. The concepts, quotes and models I used can be found in the literature review, Chapter 2.

⁶ My optimism, for example can be contagious, but also irritating. Although I tried to be mindful of this, at one point a participant said, "stop being so bloody positive." I know that I although generally a good communicator, sometimes make thought leaps and speak too fast and, and here again, the feedback from participants revealed that I sometimes failed at keeping a good pace. I am aware of sometimes striving for agreement where diverging views can be more helpful, simply because I am afraid of conflicts. These were some of my personality traits I was conscious of and tried to work with and against, however I am also aware that there are numerous others that will have escaped my notice.

B.2.5 Workshop – introduction

The following paragraphs introduce the actual workshop organised in four parts:

- Introduction
- Workshop – part 1 – Mapping fashion and sustainability, re-design
- Workshop – part 2 – Trend-presentation and scenario work
- Conclusion

The introduction was crucial in setting up a space for creative, non-hierarchical and focused work. It comprised several parts, which are outlined in the table below. The introductory part was designed to communicate the urgency of environmental improvement, focusing on the opportunities fashion professionals have to affect positive change. The introduction also aimed to ensure the safe space. There was no specific aim to generate data at this stage, although my observations, and the recordings ensured that comments from participants could be taken into account.

Workshop introductions	
Welcome and introductions	A welcome note – welcome to fashion in 2026, thanking participants for their

	attendance. Introductions, so that everybody was aware of the others' names and roles ⁷ ;
Introduction of me, and the project	My professional fashion and trend-forecasting background and the dilemma that I had perceived in the context of fashion and sustainability and which spurred me to embark on the PhD. A very brief account of the project so far – mapping the fashion industry through interviews and literature. My perspective that fashion and sustainability can be compatible.
A preliminary introduction to sustainability in relation to fashion	An illustration of the fashion lifecycle – from cradle-to-cradle, and a brief discussion of how the focus of current strategies, the process stages, do not reach where impact can be highest, the user phase, and where the scope for improvement can be utmost, the conceptualisation and design phases. The notion of the distinction between fashion and clothing was introduced, and that favoured and commonly known environmental strategies, such as durability, do not address fashion's symbolical essence. A quote illustrating the role of design in unsustainability: "In many ways the environmental crisis is a design crisis. It is a consequence of how things are made... constructed... and used." (Van der Ryn and Cowan, 1996: 24) Another quote illustrating the scope of fashion as a positive change agent: "Design is the most proactive direct action one can take to achieve impact prevention." (Keoleian and Menerey, 1994) An introduction to the notion that fashion professionals are also futures professionals, and the propositions: 'what if we can use our interest in the future and make it work for both fashion and sustainability?', 'What if fashion and sustainability were compatible and even synergistic?'
An introduction to the day – framing the session	A declaration of the importance of the participants involvement in the 'what is?' stage, in order to bring theoretical constructs to practice, and to have specialist help in the envisioning process. I made clear that although I hosted this session and supplied an agenda, it was our shared exploratory space. It would be a participatory process where all the participants' contributions and opinions were valued. A statement about the expectations on the participants, that no matter what we produced, something would happen, and that would be sufficient for my purposes. I regarded this as important in ensuring a space relatively free of stress and performance anxiety, some of which I had noticed in early pilots. A statement about research ethics; that all participants would be anonymous in the final report. I asked permission to record the session. An introduction to the 'rules' of the day. These are commonly used brainstorming principles and can be found in for example open space techniques e.g.: whoever is here is the right people, whatever happens is the best thing that can happen, one conversation at a time, say 'yes and' instead of 'no but', defer judgement until later, build on each others' ideas, no idea is too obvious or ridiculous to explore. It was important to emphasize the invitation to speak the 'obvious' as often shared and significant assumptions in a community may be not surface because of their seeming banality. I urged the participants to leave everyday constraints – e.g. time and money - aside for the session, with the 'promise' that there was dedicated time for 'no, no, no.' An outline of the session, clearly stating the flow, the mix of creative, analytical, individual and group activities, the timeline – which was posted on the wall.

Table B.2.1 Introductory part of workshop

B.2.6 Workshop - part 1

The purpose of this session was several fold and comprised:

- Facilitation requirements – to build group awareness, and the notion of the shared safe space;
- Incitements for exploration and learning – to invite both personal and professional value systems and understandings; to build up individual and group understanding of fashion and sustainability respectively, and in combination; to bring theoretical constructs into practice;
- Research incentive – to generate data to establish individual and group base level attitudes.

⁷ This was necessary even in groups from just one organisation as the industry is highly specialised.

The session was divided into three parts, mixing analytical and creative, and individual and group tasks.

Activity 1 – mapping fashion

In this first activity the participants were asked to draw the object illustrating or symbolising 'fashion' and list the reasons why they had brought it. I also brought objects to all sessions and participated in the task. My objects were consistent through all the workshops – one of the attempts I made to 'control' the parameters of the study. The participants were given five minutes to complete this task, after which they had another two minutes to rank their reasons, from the most to the least important. I choose to limit the time in order to start the creative process in a way that gave little time for doubt.

A show-and-tell followed, where each participant was asked to present the object and the ranked list. As participants were talking, the reasons and their ranking were written on post-it notes and put on a large sheet of paper in the centre of the table. The participants were encouraged to arrange the reasons in clusters. When we had all presented our objects and lists, we agreed on headlines for each emerging cluster. A discussion followed where we clarified and added words that were missing until a map had been established of what constituted 'fashion' in the particular group.

Activity 1 – mapping sustainability

The next part repeated this process but with the object brought in to symbolise, embody or illustrate 'sustainability' for the individual.⁸

A discussion followed where we looked at both maps and noticed similarities and differences. Through these first two parts of the workshop I gathered two sets of data carriers; the individual's drawings and lists, and the collective maps. These former were used to triangulate the participants' own evaluation of base level attitude to sustainability and fashion.

Activity 3 – Re-designing a fashion object from a sustainability perspective

In this task we separated into two smaller groups, and each group was asked to choose a fashion object from those that we had all brought in. Again, I participated in the task, and would make sure that I was not in the same group as the CSR/environmental officer if there was one present. I also tried to balance the groups in terms of for example designers and buyers.

⁸ I choose to place this mapping task after the one focused on fashion, as I considered it likely that most participants (with the exception of the CSR representatives) would feel more confident addressing fashion first.

The groups were asked to re-design the object they had chosen, using one or two headlines from the sustainability map we had just created as guidance. It was made clear that all suggestions, from the realistic product focused to the experiential and perhaps fantastic, were equally valid. The participants were encouraged to document their new design in drawings and writing. Again this task was brief, about fifteen minutes. A show-and-tell followed, and a brief reflection and discussion on the experience of designing from within another context – sustainability.

This part of the workshop generated data carriers in the form of the new designs, including key words, concept, drawings of the design, and written accounts of the specified strategies.

This activity concluded the first part of the session and we were at this point about one hour into the programme. I announced the working break and we had a few minutes to get refreshments, and set up the computer and projector in preparation for the second part of the workshop.

B.2.7 Workshop – part 2

This session comprised two parts, a trend-presentation and the scenario work.

Trend-presentation

The purpose of this part, which constituted a twenty minute long presentation, was to orientate the participants in fashion in the context of sustainability - to inform and to inspire, and in some cases provide confirmation. I used the term 'trend-presentation' to situate it in a fashion and trend-forecasting context, and arranged it in a series of themes, which also resonates with fashion and trend-forecasting work. It was anticipated that the knowledge level would vary between individuals and it was therefore important to promote a shared understanding in preparation for the scenario work that followed. The presentation was also put in place to spur discussion and personal reflection. It comprised basic sustainability concepts, and an introduction to design for sustainability through a series of recent examples from fashion design research and practice, and beyond.⁹ It focused on distinctly strategic and design led environmental approaches, but also featured more common approaches, such as the specification of organic cotton. The first three of four themes – reduce, reuse, recycle – are commonly used in environmental discourse and design. I added a fourth theme – reframe – in order to bring in conceptual approaches that can intervene even earlier than the common understanding of design (as product focused). Although chunking the examples

⁹ All concepts and principles can be found in Chapter 2. The writings I drew upon included Benyuys, 1997; Birkeland, 2002; Fletcher, 1999; Fletcher and Tham, 2004; Manzini, 1994; McDonough and Braungart, 2002; Merchant, 1982; Orr, 1992; Pepper, 1996; Williams and Wackernagel, 1996; Willmott, 2001.

into four themes was at times a stretch, the resulting simplicity and clarity was prioritised. The table below provides a brief account of the various elements of the presentation and their purposes. The participants were encouraged to ask questions, make comments and discuss the contents during and after the presentation.

Presentation element	Content	Purpose
Introduction	This session is about bringing together the two maps that we have generated	To bridge the session before with this one To restate the proposition 'what if fashion and sustainability were compatible and even synergistic?'
Overview of presentation	Sustainability concepts and history Four trends for design	To give participants a reassuring structure
Sustainability concepts	A triple bottom line Ecological footprint Ecological rucksack	To introduce basic sustainability concepts To emphasise the holistic and systemic perspective Introducing links between the personal and the global
A brief history of ecology and sustainability	From perception of Earth as living organism to machine Key texts such as Limits to Growth (Meadows <i>et al.</i> , 1972) and Our Common Future (WCED, 1987)	To introduce the power of controlling imagery To introduce the significance of a holistic view, and of co-operation
A brief history of environmental fashion	The environmental fashion and eco-looks of the late 1980s and early 1990s – stereotypes about environmental fashion	To bring out and acknowledge stereotypes and their origin and connotations
The new wave of sustainability	Urgency is evident – at global and personal levels The involvement of media and consumers The notion of a citizen brand Sustainability as a creative opportunity and futures issue	To stress that the present is different from the past, and therefore leave stereotypes behind To emphasise the engagement and pressure from other stakeholders To situate sustainability in what is perceived attractive in fashion – creativity and a futures perspective
Four trends in sustainable fashion – concepts, projects, products and ideas for design	Introduction: Recent fashion events with a sustainability theme, London, Paris, New York	To show that sustainable fashion is 'happening'
	<u>Reduce – minimising resource use</u> Design for symbolic and material durability Design for multi-functionality Design for low-maintenance – saving water and energy	To introduced basic principles of design for sustainability To introduce applied lifecycle thinking To inspire through examples To introduce the diversity of approaches to design for sustainability, and the diversity of actors engaging in it, and the diversity of rationales for engaging with sustainability
	<u>Reuse – new lives for old garments</u> The flourishing second-hand and vintage scene Creative approaches to including used garments and materials in new design Design for disassembly	To refute stereotypes such as the dire look of environmentally friendlier fashion, and the superiority of natural materials
	<u>Recycle – closing the resource loop</u> Design for recycling Design for biodegradability Creative design approaches to recycling	
	<u>Reframe – new starting points for design</u> Fashion miles Biomimicry Fairtrade Mission brands Product Service Systems	To highlight hidden costs and opportunities of fashion production and use To introduce strategic and systemic approaches to sustainability To show synergies between fashion and sustainability To introduce natural systems and rhythms as a starting point for design
Conclusion	Design as intention Visioning is the core of Futures Studies "Design can give form to a changing world and offer opportunities for new types of behaviour." (Manzini, 1994)	To stress the power, opportunities and responsibilities of design To emphasise the importance and power of strong visions to ground the following part

Table B.2.2 The presentation elements and their respective purposes

This part of the workshop was not designed to generate data, however, all comments were recorded and taken into account in the data analysis.

Scenario work

"The concept of vision is our organizational attempt to fill the space of possibility. Most visions suffer from a lack of understanding possibility and the future. Most people see the future as a place to get to and live as though the future is waiting out there in front of us with an existence of its own. In these limited linear models of the universe and time, a vision as a goal makes perfect sense. At some level [however] we all know that the future will not unfold in the way that we are imagining it and that a vision will not be accomplished as stated. But even so, there must be some value inherent in having a vision." (McMaster, 1996: 150)

"Exploring what's possible and engaging in the thinking, dialogues and actions that develop those possibilities are both of great value. The richness of the representation of the resulting future will depend on the amount of participation and dialogue that has helped create it... A rich representation of that future will be possible and valuable only if it can be expressed in poetic, metaphorical, or abstract terms. If these terms are able to capture the fundamental and enduring values of that vision, then something of power has been created... the space of possibility can be kept open by continually engaging in conversations that develop the very space itself." (McMaster, 1996: 151)

The workshop was designed to build from smaller, quite straightforward tasks, like the drawing of an object, to longer and more complex activities, ending with the scenario. The purpose of the scenario work in the session was several fold: to explore the generative quality of the proposition 'what if fashion and sustainability were compatible or even synergistic'; to serve as a project for immediate application of the principles and tools introduced through the session, to provide a forum for interdisciplinary team work and discussion, and, finally, to create alternative imagery and narratives in a format that could live on after the workshop. I estimated that the scenarios we created would 'chunk' and therefore make more clear and powerful the contents and the experiences of the workshop as a whole.

Scenario works is a commonly used set of methods used in Futures Studies. van der Heijden (1996) describes it, in the title of his book, as "The art of strategic conversation." Scenario work encompasses a range of approaches and tools. Some scenarios focus on one image of the future, whereas other generate a range of contrasting images. These images can be general, allowing for detailed scenarios within, or specific. (See e.g. Ames, 1997; List, 2005; Van Notten *et al.*, 2003; Wack, 1985; and chapter 5, 5.6.4) A common scenario process (as outlined by Schwartz, 1996) in simple terms involves the following elements:

- Framing a question - establishing focus;
- Researching facts – understanding context;
- Identifying driving forces – from the local to the global; this includes both predetermined factors and critical uncertainties;

- Developing a matrix – working out potentially auspicious combinations of drivers and facts, resulting in four spaces of possible outcomes;
- Choosing scenario plots – identifying for example actors and space of interaction;
- Fleshing out the scenarios – generating stories that illustrate the combination of driving forces as mapped above, e.g. through the eyes of some characters, exemplified in their actions, living situation;
- Presenting the scenario – receiving feedback from e.g. a client.

In this inquiry, partly because of time constraints, we focused on generating one future image per group. These images were not generated or communicated as the ultimate solution, but understood to visualise the many possibilities of an alternative paradigm for fashion. The scenarios sought to evidence, for example, experiential aspects, yet also retained a degree of poetic metaphor, and therefore remain open for interpretation. In comparison to the continuum – from the prescriptive, informative to the open, visionary and inspirational - of fashion forecasts described in Chapter 4, those created in the workshops belong to the latter category. The process we followed was less formal than described above, and started as a creative process deferring diagnostic judgment until later. This approach was chosen because I deemed the visionary and creative qualities, in this context and with the time at hand, to be more important than exactness of facts. The workshop series as a whole generated ten new images – Lucky People Forecasts.

The scenario work started with a short introduction where I invited the participants to go on a journey with me to the year 2026, and fashion in the context of sustainability. I offered the reflection that a number of factors; such as time constraints, commercial issues and consumers concerns usually guide our design work. I explained that in this session we would take our expertise with us, but imagine that we were in another paradigm or world, without regular constraints, and could use sustainability as an opportunity and context. The participants were invited to make use of, for example, technological innovations that might take place in the twenty years to come. I reminded the group of the ‘rules’ and urged them defer judgement.¹⁰ Finally I explained that we were going to make a scenario for a fashion company, at mass-market level, in 2026. This introduction, just like the introduction to the session as a whole, was important in creating a kind of funnel or anteroom to an extraordinary space. I tried to keep the tempo here slower, and used the metaphor of the journey to prepare us for working from an alternative paradigm.

The participants were asked to spend a moment reflecting upon what they would like to bring with them into the scenario; the emphasis here was on curiosity and excitement rather than what they perceived ought to be included. It might be a keyword from the fashion and sustainability maps, something that had interested them in the presentation or a reflection

¹⁰ To use a ‘yes, yes, yes’ approach until it was time for the ‘no, no, no’ part.

they or somebody else had made. We collated these key words, one or two from each member of the group, written on post-it notes, onto a sheet of paper. I termed this process a *vision consensus*, or the generation of core values – a branding term that most fashion professionals are aware of. I explained that these key words would guide our work, but that we were free to add more or adapt them as we progressed.

Although the scenario work occupied the largest chunk of the workshop, roughly seventy minutes, I was aware that it would be a stretch to fit it in, even with modest expectations. To quickly establish focus, I therefore provided a checklist of some possible parameters of a concept, and a user journey.¹¹

Scenario checklist - Who is it for, what does it do, where is it?	
Location – where is it?	E.g. urban - rural, specific to one place – global, off-line – online
Offer	E.g. products/services - the interpretation of the fashion offer might be wide
User – who is it for?	We were designing for the equivalent of today's mass-market audience, but might find different foci within this large target group
User experience	What does it feel like to visit or come in contact with the concept as a user?;
Designer/producer experience	What does it feel like to work with and for the concept?
Retail environment	What does the shop, or other, feel, smell, sound and look like?
Touch points (where user meets a brand)	E.g. website, shop, products, packaging, advertising, staff

Table B.2.3 Scenario checklist

Finally I introduced a set of drawing and modelling tools, explaining that we would use them to evidence and visualise the scenario in as specific and tangible a way as possible. I highlighted the importance of constantly documenting our ideas for shared understanding in the group. The process came to constitute a discussion where my main interventions constituted asking questions when we got stuck, and directing the focus at divergence or convergence.¹² I also made contributions to the discussion, where I felt they were helpful and would not overpower or steer the discussion too much.

SWOT analysis

When the scenario work had reached a point where a concept was fleshed out, in terms of at least location, rudimentary operation, and some key experiential aspects, we evaluated its viability in a wider context. This element was what I had introduced as the space for 'no, no, no', a critical assessment carried out using a SWOT analysis. (See Chapter 5, 5.6.4) While we were identifying internal and external positive and negative factors, we simultaneously tried to understand whether there might be potential synergy effects from matching them, and modified the scenario according to our new understandings. The role of this aspect of the workshop was to solidify our ideas, to place them closer to a current fashion industry

¹¹ This checklist was not introduced as exhaustive or 'right', participants were welcomed to change it or make additions.

¹² Such questions included revisiting the check list – 'where would we like the concept to be located?', and sometimes a reminder of the rules 'aren't we focussing too much on financial viability?.'

reality, so that the participants would feel that we had accomplished something potentially useful and not 'just' a fantasy. Although I appreciate the significance of the scenarios as new imagery and legends of sustainability and fashion, I estimated that for some of the participants a 'reality check' would be important in legitimising our work.

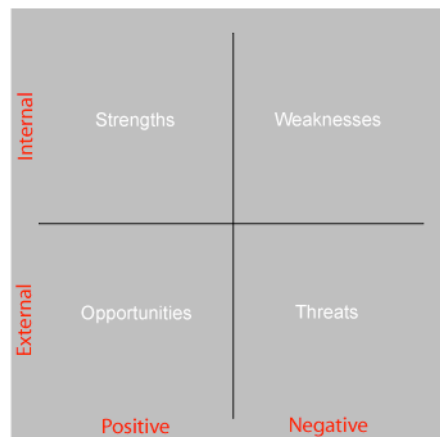


Figure B.2.2 SWOT matrix

Name giving

We concluded by giving the fashion concept a name. I deemed this an important aspect in bringing life to and taking ownership of our scenario.

The scenario part of the workshop generated data carriers in the form of the lists of key words from the vision consensus, the maps, illustrations and texts describing the fashion concept, the SWOT analysis, and the concept name.

B.2.8 Workshop – reflection and conclusion

The workshop concluded with a collective sense-making session. Here I asked for spontaneous feedback on our shared experience and whether the participants had advice for the following groups. It was important for me to get these responses, but also to ensure that participants had the opportunity to, in the group, make sense of the process they had been through. I also introduced the next steps of my research process, and asked participants' permission to contact them for individual follow-up interviews. This session functioned as a space between the workshop and the outside reality, where participants could start a reflection process of what the workshop might imply in their daily professional and personal lives. Finally I thanked the group for their generosity, wisdom and time. The data generated in this session concerned my observations and reflections of participants' immediate reactions, these were supported by recordings of our conversations.

APPENDIX B.3 Coding templates

B.3.1 Brand/perception

Brand/perception				
Key words	Subjective opinions, beliefs, preferences			
Overarching question	To what extent - on a continuum from dichotomy to opportunity - has the modified version of trend-forecasting changed how the fashion industry at mass-market level perceives the compatibility of fashion and sustainability?			
Scale	Small	Medium	Large	Extra large
1. Perception of importance of sustainability	Sustainability is not important	Sustainability is important	Sustainability ought to permeate everything; it is impossible to ignore	Sustainability is more important than anything else
2. Perception of sustainability as field of interest	Sustainability is not interesting	Sustainability is interesting, inspiring, exciting	Sustainability is very interesting (independent research, told others)	Sustainability is extremely interesting
3. Perception of the degree of implementation of sustainability	Sustainability is not implemented at all	Sustainability exists but only as a niche phenomenon	A lot is happening in terms of implementing sustainability	Sustainability is everywhere
4. Perception of the possibility of change	Change is unlikely	Change is not impossible	Change is possible	Change is inevitable
5. Perception of sustainability's compatibility with fashion	Fashion and sustainability constitute a dichotomy Opposing characteristics occur in the descriptions of fashion and sustainability	Sustainability may limit design Same characteristics occur in descriptions of fashion and sustainability	There are many possibilities to integrate sustainability with fashion	There are endless possibilities to integrate sustainability with fashion
6. Perception of eco-fashion	Eco-fashion is unattractive	Eco-fashion is getting closer to ordinary fashion but not quite there yet	New eco-fashion is significantly different from that of the late 80s, early 90s	Eco-fashion is desirable
7. Perception of other stakeholders' level of interest	Stakeholders show no interest in sustainability Stakeholders find eco-fashion unattractive	Stakeholders have an interest in sustainability but prioritise e.g. price	Stakeholders are very interested in sustainability/eco-fashion	Sustainability is the highest priority for stakeholders

Table B.3.1 Brand/perception – analysis criteria and scale

B.3.2 Knowledge and awareness

Knowledge and awareness				
Key words	How we think and what we know, 'factual'			
Overarching question	To what extent has the modified version of trend-forecasting increased the level of knowledge and awareness of sustainability in the fashion industry at mass-market level, on a continuum from single issue focus to lifecycle perspective?			
Scale	Small	Medium	Large	Extra large
1. Consciousness of sustainability/eco-fashion	Sustainability/eco-fashion is only occasionally present in my mind	Sustainability/eco-fashion is in my consciousness	I am very conscious of sustainability/eco-fashion	I am always conscious of sustainability/eco-fashion
2. Engagement with complexity of sustainability/eco-fashion	I have a fragmented awareness of some issues or areas	I am aware of some nuance in issues or areas of sustainability	I am aware of the lifecycle perspective	I am aware of the importance of systemic understanding
3. Direction of thinking	Linear Same perspective as before the workshop	My thinking ventures outside the linear Slightly new perspective	My thinking is broad and creative Change in perspective	Outside the box Entirely new perspective

Table B.3.2 Knowledge and awareness – analysis criteria and scale

B.3.3 Relationships

Relationships				
Key words	Empathy - I relate, making connections			
Overarching question	To what extent has the modified version of trend-forecasting changed how the fashion industry at mass-market level locates itself in the area of sustainability and the intricate relationships that sustainability implies, on a continuum from partial to holistic understanding?			
Scale	Small	Medium	Large	Extra large
1. Engagement with interdisciplinary team	Interdisciplinary teamwork is difficult, not useful	Interdisciplinary teamwork brings different perspectives	Interdisciplinary teamwork is beneficial for an organisation/enriching for stakeholders	Interdisciplinary teamwork is necessary
2. Personal/professional value position	It is not relevant to bring in a personal perspective	The personal perspective was brought in	The personal perspective was positive	Bringing in a personal perspective is necessary
3. Engagement with stakeholders/contexts and stakeholder relationships	Fragmented stakeholder awareness	There is a stakeholder/contextual element Stating facts	There is a high degree of complexity Asking questions, making connections	There are complex causal relationships Forming theories in the context of sustainability

Table B.3.3 Relationships – analysis criteria and scale

B.3.4 Action and activism

Action and activism				
Key words	Empowerment, commitment, involvement			
Overarching question	To what extent has the modified version of trend-forecasting changed how the fashion industry at mass-market level perceives its power to act and affect change, on a continuum from passive reliance on other stakeholders to personal action and activism?			
	Small	Medium	Large	Extra large
1. Role in unsustainability	My actions contribute insignificantly to unsustainability	My actions contribute to unsustainability	My actions contribute significantly to unsustainability	I am constantly aware of my role in unsustainability
2. Power to affect change	I do not have power to affect change It is somebody else's responsibility	I may be able to affect change but have reservations as to how to go about it	I am exploring possibilities to affect change My contribution matters	I am in a particularly powerful position in terms of affecting change There are many possibilities to affect change
3. Means to affect change	It feels difficult, I do not know how to affect change	I have some means to affect change	I have important means to affect change	I have all the means I need to affect change
4. Desire to affect change	I do not prioritise change	I want to make changes and that my company makes changes	It is very important that I and my company make changes	There is nothing more important than for my company and I to make changes
5. Efforts in professional life	I do not consider sustainability in my professional life	I want to take more responsibility in my professional life	I make some practical choices in my professional life	Sustainability influences everything I do in my professional life
6. Efforts in personal life	I do not consider sustainability in my personal life	I want to take more responsibility in my personal life	I make some practical choices in my personal life	Sustainability influences everything I do in my personal life
7. Activism – the spread of the inquiry's message beyond the remit of the workshop	I told somebody something about the workshop/sustainability	I have told everybody, I have described specific issues	I have made efforts to engage my company or others in making changes	I have made spreading the message my priority

Table B.3.4 Action and activism – analysis criteria and scale

APPENDIX B.4 Follow-up interview questions

Impressions

What can you remember from the workshop?

What stood out for you during the workshop, what engaged you most?

What was the least engaging part?

Thoughts after the workshop

Have you thought about the workshop afterwards?

What thoughts did it raise?

Did the workshop change your way of thinking in any way? How?

Workshop approaches and contents

Was the material presented relevant for your work?

How did you feel about the interdisciplinary group?

Future needs

What do you need now?

What might be a good continuation of the workshop?

Other issues

Is there anything that I have forgotten to ask, that you would like to add? Other things you think are important?

Background data¹³

What is your educational background?

What is your professional background?

Age?

¹³ Questions only posed to individuals who did not participate in the first empirical study.

APPENDIX B.5 Sample transcript

The interview with CSR C took place on 22 June 2006 over the phone. It lasted for 17.02 minutes. The workshop took place on 7 June 2006.

The participant consented to recording before the recorder was switched on.

T¹⁴ Yes, a few weeks have gone by now since last time and first of all I just want to ask what, what do you remember like immediately from the workshop?

CSR Yes, I thought it was an, an exciting discussion in the sense that we were so mixed, such a mix of people that had so to speak somewhat different points of departure. 1M

T Mm.

CSR And different ways of looking at this and I thought that was very inspiring. 1L

T Mm.

CSR So that I hope that it leads to something further here within the company. 4M

T Mm.

CSR So that.

T Was there something.

CSR No, I just experienced that obviously, I remember this, perhaps I see it partly. Yes, or actually we very much had the same view on this about taking care of the environment in different ways. Both the exterior environment and then this, what can one say, a bit, we do consume such a lot. 2S

T Mm.

CSR And then we had slightly different views, or starting points, but perhaps, those who look more to the, what should one say, the design, the look, the fashion side and I perhaps look at it more from a technical perspective. 1M

T Yes, sure, sure, absolutely.

CSR Yes.

T Yes, but that's really true.

CSR Mm. So it is that difference that, and it is that, that should be there too and that is why we have a bit different roles and different backgrounds and different purposes too, with our jobs. 1M 1L

T Mm. Precisely. What did you think was most fun or what stood out if you think about the different things that we did?

CSR Em, I thought that these, well or one could actually say this expressively, well if one says the fashion bit, that was obviously your shoes. Laughter.

T Mm. Laughter.

¹⁴ T signifies trend-forecaster/researcher.

CSR Laughter. Somehow it was so concrete. But then I was very, really very, if one could say it like this that yes, and then it was. **I think it was very interesting too to bring out paper as well as an example or something else.** 3M

T Mm.

CSR This thing with water. They are really such, or, water is a staple and paper that is really a common, so to speak of a product that we use everyday in different forms.

T Yes.

CSR But it is also one of these staple products.

T Yes, of course.

CSR **And then it has, these fashion aspects and I thought that it was really interesting this woollen sock that.** 7M

T [Designer I] brought.

CSR That she brought, the fact that she had one. Yes, I was thinking that I have one of those at home. I have the spinning wheel that my grandmother used and there is among other things a scarf that I have intended to keep. The yarn is, she has spun it on the spinning wheel that I have.

T Amazing.

CSR Yes, and then it is knitted, one of those long, narrow basics scarves and in it there are all those grey natural patterns.

T Mm.

CSR Dyed wool, from this natural white to the almost black. **So I thought it was very interesting when she brought this woollen sock so that one can see the generation before so to speak.** 3L

T Yes of course.

CSR **Yes, and still, what appreciation we do have today so that it is not forgotten in all this, so to speak, fashion discussion.** 7M

T No but of course.

CSR And then that [Designer I] who works as a fashion designer brings it.

T Yes of course.

CSR That was very interesting.

T Yes, that is true, it is.

CSR Mm.

T Eh, if one should ask, was there something you think that we did that was less relevant or less important? Of it sort of.

CSR No that I have actually, no I can't recall any thing like that. Then one might say when one **discusses this thing with communication and local and the near market that, em, I was a bit surprised there really that one emphasises the near market so much.** 2M

T Mm.

CSR **Keeping globalisation in mind, the world, the globalised world spanning trade.**

T Mm.

CSR That we have today. And you notice that we are perhaps moving even more towards that in the future. 2M

T Mm.

CSR But it might be that it turns back, but that made me a bit surprised.

T Mm. That there was such a focus on it.

CSR There was a focus on it. I hadn't, well sort of not expected that. 3M

T No. I understand.

CSR Yes. No I had more imagined, a world, more if one can say, that one would see how the world trade develops.

T Yes exactly.

CSR Mm. But that might be, well I don't know if it is that one is sort of starting (laughter) to link back to that in some way. 3M

T Yes.

CSR Yes, so that I actually, I personally don't think that it will come back. 3S

T No.

CSR No. But in that case there has to be a tremendous technological development.

T Yes exactly.

CSR Against this crafts, one can never go back on a big scale, instead in that case it will be more on a hobby basis. 4S

T Yes exactly.

CSR As well, yes.

T Precisely. Eh.

CSR Mm.

T I was thinking about. Have you, have you continued thinking about this, this workshop.

Laughter. I mean I know that you are always thinking about environmental issues, but have you, has the workshop, so to speak, been with you since we did it?

CSR How do you mean?

T Has it provoked thoughts afterwards in any way?

CSR Eh, yes I do think it has. It has provoked thoughts here within the company. 1L

T Mm.

CSR So that we have sort of when we sporadically meet in the corridor, we have thought that it was very inspiring and exactly this thing how we can proceed and then sometimes it feels like, it goes a bit, so that one would like to (laughter) one felt when one got home, that one one would like to start doing something right away. 2L 4L

T Mm.

CSR But it doesn't happen that quickly. 2M

T No exactly.

CSR But I think that it was very inspiring in some way. 2M

T Mm.

CSR Mm.

T Has it, has it changed your way of thinking in any way?

CSR Eh, no I can't say that it has changed my, my way of thinking, but eh, it gave me hope of, eh, the environmental concern was more manifest than I had thought. In, or I discovered that there was more than I had thought in, amongst our designers as well. 2M 3S

T Yes, that they are more interested than you thought they were.

CSR More interested than that what is perhaps on a daily basis expressed.

T Precisely.

CSR So that, and, and that is what I found very interesting because it was exciting and that is what we have discussed more afterwards as well, this very inspiration that they too felt.

2M

T Mm.

CSR And they have had this in, in their thoughts but it, it doesn't perhaps express itself every day as clearly.

T Mm.

CSR Mm.

T I understand. Eh, eh, did it feel like the contents of what we did were relevant to your company.

CSR Yes, I think there was this kind of brainstorming that one actually needs. 1L

T Mm.

CSR And that is what we, we haven't actually had. At least I haven't been part of anything like that, in this free form.

T Mm.

CSR Before, but we have more, so to speak, it has more been like now something is coming, or I mean in my role we have more been like this, that something new is coming now, now there are new regulations, now we can't use this and that substance anymore. 3L

T Mm.

CSR And it has been a lot about these regulations, the laws and how we can live up to the regulations that are imposed on us by the authorities. 3M

T Mm.

CSR Or we know that this, this is being discussed now and this is coming up and now we sort of have to be one step ahead and start preparing ourselves. So that it has always been more this background reality, it is concrete, we have to do something.

T Mm.

CSR Not this free thinking and the, so to speak, brainstorming. 3M

T Mm. Precisely.

CSR And it was that that I thought was so interesting and at the same time, like beforehand I felt a little bit like. Well, how will I fit into this?

T Laughter.

CSR (Laughter.) I, you know we are so different. 1M

T Yes.

CSR But that is exactly what, then it turned out that. One should be different, one should have these different perspectives. (Laughter.) 1L

T (Laughter.)

CSR On the same issue.

T Mm.

CSR And that is how one gets the breadth and the width and there occurs sort of a, a fruitful discussion with different, so to speak, different backgrounds and outlooks on the questions.

1L

T Mm.

CSR Or the background and what we do on a daily basis of course. (Laughter.)

T Mm.

CSR Is mirrored in what we are trying to understand or how we enter this question and that came out very clearly, in terms of what we do, how we had gone about, how we came in with these examples in, in the discussion, don't you think. 1M

T Mm. For sure.

CSR It was reflected very clearly. Which it should be doing too.

T Yes of course.

CSR Mm.

T Eh. If one were to say, you said that one is inspired obviously right afterwards. If one were to think of a continuation to this.

CSR Mm.

T What might that be? Should there be more, more brainstorming, or should there be, have?

CSR Yes, if one is talking from the company's view point so to speak, then I think that it has to result in concrete results or concrete measures that are reflected in the products that we sell.

T Mm.

CSR And naturally, we cannot ever forget the financial side either.

T No that is evident.

CSR Clearly evident, as one says, to get this framework in terms of the quality and the finances, and in that way get the environmental thinking into our, into our products and the ranges in such a way that we can raise the image of the company and we can, so to speak also, we must be able to sell the products. 3L

T Exactly.

CSR So to speak support the sales at the same time as we combine it with sustainability thinking. 5L

T Mm. Sure. So it could be, one might continue with, if one were to continue one might do something with some of the products that you have so that.

CSR Yes exactly. One continues.

T Put them into this scenario in some way.

CSR Exactly, precisely.

T Yes.

CSR These everyday products and there are more staple products in the ranges, take for example underwear that everybody needs and then you have one of those elastan T-shirts or whatever you say.

T Yes.

CSR Where one not so expressively wants fashion.

T Precisely.

CSR Where it is easier to combine in with the environmental thinking. 3L

T Exactly, I understand.

CSR Mm. So that is the kind of concrete result that one would like to see, eh.

T Mm. Exactly. But one has to start somewhere.

CSR Yes, yes, one has to start somewhere and it is always a long process, but well, if one starts today one might have something ready in one and a half years. 4L

T No. Exactly.

CSR It is a development process, so to speak, and the lead times and everything, like you know in this industry.

T Yes. It is so.

CSR Are quite long and despite of the so to speak. fast (laughter) rotation in fashion, but still the lead times remain, and particularly if one is going to start developing something that demands individual, so to speak, technical adjustments in the very production process. 2M

T Yes, exactly, then it takes a lot, but of course. I do understand that.

CSR Mm.

T I want to thank you very much, I just need to ask as well.

CSR Yes, may I correct you about a thing in this script that you have done?

T Absolutely.

CSR Yes, firstly it is from cradle to grave, and I'm sure you know that because.

T Well, one does talk about from cradle to cradle as well.

CSR I see, well that might be true. But I have only always seen cradle to grave.

T Yes exactly.

CSR Okay, but then when we talked about, about this thing with pine, pine, pine needles. It is not polyester that one makes but viscose.

T Exactly. I just wrote that because we said, we sort of joked, but obviously it is viscose.

That is the way it should be. It ought to be correct, absolutely.

CSR Yes.

T That is very good, thank you.

CSR Yes, there is sort of a couple of factual errors, one can use different expression for.

T Yes, exactly, that is very good.

CSR Cradle because if it goes from the cradle of raw materials to the next, so to speak, that one starts using, reusing the raw material, then it is obviously a cradle once more.

T Yes exactly, no but it is sort of a full lifecycle.

CSR Yes, yes, exactly.

T I just wanted to ask you as well, because I haven't met you before.
CSR No.

T Just a bit like, for how long, where have you, for how long have you been with [Company C] and things like that?

CSR I have actually been with [Company C] for almost twenty-five years.

T That is wonderful.

CSR Yes, a generation or it is slightly horrifying really, yes, yes, mm.

T Yes, but you started with the quality?

CSR Yes, I started, so to speak, when I came to [Company C], I was employed as responsible for quality.

T Mm.

CSR At that time one started to, this was in eightyone, and then it was so to speak, the user demands, the labelling, so to speak, this thing about for example. I remember that I in the beginning really only worked with the textile side of things, because of my background.

T Mm.

CSR And at that time this thing with care instructions started appear on the products. So that and obviously various requirements on the National Board for Consumer Policies' part, amongst other things, this thing about use characteristics of the products. Shrinkage and colour fastness.

T Mm.

CSR Pilling, all that came so that I was employed at that time. It was a newly created post that had never existed in the company previously.

T Mm.

CSR And then obviously, at the end of the 80s, beginning of the 90s, the environment appeared.

T Mm.

CSR And that was naturally placed on my table.

T Mm.

CSR And then later, there has also been, so to speak, the third leg of the chair, the ethics thing.

T Mm.

CSR And social conditions. So that they touch my work as well.

T Mm.

CSR The overall responsibility for these issues is with my manager but I am still involved.

T Yes, exactly.

CSR In that, you know.

T Exactly.

CSR And the background comes from my youth days', at the end of the 60s, I trained as a textile tutor at a textile teacher training college.

T Yes, yes, yes.

CSR And then, eh, I studied textile mechanics test technology for two and a half.

T Mm.

CSR And then I worked for nine years with [consumer policies]. And since then I have worked here. (Laughter.) And this is my.

T That was a solid. (Laughter.) A solid background.

CSR So that, mm.

T Very good.

CSR So I have, so to speak, one might say that I have a bit of an engineer in my blood.

T Mm.

CSR In my way of looking at the issues, it is a bit of a different view point from, from that that one has as a designer.

T Yes. But exactly and that is also what is so very good, that one has different.

CSR Yes, have all these aspects or.

T It is really very important.

CSR Yes.

T Absolutely. But then I should. I am so very grateful that you could participate and it was.

CSR Very inspiring and, and nice I thought.

T I'm very glad.

CSR Yes, mm.

T And it.

CSR And good luck now, with this work.

T Thank you so much and I will be in touch later as well so that you can take part of it when it is finished, of course.

CSR Thank you and happy summer.

T Yes to you as well. Bye

APPENDIX B.6 Scenarios

B.6.1 Company A

Lucky People Forecast No. 1

Group: Company A

Concept name: Clear

Key words: Participation, fairness, lifecycle, surface and content, personal power, profitability

Territory

This group started out discussing the importance of transparency in production, communication, retail, use and beyond. The participants felt that the early eco-wave of the late 80s and early 90s had failed to convince the consumer because of flawed labelling and an eco-look that did not always correspond with practice.

Concept

The central idea of this concept is that all production and use is transparent, so that users can fully understand the effect of fashion on environment and people.

How it works

The concept's interface is a real shop, the centre of which is a scanner where the user can check how the clothes are made, by whom and what their effect is on the environment. The user controls the amount of information accessed. The information is also visual, on big screens: images of people producing garments, what it looks like inside and outside the factory, maps of the journey the clothing takes and how it is transported (by boat). There is live video screening of people wearing the products in different parts of the world. Before trying on the user can get a quick idea, through the scanner, of how the product will look on through a computer image. Thus, the user only needs to undress for and try on clothes that really stand a chance.

All products are fitted with a digital environmental card and tagged. The card stores the user's individual environmental credit points. Each user is given a million environment points at birth; subsequent practices and consumption adds or removes points. Good environmental fashion practice awards points to spend on products in the shop through a virtual check. The group debated the environmental soundness of data chips, and decided on the use of aluminium or a future biodegradable material. The chip tracks how often a garment is washed and at which temperature. Extra points are awarded if the user hands on garments he or she has finished with. The user loses points for air travel, and how the user gets to the shop (walking or driving) also affects points.

The clothes come in fairly classic shapes of very high quality. They are expected to last for about five years, or the user gets a free replacement. To renew and restyle garments, the

user visits the shop for upgrades, new digital prints, colour, re-styling and fitting. The shop works like a subscription – this is how it makes money. The staff is happy and very well educated. There is plenty of staff, which generates excellent service and good work opportunities.

Lucky People Forecast No. 2

Group: Company A

Concept name: DIY community

Key words: participation, justice, lifecycle, surface and content, personal power, profitability

Territory

The starting point of this scenario was the groups' interest in user interaction in the fashion production process, the need for more transparency of production, and to reduce transport costs associated with fashion.

Concept:

DIY all through the Internet. You download instructions for a knitted jumper or a woven garment. You either make it yourself or you go to a local tailor or knitter to make it for you. This can be international, existing all over the world, but with local makers. The website gives directions of local resources, i.e. materials and makers. This supports local production (less fashion miles) and more contact with neighbours and community. The website can also recommend where to trade clothes you are finished with.

B.6.2 Company B

Lucky People Forecast No. 3

Group: Company B

Concept name: Energy

Key words: resource efficiency, good-looking, DIY, outside-the-box, clever

Territory

This group started out thinking about a location that was central, yet outside the city centre, and spectacular yet flexible and resource efficient. The group wanted to explore how users could be invited into design, production and retail processes.

Concept

The concept travels the seven seas and brings energy where it is most needed. A movable shop, which is self-sufficient in terms of transport and energy use. A concept that celebrates the rhythm of seasons and is experienced as an inspiring meeting place rather than a commercial environment. Design that considers appropriate lifetimes of garments and allows for individual interpretations.

How it works

The shop is situated under water, in a movable space, a typical location of which is the channel between Malmö, Sweden and Copenhagen, Denmark. The mobility of the shop means constant novelty for consumers – who will be looking forward to the arrival of the shop, and constant media attention – and therefore new customers. Additionally, goods can be picked up during the journey. The shop's arrival is a happening in itself. By its under water location the shop does not occupy precious urban space. The shop draws energy from the water.

The shop constantly mirrors the change of seasons, but the seasons arrive slightly earlier than in the world outside so that the customer can imagine the experience of using the clothes in the autumn and so forth. The shop engages all senses. There are typical seasonal smells from nature, and the interior might grow seasonal plants. In the winter the shop closes early so that staff and customers get more out of their day, and in summer it stays open longer. The shop is always full of daylight.

The shop offers an experience above the ordinary and is therefore a destination in itself. The experience of entering the shop, through something like a funnel, encourages the visitor to leave everyday life behind and enter a different state of mind. It is a kind of catharsis helping customers to make sounder purchasing choices, for example buying 'slow' garments. The group anticipated that in 2026, the general awareness of sustainability will be far greater than it is today. All senses are activated in the shop, the purpose of which is to supply both clothing and good energy. It is a one-stop-shop for several needs. The reception is calm and the customer decides the level of service she wants. When buying a classic garment - slow fashion, much well-educated help is on offer. For fast garment, or for people who do not wish to speak to anyone, and for potentially harmful work elements, such as heavy lifts, there are robots. By wearing the products, the staff also function as display.

Some of those frequenting the shop like it so much, and the energy it brings them that they spend more and more time there. These supporters spontaneously help selling the products, which creates greater credibility than when proper staff is involved. They become ambassadors of a kind of the concept. With time the boundaries between customer and staff blurs. The supporters take over and finally very few real staff or perhaps only robots are needed for continuity. Obviously the supporters are free to leave whenever they like.

The products offered consist on a continuum from the very slow to the very fast. There are strategies in place as regards lifetime for all garments, and these are clearly communicated to users. Non-renewable materials (such as polyester) are only used in garments that last for a very long time, forty years or so, and will be handed down to the next generation or become vintage. Quickly renewable materials (such as bamboo) are used in the faster

garments. The slow garments are classics, which are always available even when other brands have stopped selling them. This gives customers a sense of security. The garments constitute the skeleton of the wardrobe, examples of which are jeans and a wrap dress, but also garments that will have become classics in 2026. The garments are very well-made and meticulously fitted. The fast garments consist of a simple base, one size and sometimes unisex – which means there is no need for a big, complex stock system and that the bulk of products is simple and easy to produce. A T-Shirt or basic dress can be worn in a variety of ways, tied in or loose. In the changing room it is possible to explore different colours and prints through projections, after which the garments are immediately printed in the shop. The fastest garments are the ‘one-per-day knickers’, fine disposable underwear made from recycled paper. The customer gets fitted with a suitable style and buys a monthly supply. The group decided that a more comfortable way of trying on intimate garments was needed and put in place scanner fitting system, and trial knickers to wear before emailing in a full order.

The shop is fitted with an easy to use workshop so that users not only choose but can also be part of the making, such as simple sewing tasks. Because the group believed that much craft will have died out in 2026, this will add to the unique experience that the concept offers. Additionally, the group anticipated that in 2026 people will be resistant to homogenous fashion, and want to make their own adaptations in order to wear something unique. The contributions that customers make to the shop, such as helping out, and performing some of the making, is translated into discounts on garments.

The concept targets the equivalent of young men and women shopping in the high-street today. Pensioners, for example are of course welcome, but they are not the target group.

Outside the shop, already on the bus, train or bike the customer can ‘scan’ garments other people are wearing and check if they are available in the shop. The concept’s daily offers are projected on the surface of the water or sky. The concept’s slogan is: Don’t give up - Energy will soon come/to a city near you/congratulations Malmö.

B.6.3 Mixed A

Lucky People Forecast No. 4

Group: Mixed A

Concept name: www.alltclothesintheworld.com

Key words: local, seasonal, resource efficiency, responsibility, not affecting quality, not an alternative, it tastes good

Territory

The starting point of this concept was extreme 'fast fashion' and its intrinsic polarity to the reality of limited resources. The group asked: would people in the future crave even faster fashion or become spiritual and perhaps consume less? The assumption was that since we are increasingly buying experiences above objects, fashion in the future would be even more intangible.

Concept

The aim of this concept is to sell the fashion emotion raw, instead of going through a tangible garment. The consumer gets the feeling without having to consume (almost) anything.

How it works

Developments in the music industry proved helpful in making sense of and explaining this scenario. Just like we can already download music files through for example I-tunes, in twenty years time we will be downloading fashion. With music the I-Pod or another MP3 player serves as a vessel, interface or transmitter of the tunes. The equivalent for the fashion files is a simple grey tracksuit or pyjamas. According to the group, what everyone would really like to wear if they did not have to think about looks. From a website, fashion files are downloaded to the tracksuit or pyjamas. What the user sees in the mirror, and what other people see is the fashion of choice, for example a style Margiela designed in the early 90s.

Implications for fashion

This scenario has interesting implications for the fashion industry. When fashion becomes a service – a downloadable virtual Dior and so forth, it becomes a lot cheaper than such fashion is today and therefore accessible to everybody. The equivalent of today's high-street shopper will in twenty years time be wearing Dior instead of H&M.

Just like small record labels are benefiting from the advent of downloadable music, independent designers will benefit from this new system because it makes designers like them more accessible to a bigger audience. They can finally compete with H&M and the Gucci group etc. There will be a much more interesting choice – 25.000 independent designers instead of a handful of chain stores and mega brands. The concept also opens up for personal creativity, just like Apple's Garageband which invites users to create their own music, the website allows consumers to create or partly create their own fashion. Everyone becomes a designer – the possible death of brands.

Somewhat paradoxically, this scenario allows for even faster fashion. The consumer may choose to at the start of the day set up a play list of today's fashions. It also means that fashion is truly global without the negative impacts of transport - fashion miles. A fashion from New Zealand is just as accessible as one from London. Downloadable fashion means that all fashion is constantly available, just like music. To continue with the music metaphor,

it allows users to follow the mood whether it be for Led Zeppelin or a new band from Iceland. For designers one implication is that they can produce new fashions when they are ready, and otherwise live on royalties, instead of having to churn out new ideas in a twice a year (or more) cycle. The designer can decide whether a style can be adaptable or not by users by specifying whether a fashion file is locked or open for edit. It is the end, eventually, of all tangible clothes bar tracksuits and pyjamas. As one designer participant of the group put it: "It was just an illusion anyway". (Designer, Scenario 3, 2006: 2)

The group conceded that its concept www.allclothesintheworld.com needed to embrace the importance of the live gig for the music industry, and design equivalent spaces for fashion spectacles. The group appreciated the main environmental cost of this scenario to be the energy usage. The participants considered the implications of technology being switched off.

"When you do this you should be in the privacy of your home – otherwise people will see you in your grey tracksuit! It is the new Adam and Eve situation. Switching off is equivalent to eating the apple of truth. The illusion is gone." (Designer B, Scenario 3, 2006: 3)

In the discussion about a suitable name for the concept several suggestions were made. The suggestion 'Matrix' clarified that we saw the concept as the only fashion company/portal in the world. Other suggestions were Nudie, Everything, None, Nuffink, Nada and Onion. We finally settled on www.allclothesintheworld.com.

Lucky People Forecast No. 5

Group: Mixed A

Concept name: London Fields

Key words: Local, seasonal, resource efficiency, responsibility, not affecting quality, not an alternative, it tastes good

Territory

The starting point for this concept was the environmental impact of transport. Which clothing materials can be produced locally in London? The concept builds on the assumption that in twenty years time genetically modified animals are going to be an important part of reality whether we like it or not.

Concept

In London Fields cows graze that grow wool (extra furry fur) and also supply milk and leather. The ecological footprint is small since the cows' activities are limited to this specific area and it is efficient because the cows are an all-in-one solution. The fashion shop is located next to the field. The consumer can pick which cow he or she likes and which part of the animal ('point-a-cow') will be used as a source of the fashion item. This way he/she

forms a unique relationship with one animal and gets a situated understanding of 'how things work'.

B.6.4 Company C

Lucky People Forecast No. 6

Group: Company C

Concept name: Local

Core values: Lifecycle, recycling, not exploit resources (environmental and humane), honesty/transparency, social aspects, local, good-looking, fashionable

Territory

The starting point of this concept was that we wanted to be conscious of the product and its resources' whole lifecycle 'from-cradle-to-cradle' and reduce transport costs by thinking local. We were counting on it in 2026 being possible to recycle more resources than it is today.

Concept

To significantly reduce the environmental cost of transport by seeking and developing local materials. To focus on positive, and fashion driven communications of ethics and the environment.

How it works

The concept exists both on the Internet and in reality – this is a requisite. We believe that in twenty years time 'A locations' will still be important, and that A location for our concept equals the city centre of bigger cities and big shopping centres outside the city. Although the Internet is a good shopping channel, there are major environmental costs associated with transport, as all goods is sent out individually. The Internet part of the concept depends on there existing a more efficient infra structure in 2026, perhaps something similar to the Green Cargo initiative.

We believe that 'lack of time' will be as significant a factor, if not even more so, in twenty years time. Therefore several different types of fashion products are offered in the same place. The concept bears resemblance to Colette, where everything that is 'in' is on offer.

Because one of our core values was 'local' - in order to reduce transport costs - we explored what resources exist in Sweden. The products are made from potato starch, a type of viscose from pine needles, and nettles, hemp, jute and linen (mechanically instead of chemically treated). The materials do not equal an old fashioned eco-feel, instead the look is modern.

'Local' also results in a new outlook on the market. If everybody works and consumes in their local market, everybody will have sufficient funds. The price of the product must be adjusted to meet the local price of labour. It is about not exploiting resources. We can, for example, offer unemployed people dignified work in the local production chain.

The experience of visiting the shop is inspiring and surprising. It is the very latest that is shown. The shop will be in constant change. We will be hungry for experiences and also for that which we did not even know we wanted. The customer enters the shop and new needs are awakened, because he or she has not got the energy to think any longer. There is so much to choose from that people have ceased to want to choose. We will be just as stressed as today, and because of that, will also want a breathing space, and perhaps this need will take over.

How we communicate in 2026 will affect how we shop. It is important that communication of the products that our concept offers is transparent, i.e. that all environmental and social aspects are accounted for. There should be a special emphasis on the use of local resources. At the same time, there must not be too much to read, perhaps the consumer can choose the amount of information he or she accesses - through 'clicking'. The information must be experienced as positive, enjoyable and inspiring – no admonishing 'sticks'. The information should be politically neutral. It has to be positive. Fashion will equal sustainability in 2026.

When naming the concept, we considered Potato (too earth bound), Local and Transparency. We chose Local (the bonus of which is the Swedish side meaning of going out dancing).

B.6.5 Trade

Lucky People Forecast No. 7

Group: Trade

Concept name: Fashion Society

Keywords: Local, low consumption, fair production, recycling, technology, social responsibility

Territory

We imagined a democratic form of capitalism, where the individual to a small or large degree can influence the garments she or he buys. The consumer is therefore both designer and consumer. The group sought to offer an alternative to the homogeneity of contemporary fashion.

Concept

A concept of several layers – a democratic voting process that defines which garments are produced and which ethical and environmental strategies are applied; a meeting place for culture and learning; and a site for extremely personal fashion services that border on therapy. Environmental goals are realised by ensuring an exact fit between user and garment.

How it works

The focus of the concept is garments developed for the individual – bespoke, and Individualised mass-production. The concept exists both on the Internet and in reality. The concept offers alternatives to the increasingly homogenous mass-production and mass-consumption. Today everything is standardised - sizes and aesthetics. If one does not fit into this standardisation, there is very little on offer to shop.

We discussed whether shopping in the West in twenty years time will still give us the same 'kick'. Perhaps we will find other 'kicks' and ways to demarcate status? We believe that in the future, people will make even bigger demands on individually tailored products and services. That makes the customer feel 'seen' and confirmed. At the same time as individualisation is important, physical meetings are a necessity, in order for the Internet and a virtual reality not to take over. Therefore we want to emphasise the social aspects, and the concept partly functions as a space for meetings.

The environmental gain is that the individually adapted garment replaces three garments that are almost 'right'. The garments are caringly produced by environmentally friendly materials and techniques. Because the concept is locally anchored, the reduced transports constitute yet another environmental gain. We believe that in the future the cost of labour will be equal across the whole world. Therefore production will move back to Sweden and we can buy locally produced garments. The production of clothes continues to be an important industry in China, but the consumers will be Chinese instead of Westerners. Accelerating oil and water shortage will also necessitate local production.

The customer visits a blog on the Internet and votes for those garments to be produced in the factory, which is connected to the society. Today's youth are already familiar with the voting function of e.g. Ebay. The society puts certain demands on the factory, as regards ethics and the environment. On the blog, the customers can also vote for ethical and environmental strategies. Does one want bamboo, hemp or paper? What has worked best before? In a show room in the city demonstration exemplars of the clothes are shown to those who want to touch and try on.

It is of course also possible to be scanned in order to immediately on the website get a feel of how the garment will look on. The showroom has the characteristics of a meeting place, café, library, music forum and a place where one can learn new things – rather than a commercial environment. The show room is situated in one of the major gallerias in the city centre.

Another part of the concept focuses on highly personal service. The 'shop' has a very intimate character. The customer makes an appointment with his or her favourite designer/tailor, and gets a garment with unique design and fit – the perfect garment. This is a continuation of what is today termed 'personal shopping'.

The meeting between the customer and the designer will get deeper and borders on therapy. The designer finds out about the customer's needs, in terms of taste, lifestyle, fit, but also in terms of more abstract needs and desires.

It is about meticulously ensuring that a customer gets the ultimate garment for him or her. Instead of going impulse shopping, the concept offers a unique experience. The customer gets a personal connection with a member of staff who describes the products, so that they are given a history or story. It is not the products that are central, but instead the experience. The customer feels 'seen' and confirmed and gets a kick that replaces all the mini kicks that impulse shopping and fast fashion offers today. Visiting the 'shop' offers a moment of calm, where the customer gets to be the centre of attention, sit on a velvet chair and feel pampered, seen and heard.

The designer/consultant can also offer an objective description of the trends. "This will be very big around Stureplan [posh centre of Stockholm]." The trends will become increasingly specialised and the codes adhere to an increasingly smaller group of people.

The intimate tailor ambiance is a front. Behind, there is a technologically advanced factory, so that garments can easily be put together in an individual way out of a wide range of standardised parts. The experience is of something that is really tailored. We imagine a range from garments that are hand sewn to garments that are individually adapted in the assembly process.

The concept is called Fashion Society – to communicate both clique and community.

B.6.6 Mixed B

Lucky People Forecast No. 8

Group: Mixed B

Concept name: Garden

Keywords: Local, relationship to product – not trends, DIY, adaptable, lifecycle, identity

Territory

A starting point for our scenario was to create a fashion environment which is not stressful to visit, and focuses more on relationships and doing it oneself. Our conversation generated a new keyword – links, which is about the relationships between people, the relationships to products, and the awareness of how products are made, and their associated effects on the environment and people.

Concept

This concept is centred round a garden. It helps discarded garments find new owners, and customers to find clothes that really fit. The concept also functions as a social space and contributes in raising awareness of environmental and ethical issues.

How it works

The shop does not feature thousands of goods, instead only a few products are presented. From them it is possible to continue searching through an advanced system of links. The concept is characterised by a high level of service and focus on the individual's needs. At the same time it constitutes a social forum.

The environmental benefit of our scenario is that the number of products in circulation is reduced as the concept helps discarded garments to find new owners. Additionally, the personal service means that the customer leaves with garments that really fit (body, needs, lifestyle...) The concept that we propose contributes in raising awareness of environmental and ethical issues as the space offers both shopping and information.

The shop is located in the city because we think that in the future, as today, the city will be more environmentally sustainable than the countryside – transports are not as extensive in urban space. In twenty years time we will also have more resources to support the city's environmental profile. We also believe that the city will expand. Stockholm, for example, might consist of a number of satellites with links in between. The atmosphere of the shop is calm. There are only a few goods on display, but a lot of staff. (The opposite of H&M.) The staff is well-educated and has time to properly respond to the customers. Obviously those who wish to be left alone will be. The customer feels 'seen' and confirmed. This will be as important in twenty years time as it is today. The shop does not feel like a commercial environment.

Internet shopping arose out of new technologies and lack of time. We imagine a backlash – in twenty years time one will want to see people in real life and we will have time in our lives.

The concept offers a mix of information and shopping, without being the kind of 'experience' everybody is talking about today; that there has to be a video screen in the sport shop. That is quite primitive. Here the information is integrated in the environment. We were inspired by the Citroen Park in Paris, and by Japanese sculpture parks and Zen Buddhist gardens. We imagine that the shop is like a park where real animals graze and plants such as hemp grows, and where there are also new interesting clothing materials that will have been developed by 2026. This way, the customer gets a relationship to the production, and experiences something beautiful and interesting. The environment, like the Japanese sculpture gardens, feels both super urban and meditative.

Our shop is created in collaboration with architects. It is a mobile structure so that the shop can constantly be on tour – to smaller places too. Perhaps the mobile structure is one of several of a kind, all of which sometimes return to the common 'mother ship.' From a marketing point of view, the tour is a good idea, as it will constantly generate news value and new stories. Our shops have a clear identity. They feel far away from H&M, where the shops in cities may as well be offices, and the customer gets the sense that she or he should pass quickly through the shop, and is part of an efficiently planned machinery. Our shop is not experienced as a commercial space.

We want the environment to feel cosy, have atmosphere, without being jammed with stuff. We imagine that the space communicates the approach instead of merely being decor. Additionally, the architecture makes the shop self-sufficient in terms of heating. Part of the park is dedicated to children, but this part is not a commercial space, but instead an exciting park.

We posed ourselves the question how we might offer continuity, yet the sense that something new is happening. We also asked ourselves how exclusivity might include warmth and personality. Our idea of the goods on offer answers these questions to some degree. In the shop only a limited number of garments are displayed, but behind there are another 'fifty'. The customer makes the choice how much further in depth or breadth he or she continues searching. There are links both back in time and sideways.

One customer might be interested in seeing Margiela garments from the first collection onwards, whereas another want to look at the range of coats on offer. The Internet serves a model for the system of links which makes it easy to control the amount of information to access and which route to take. For our concept the links might mean a website connected

to the stock and people who frequently hand in discarded garments, or a real tunnel system in the shop.

Like at I-Tunes and Amazon, it is possible to get recommendations based on what other people that have bought the same garment or designer as the customer have chosen beyond that specific garment.

In small cubicles the customer is offered personal service from a designer. The customer and designer build a long-term relationship (like that with a hair stylist or doctor). It therefore becomes especially important that the designer sells the right thing. The designer describes the product and its history and finds out about the customer's varying needs and gives personal fashion advice. It is a kind of continuation of the personal shopper phenomenon of today, but without being elitist exclusive. It is exclusive but still feels natural. In the cubicle the customer is also offered help to navigate the link system. On Thursdays and Fridays, design students can show, discuss, and sell their ideas and garments in the shop.

In the concluding discussion the thought came up that monetary transactions might feel crude in the context of the intimate conversation between customer and designer. Might there be an alternative to monetary transactions?

In one corner of the shop, there is a café and a kind of match-making service. Here it is possible to get in direct contact with people who have the same size and taste as oneself but are a bit ahead in the fashion chain. In other words, the shop establishes contact between early adopters and followers, in order for garments to have a longer life. Because the 'match-making' service provides people interested in fashion with links to those further a head in the fashion chain, it challenges the elitism of the fashion world. This will fundamentally change the outlook on fashion. The concept develops a special system of codes, which makes it easy to find for example Margiela users. The shop also accepts old garments, we want to develop vintage, which is of big interest today.

In the shop it is also possible to rent or borrow clothing. (Just like stylists already do.) This enables small designers to be more visible. Customers may not dare risking buying a garment. We therefore solve a concrete problem of smaller designers: if their garments are somewhat expensive, the customer will go for well-established brands rather than new designers.

From the perspective of an H&M customer, we imagine that quite a lot of knowledge is necessary in order to fully make use of the concept's offer. It is therefore important that there is flexibility built into the interaction with the material. There are tips on offer for those who desire them, or the user can independently search, or receive help to explore the various

routes. The concept is comparable to a website where time and interest level defines the extent and depth of interaction.

The shop is also a place for debate and learning. The customer does not merely meet a glossy surface, but instead gets to see that there is, for example, a real animal behind wool, and how the production chain works. This means that the customer becomes both user and communicator in the shop. Out of several possible names, e.g. Social Shopping, Park and Garden, we choose Garden.

B.6.7 Students

Lucky People Forecast No. 9

Group: Students

Concept name: My cousin Pelle

Key words: Local, imagination, expression, seductive, relative values (work has to be either put into the design or later into the production in order to develop environmentally sound products), water, no crap, relationship to body

Territory:

The group sought to create an alternative to the homogeneity and MacDonaldisation of fashion. The group believed that people are longing for more genuine experiences.

Concept:

A concept with and for personality, with a strong identity and special soul. The experience of the concept is closer to that of visiting a friend than a commercial environment.

How it works

We imagine the shop to be in the city – where many people can access it. We imagine that the city in twenty years time consists of little villages, where the local environment and the people living there are cared for. It is a safety issue but also the urban dweller's longing for the small village. The village might constitute a few blocks on Södermalm or a street in Östermalm [areas of Stockholm]. The village feeling is also important for Stockholmers to feel that the city is theirs and not just the tourists. When going shopping outside one's village, and people sometimes will in order to get a 'kick', they still want a shopping area with personality. Therefore shopping districts in the future will be far from the Heron Cities of today.

The concept range has a personal character; it is evident that there is a person behind all choices. The service is very important, and also of a personal nature. The scenario focused mainly on the social aspects, such as supporting relationships between people and to work against unsound relationships to the body in fashion consumers. The environmental gain

comes from the customer buying products that really fit and therefore last a long time, and from all transports being coordinated with other companies. The production will not be as far away as China.

Because we are working with other companies we can start more local production. We imagined that customers or friends of the shops would help bringing things if they are on a journey somewhere. We want to explore what local waste products we might use, as material for products or packaging. We also believe we can learn from other companies or industries that have come further, such as IKEA and furniture.

It is important that the shop has a soul and personality, and that we move from the homogeneity of an H&M in every street corner and identical offer everywhere. Visiting the shop is supposed to feel like visiting a friend. Perhaps one makes one's own coffee. Sometimes a band is playing. The group spent some time discussing their respective experiences of shops and restaurants that really have a personal feel to them and that are not experienced as part of a marketing strategy.

Grumpy old men will get schnapps as they are waiting for their wives. Sometimes the staff will ask the customer to hold onto a garment for a while, while they are sorting something else out. It feels unexpected, but the customer leaves the shop with an experience and wants to return and get more of the personal atmosphere. It is not important that the shop is perfect, it might be a bit messy at times; instead the focus is on relationships. It must feel genuine and that there is a real person behind. Perhaps there are a family of shops, under different proper names.

Much of the concept's quality depends on the staff. The service must be personal and not 'NK [Swedish department store] professional.' Those working in the shops are generous with who they are as individuals, that lends them more credibility. The customer gets a lot of attention, while she or he is also expected to help out at times. It is also important to support the customer's confidence and not persuade her or him into buying something that does not suit the person.

The changing rooms are designed to be relaxing. Perhaps they are fitted with headphones and a sound loop with encouraging comments and compliments. This will at least provoke a smile.

The concept offers clothing, accessories and shoes, but also other products that fit the personal character.

We wanted the name to reflect collaboration, relationships and that this is a personality concept. We talked about the attraction of names such as 'Brothers', 'Sons' which create strong images of a genuine family business. We finally settled on My Cousin Pelle.

B.6.8 Mixed C – sample coding

Lucky People Forecast No. 10

Group: Mixed C

Concept name: Lucky Shirt

Key words: Local, long-lasting, commitment, fashionable

Territory

This group was interested in how **knowledge of a garment's history**, in terms of previous owners, and production might spur stronger **emotional bonds** with garments, and therefore **more sustainable practices**.

Concept

This scenario outlines a fashion concept accessible through the **internet**. The concept offers casuals, and new interpretations of casuals (in the avant-garde part). Through **a voting system**, and tick boxes, **the user makes decisions** about aesthetics, as well as **ethical and environmental factors** associated with the **production** of the garment. The website constitutes an interface for **a number of small communities which organise production and transactions**.

How it works

This concept contributes to sustainability by **promoting amongst users a higher level of understanding of environmental and social issues associated with fashion production**. With this **more in-depth knowledge**, users of the website will make **sounder choices in their fashion consumption**, and perhaps **elsewhere in their lives**. The website facilitates **closer relationships between users and producers**. The clothes sold through the websites are casuals/basics, which we believe is compatible with our commitment to **long-lasting fashion**. Similarly, we believe that a product that is **unique** and involves **some effort to get hold of** stands a better chance of having a **long life** than one that is **mass-produced and ubiquitous** - the more you expose a product, the more it becomes **throw away**.

The web site, **inspired by My Space** and similar 'democratic' and **organically developing** sites is **shaped by the users and producers** and has a low-fi aesthetics and interface. This is a result of **people of various skills participating** in forming the site, but also an advantage, because **users will make sure that the website is easy to use**. We also believe that the website therefore gets a more **real**, and **personal** feel to it. It acquires an organically developing **personality**. We also talked about the traps of websites such as My Space (narcissistic) and Ebay (falsely claiming that things are unique) and decided that it is important that this site does ensure **authenticity** in some way. We anticipate that the **producer communities** can ensure authenticity; each community will have reasons as to why the user should have their garments produced by them such as ensuring that **production in the UK is kept alive** or **building a school...**

All garments sold through the website have a recognisable, but still discrete label attached to them. The idea is that **only those in the know will spot the label**, and that you through the website may **get in touch with someone you have seen, for example on the underground, wearing a garment from the website**. This means that the website also has a presence in the **real world**. The website offers both **individualised** garments and **an introduction to new communities**. It acts as a **social forum** as much as it functions as a fashion shop.

Access to the website demands **membership**. On the site the user can explore good casuals, **temporary** contributions from **avant-garde designers**, and **garments returned from users**. When shopping for a garment, the user will tick boxes in order to answer questions about which **materials** to be used, **where production should take place** and other **social and environmental considerations**. These choices ensure highly **individualised** garments, **the user gets some insight into the "true nature" of a fashion product**, and **the product is assigned a high value (in cost and in the mind of the user)**. The order is taken by the producer community of choice. This will keep in touch with the **user who gets updates** such as **"today the farmer harvested the organic cotton for your garment"**. We believe the user will accept a long wait for a product, because it is **unique**, and **carries a history**. **The garment will be picked up by the user**, perhaps on holiday in China, or wherever **the user wanted production to take place**. This mode of shopping, **involving the user in the entire lifecycle of the product**, provides a **unique and authentic experience** for **the user, who is prepared to pay the high price**. Most garments can be produced by most of the communities, patterns can be emailed, and there can be **regional variations in fabrics**. Some products, however, (such as the avant-garde styles) may need a minimum order to get produced. In this case the user can follow how orders accumulate on a counter, and **can email friends and get them to contribute with orders**. The number of boxes ticked determines the price: if someone has got a lot of money to spend, he can have everything, an **ethically made T-shirt made from organic cotton** that is **recyclable**. The user can tick all the boxes and it becomes **more and more expensive** and the user can decide how far he wants to go. Perhaps one person doesn't mind so much whether the cotton is not organic but instead wants **the person who has made it to be well paid**, and then he can tick that box and that is how the garment will be made. Some users may prefer **local production** (we think this is going to be more important than organic, and that it is about the region rather than the nation boundaries) and may find that although labour is more expensive, **transport is free** and therefore the product similar in price to one produced far away. **The user can compare both ecological footprint and cost in money on the site**. We also envisage **a point system**; the user gets point for **environmentally and ethically sound choices**, and the points go towards new shopping. Through using the website **the consumer takes control over his or her choices**, and in a sense (whether aware or unaware) **uses purchasing power politically**. The increasing lack of high making skills in Europe and elsewhere may pose a threat to our scenario. Here the scenario may also be

helpful, by helping producers to get in touch so that they may share skills and supporting education.

Yet another level of interaction on the website concerns the stories of garments handed back after use and offered for sale again. The previous owner writes a comment about the experience they have had with the garment, such as “this shirt was good for pulling girls”. This way the new owner becomes part in a chain of experiences, the garment becomes a carrier of stories, which in themselves add value.

The working name of this concept is www.luckyshirt.com, alluding to stories that users might share about, for example, ‘the winner shirt.’

APPENDIX B.8 Data treatment – workshop process themes

B.8.1 Fashion objects

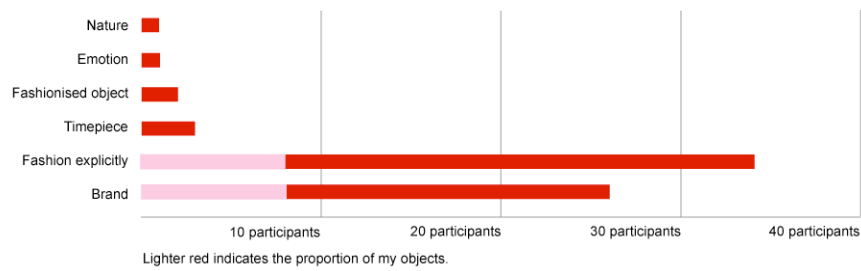


Figure B.8.1 Fashion objects and their respective frequency across the groups¹⁵

¹⁵ The themes stand for: Nature – represented by a skirt made out of straw; Emotion – an ephemeral quality; Fashioned object – such as mineral water and I-Pod; Timepiece – such as a watch and daily newspaper; Fashion explicitly – such as a fashion garment, shoes or a magazine; Brand – where the brand of the item was mentioned explicitly.

B.8.2 Fashion - individual descriptors

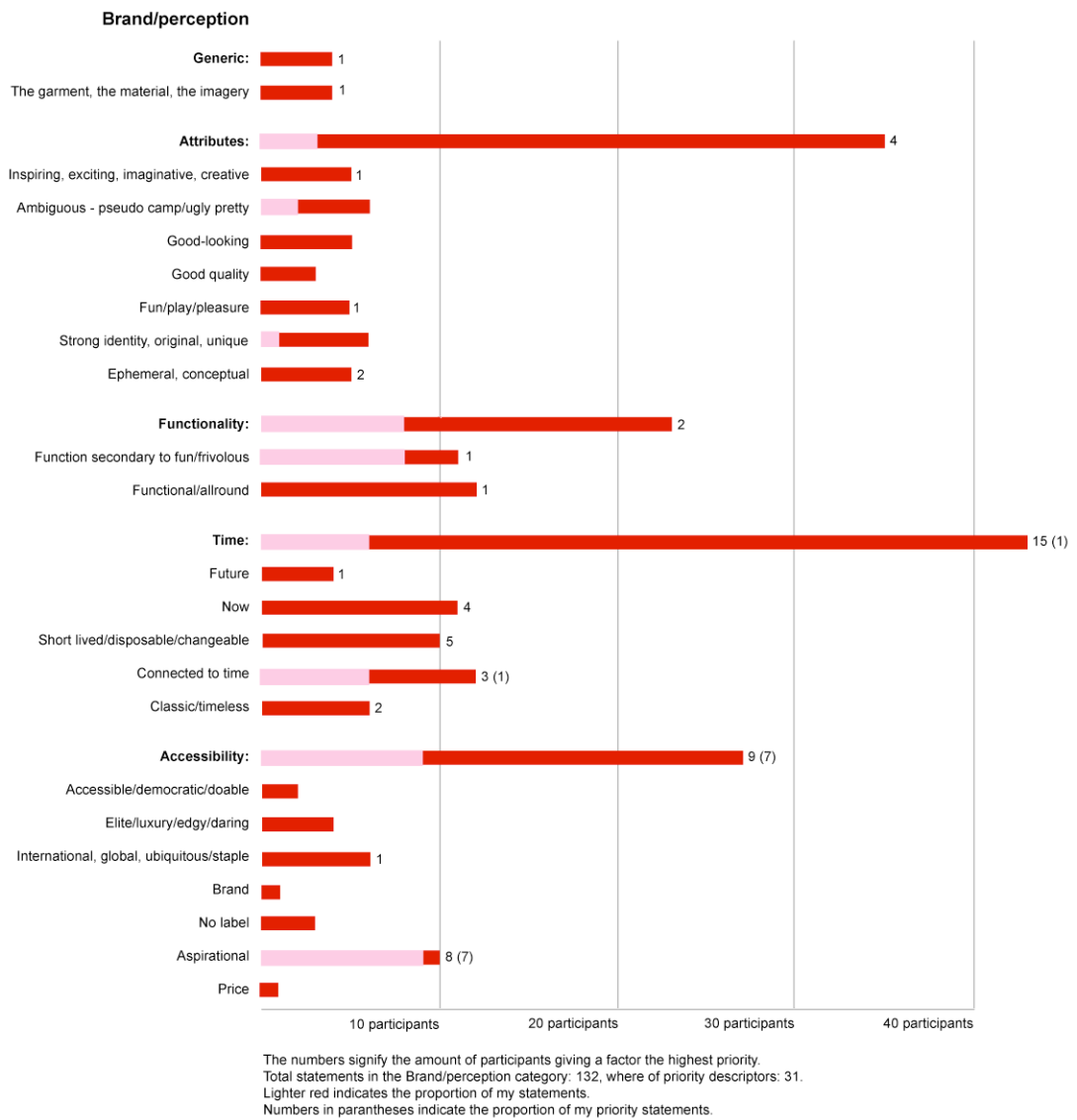


Figure B.8.2 Fashion - individual descriptors, *Brand/perception*

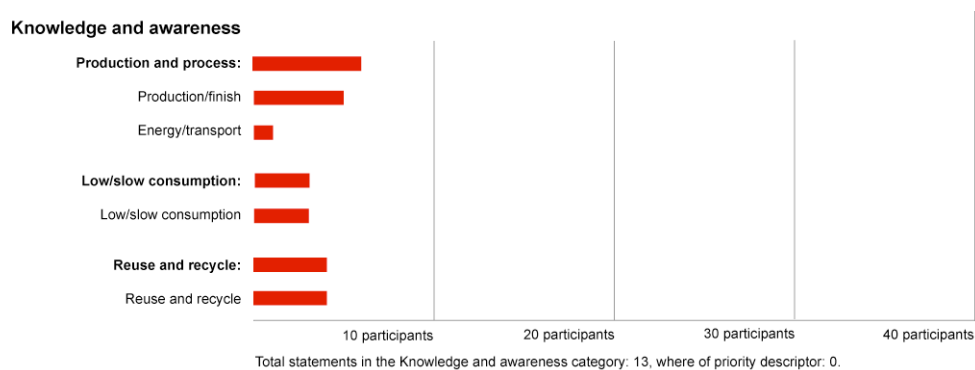


Figure B.8.3 Fashion - individual descriptors, *Knowledge and awareness*

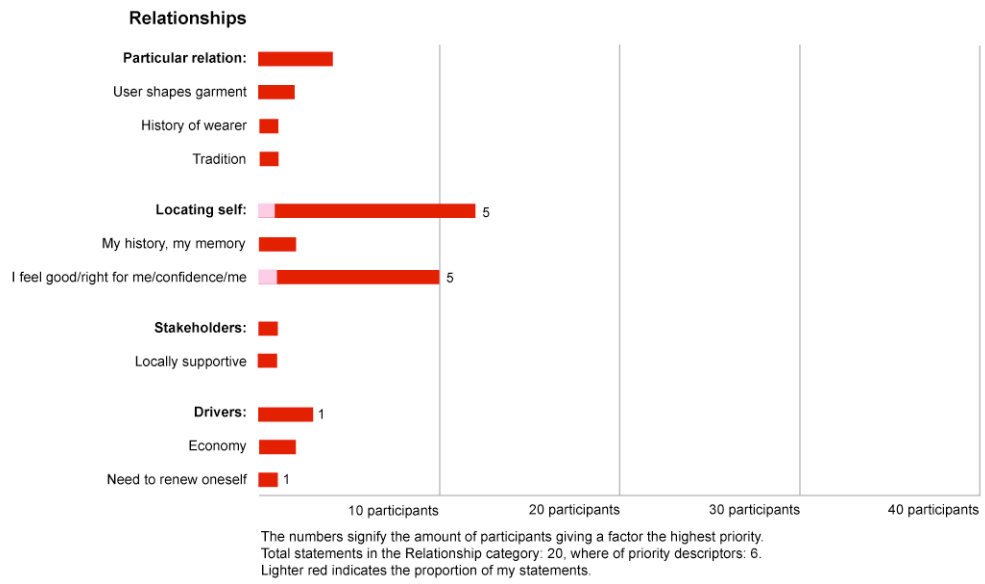


Figure B.8.4 Fashion - individual descriptors, *Relationships*

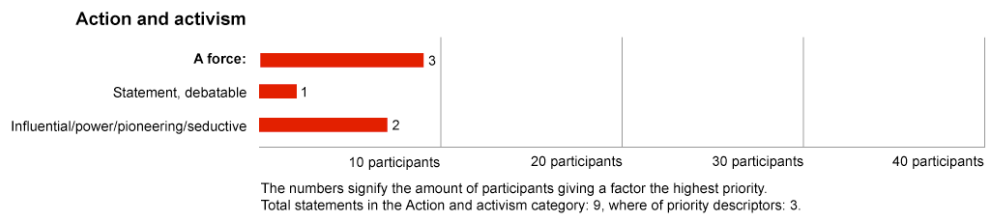


Figure B.8.5 Fashion – individual descriptors, *Action and activism*

B.8.3 Fashion - group descriptors

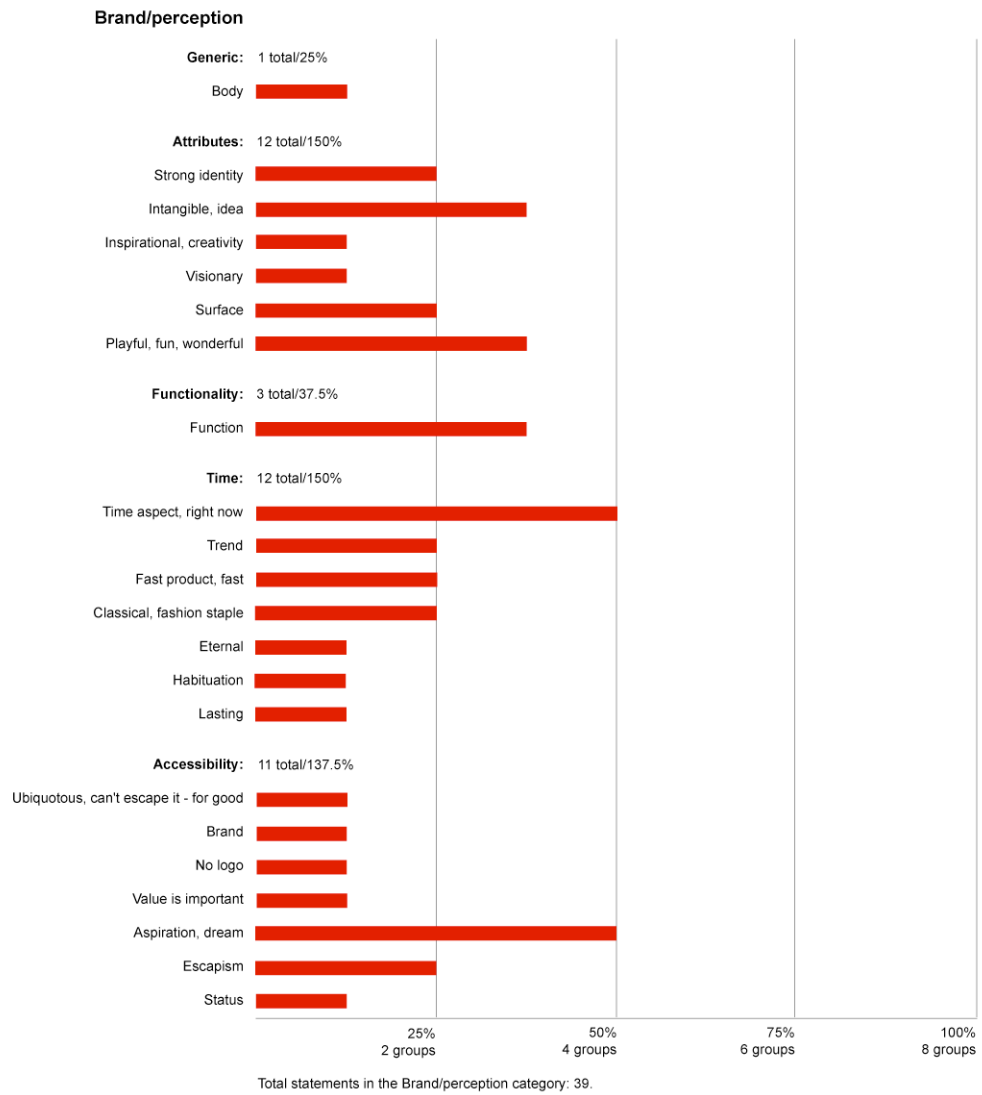


Figure B.8.6 Fashion - group descriptors, *Brand/perception*

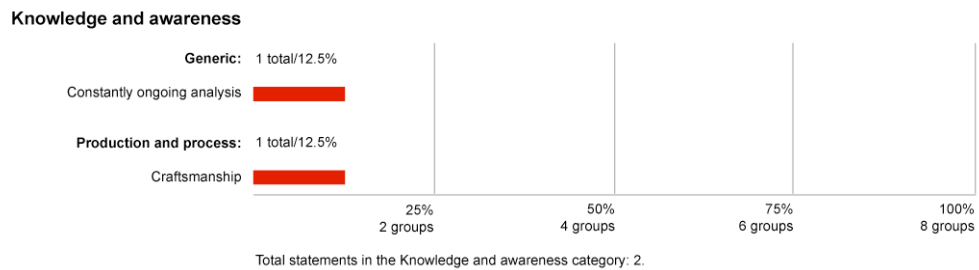


Figure B.8.7 Fashion - group descriptors, *Knowledge and awareness*

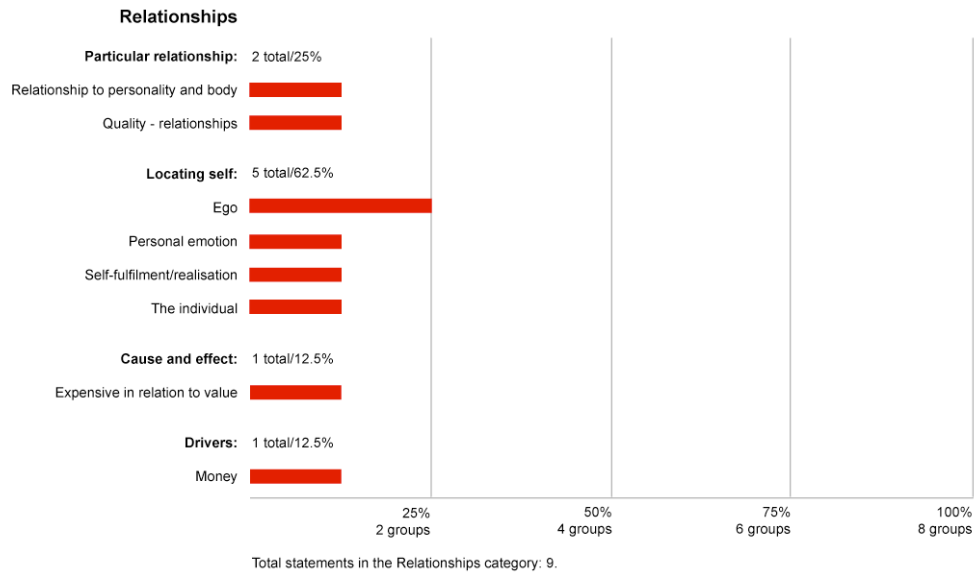


Figure B.8.8 Fashion - group descriptors, *Relationships*

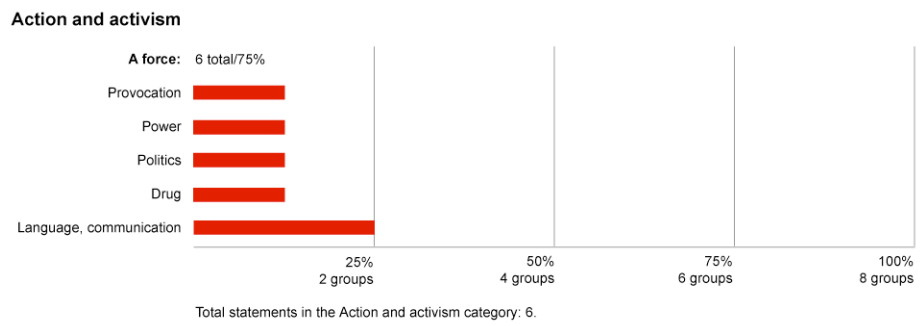


Figure B.8.9 Fashion group descriptors, *Action and activism*

B.8.4 Sustainability objects

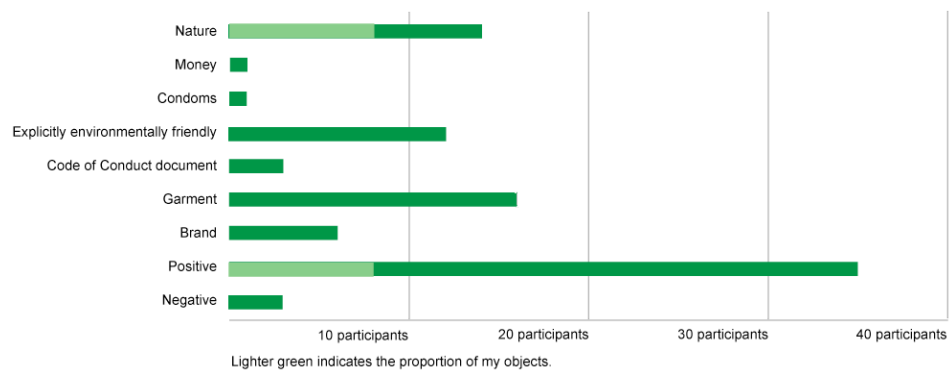


Figure B.8.10 Sustainability objects and their respective frequency across the groups¹⁶

¹⁶ The themes stand for: Nature – ‘objects’ taken from nature, such as water or a rock; Money; Condoms; Explicitly environmentally friendly – such as products with some form of eco-label; Code of Conduct document; Garment – such as a second-hand item, outdoors clothing, jeans; Brand – where the brand of the item was mentioned explicitly; Positive – items brought perceived as environmentally/socially benign; Negative – items brought perceived as environmentally/socially harmful.

B.8.5 Sustainability - individual descriptors

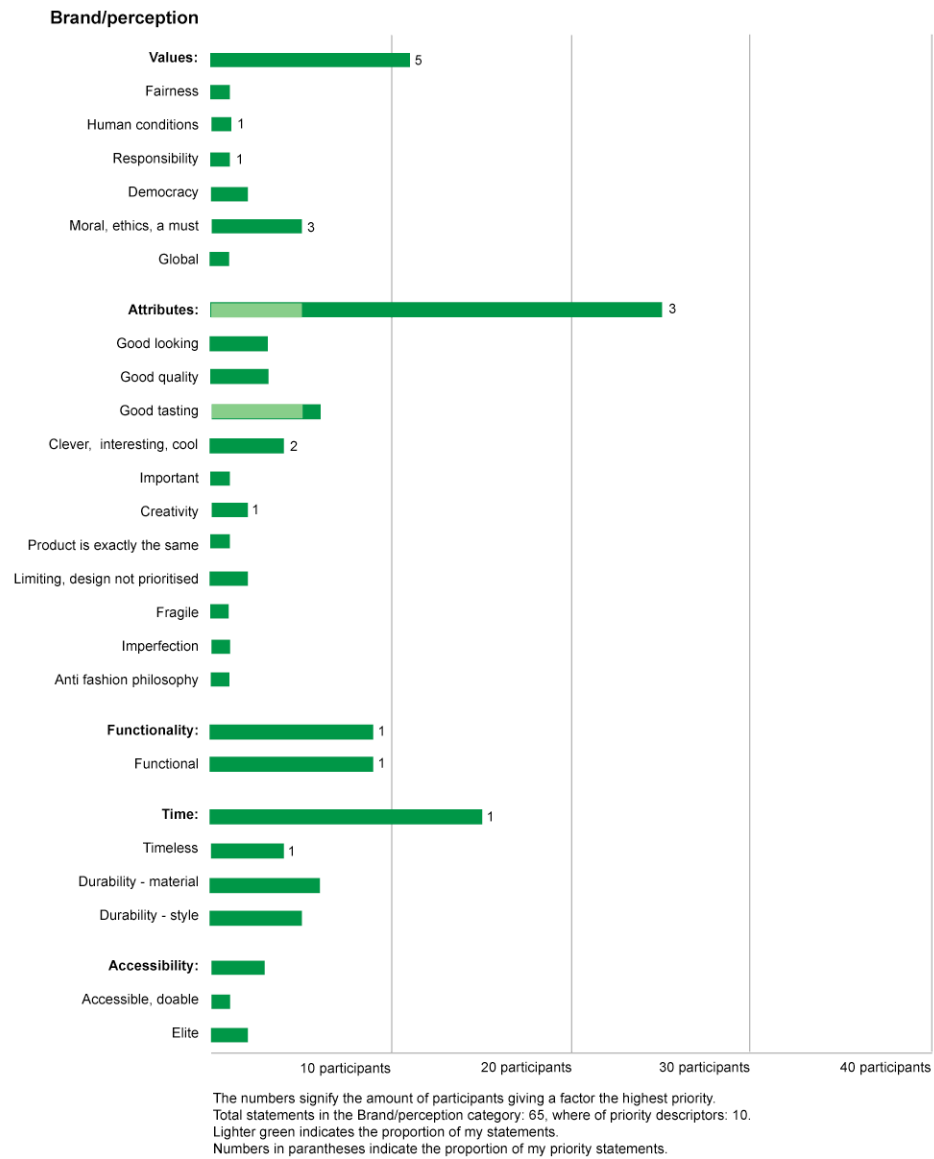
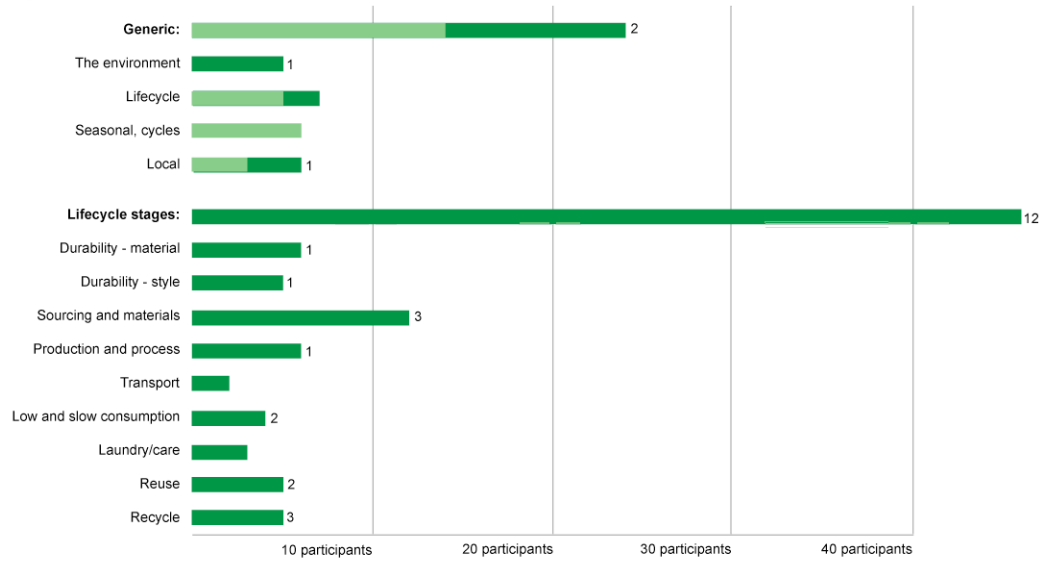


Figure B.8.11 Sustainability - individual descriptors, *Brand/perception*

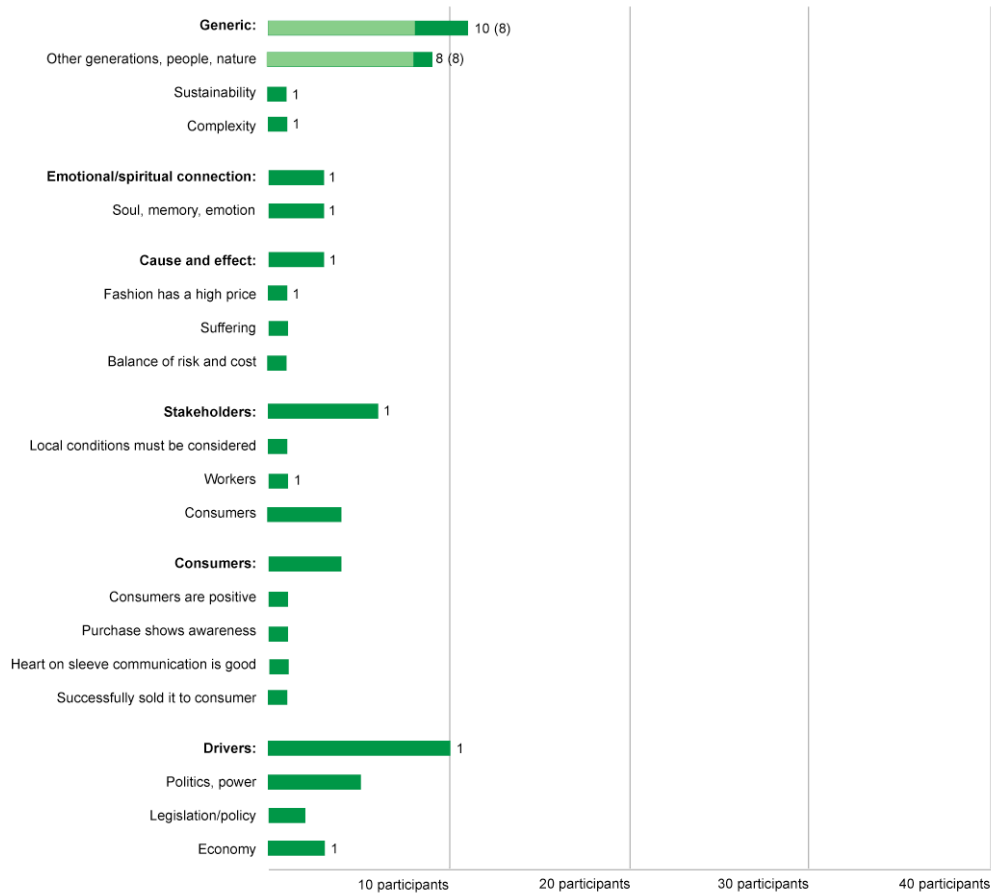
Knowledge and awareness



The numbers signify the amount of participants giving a factor the highest priority.
 Total statements in the Knowledge and awareness category: 72, where of priority descriptors: 14.
 Lighter green indicates the proportion of my statements.

Figure B.8.12 Sustainability - individual descriptors, *Knowledge and awareness*

Relationships



The numbers signify the amount of participants giving a factor the highest priority.
 Total statements in the Relationship category: 37, where of priority descriptors: 14.
 Lighter green indicates the proportion of my statements.
 Numbers in parantheses indicate the proportion of my priority statements.

Figure B.8.13 Sustainability - individual descriptors, *Relationships*

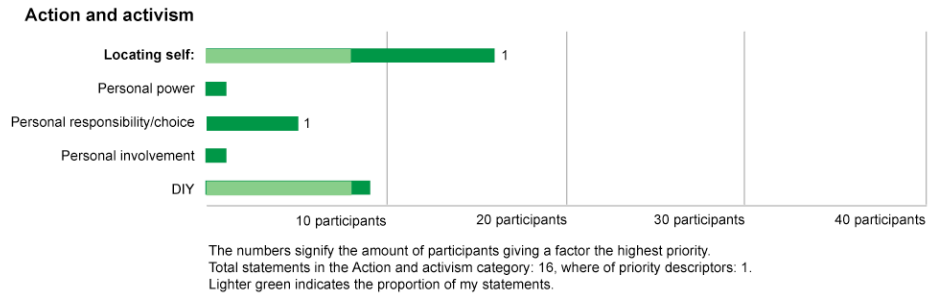


Figure B.8.14 Sustainability individual descriptors, *Action and activism*

B.8.6 Sustainability - group descriptors

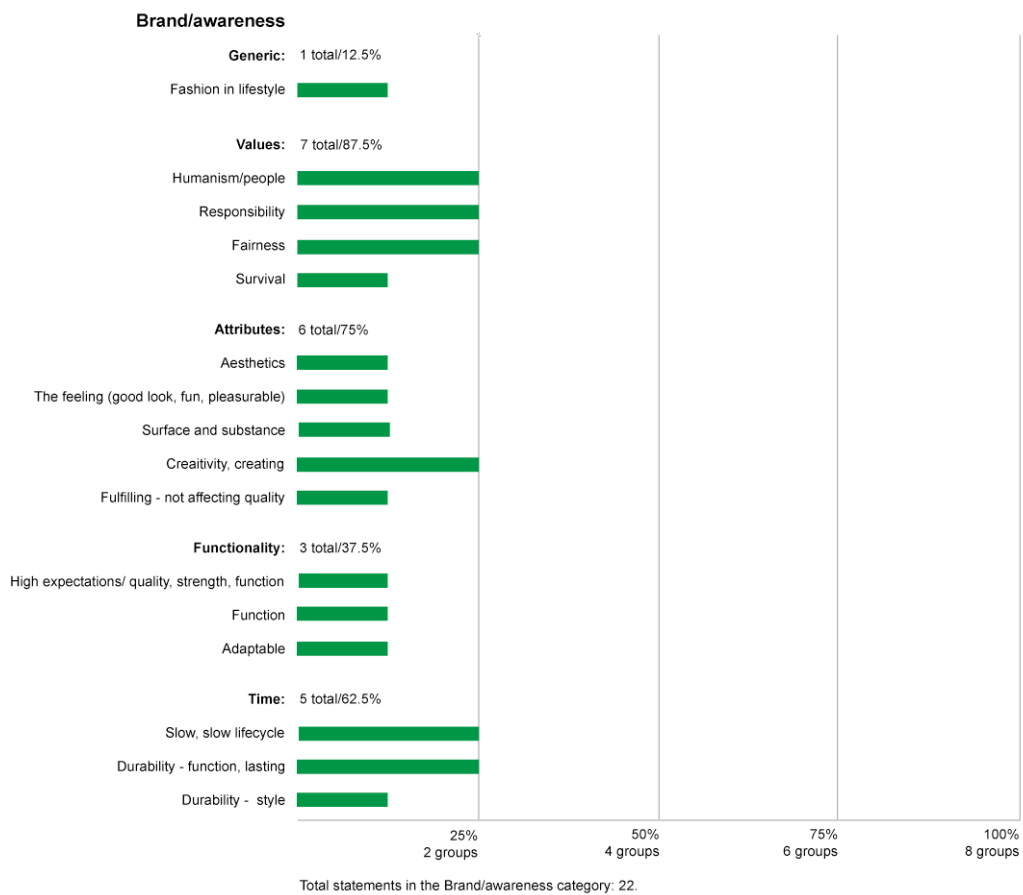


Figure B.8.15 Sustainability - group descriptors, *Brand/perception*

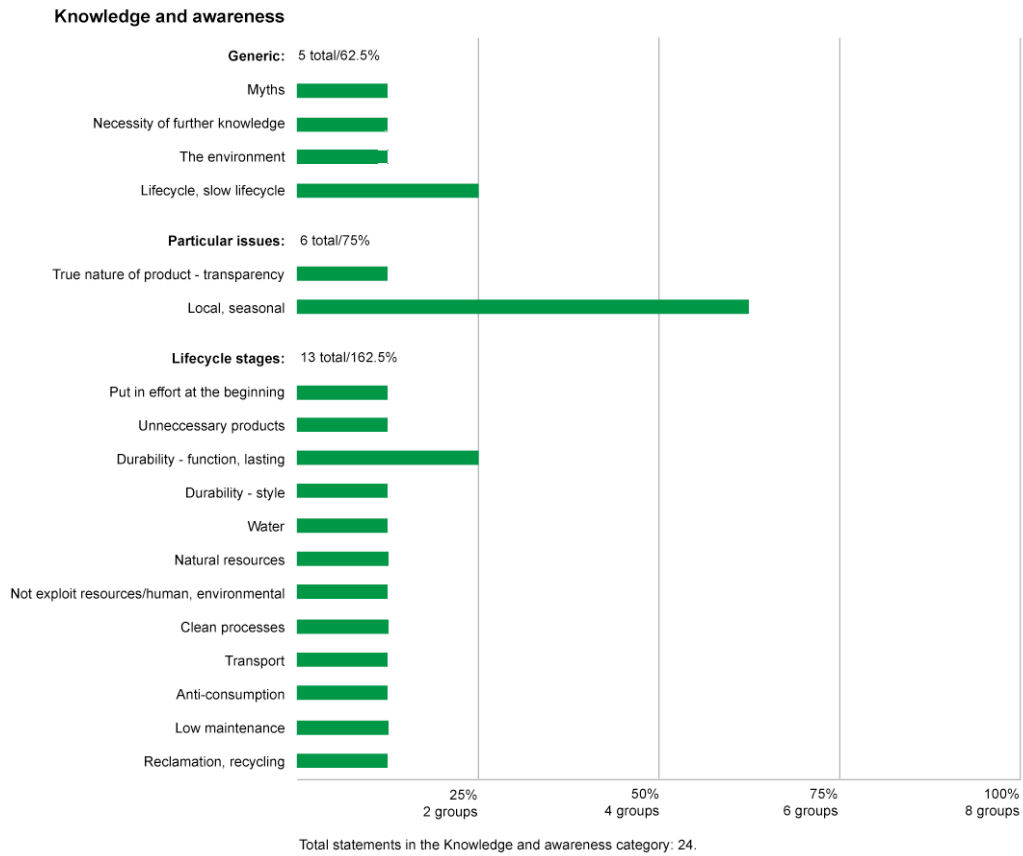


Figure B.8.16 Sustainability - group descriptors, *Knowledge and awareness*

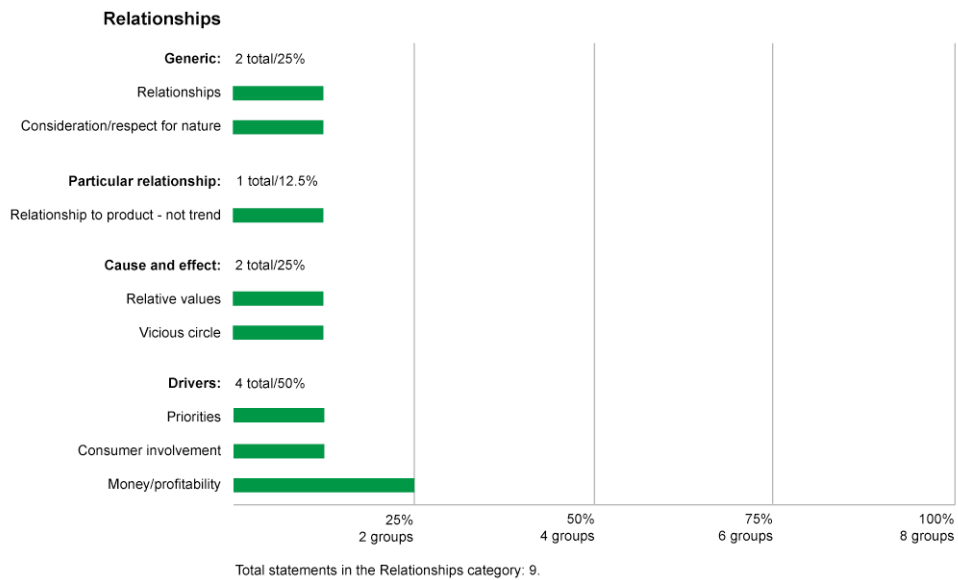


Figure B.8.17 Sustainability - group descriptors, *Relationships*

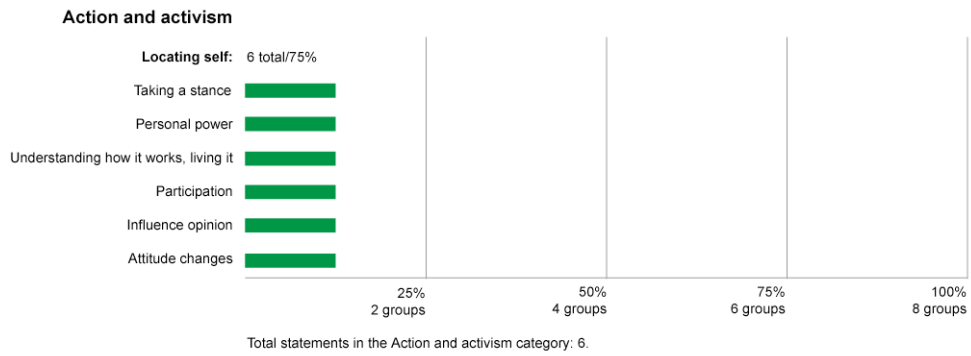


Figure B.8.18 Sustainability - group descriptors, *Action and activism*

B.8.7 Scenario descriptors

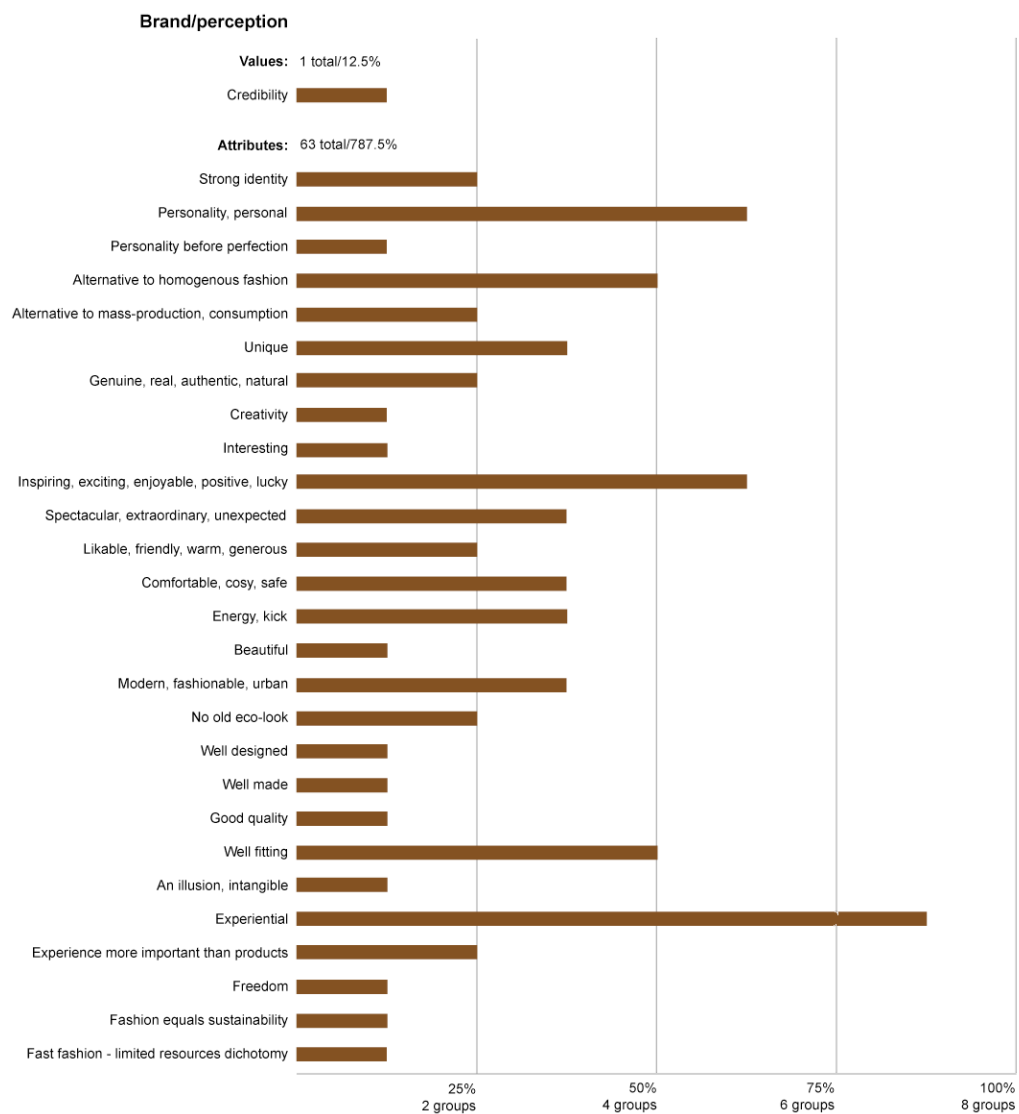


Figure B.8.19 Scenario, *Brand/perception: Values and attributes*

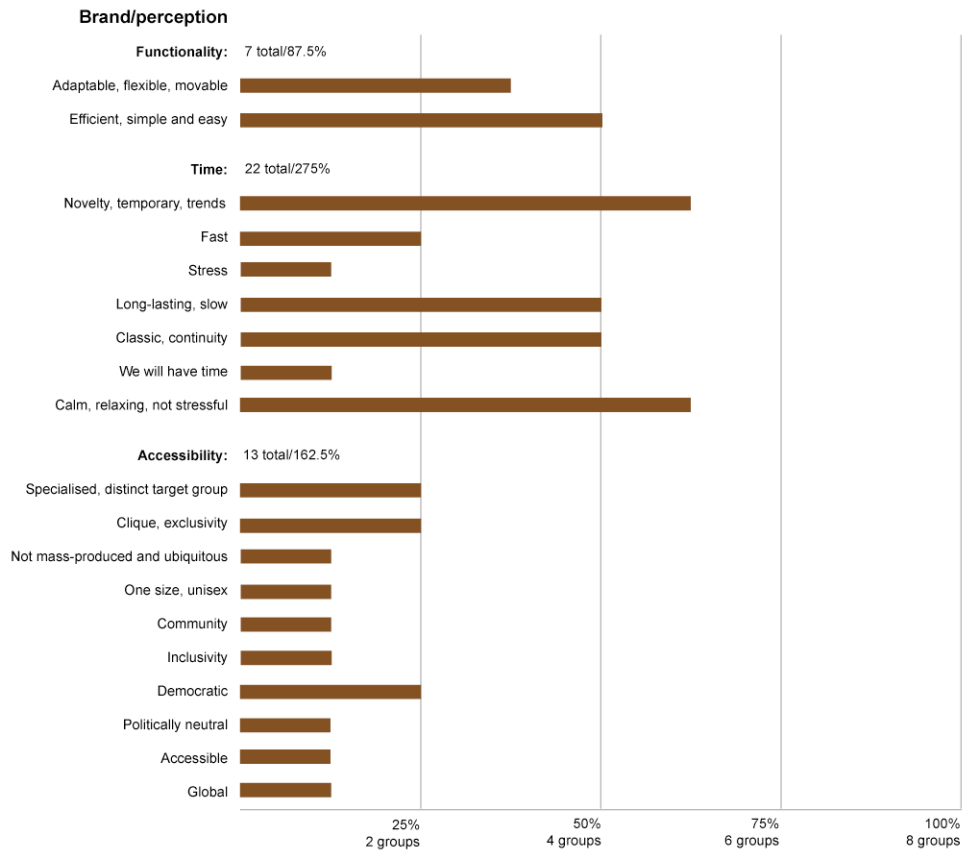


Figure B.8.20 Scenario, *Brand/perception: Functionality, time and accessibility*

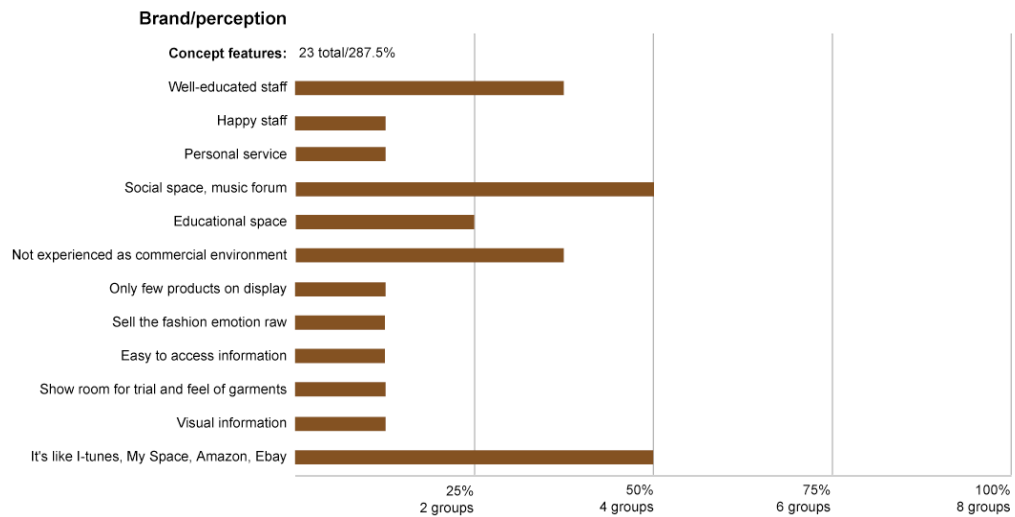


Figure B.8.21 Scenario, *Brand/perception: Concept features*

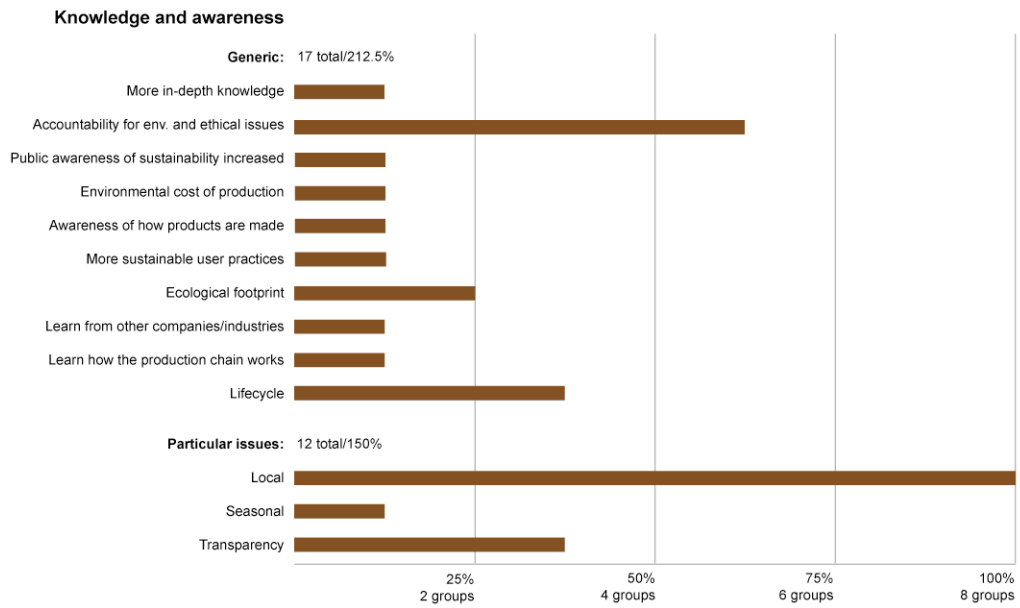


Figure B.8.22 Scenario, *Knowledge and awareness: generic and particular issues*

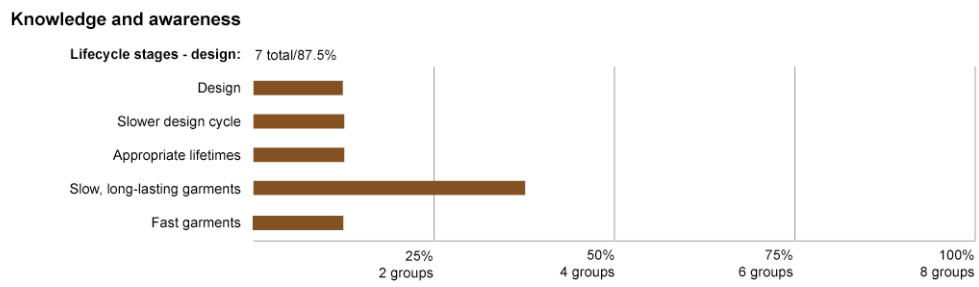


Figure B.8.23 Scenario, *Knowledge and awareness: lifecycle stages - design*

Knowledge and awareness

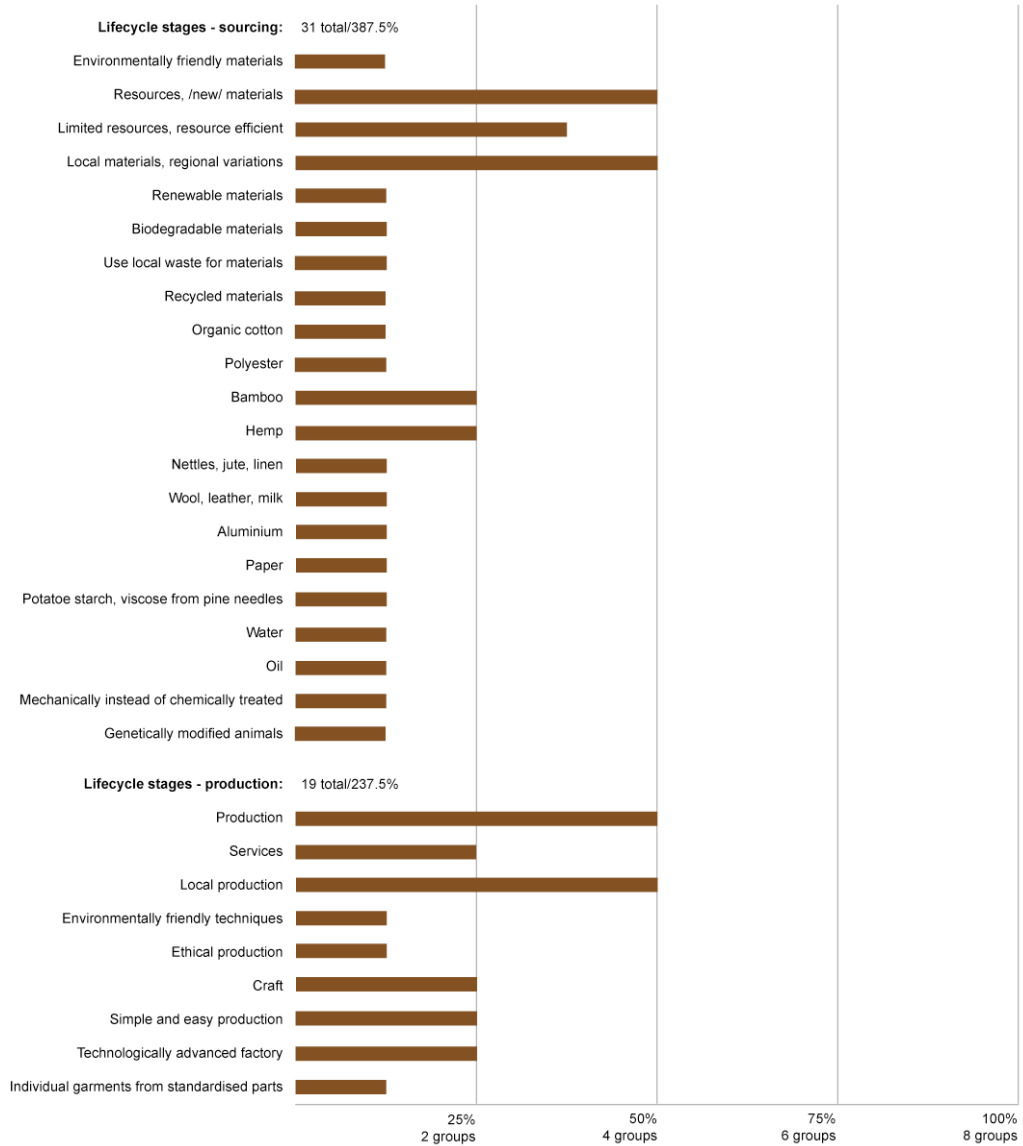


Figure B.8.24 Scenario, *Knowledge and awareness: lifecycle stages – sourcing and production*

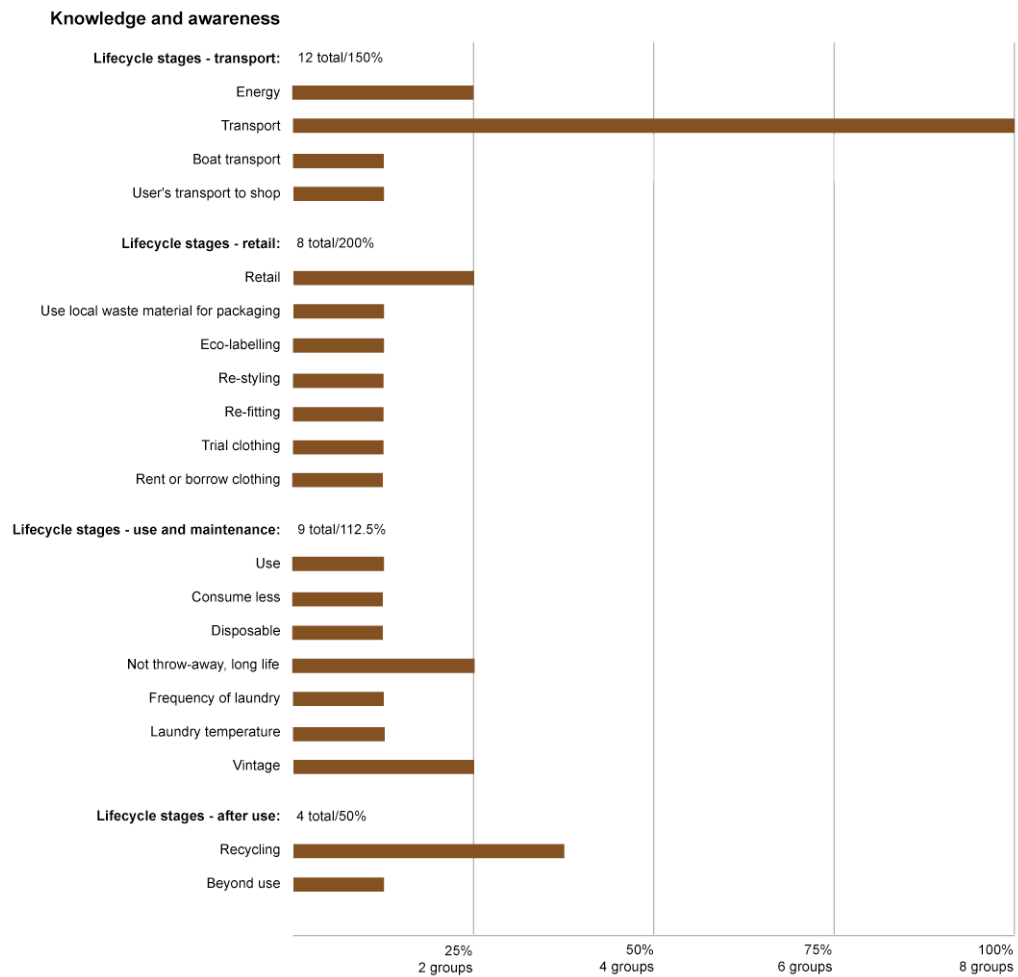


Figure B.8.25 Scenario, *Knowledge and awareness: lifecycle stages – transport, retail, use and maintenance, after use*

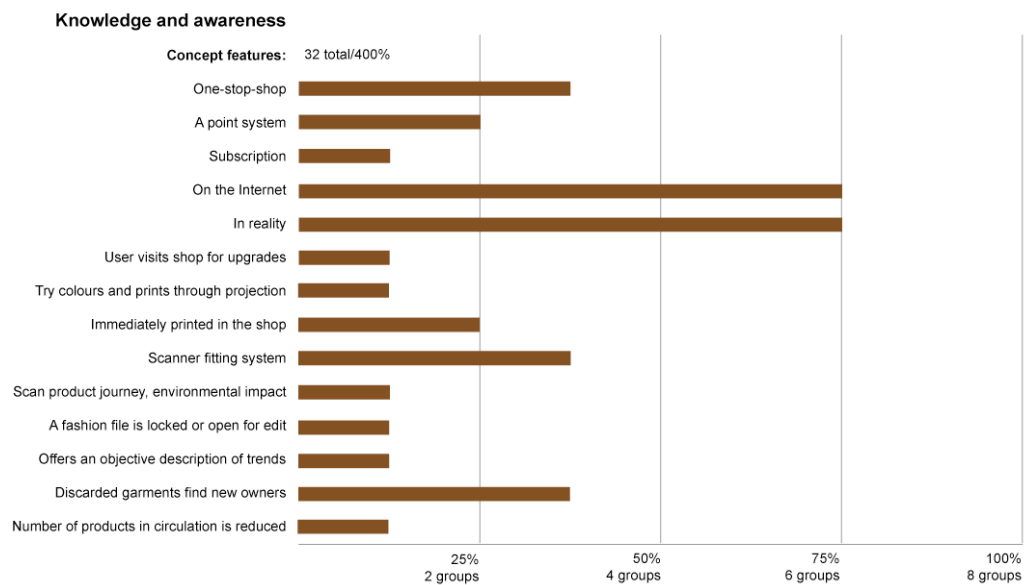


Figure B.8.26 Scenario, *Knowledge and awareness: concept features*

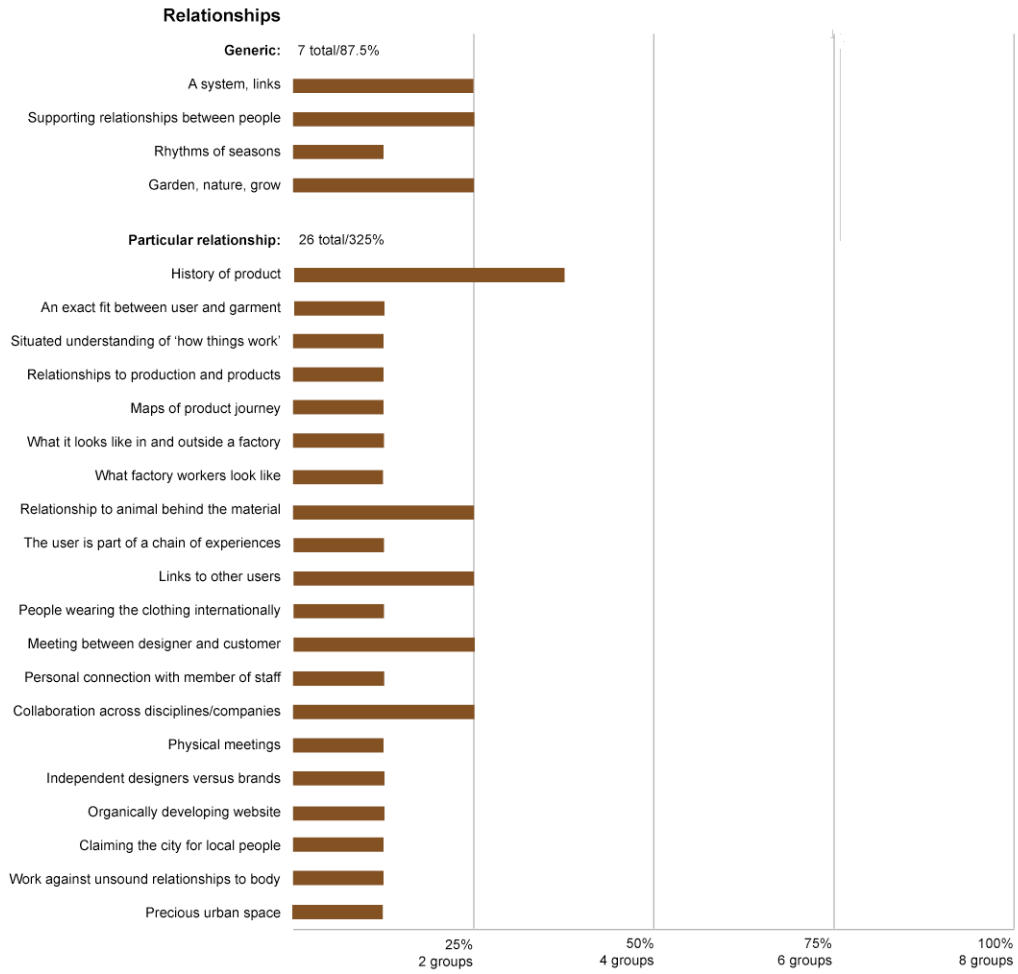


Figure B.8.27 Scenario, *Relationships: generic, and particular relationships*

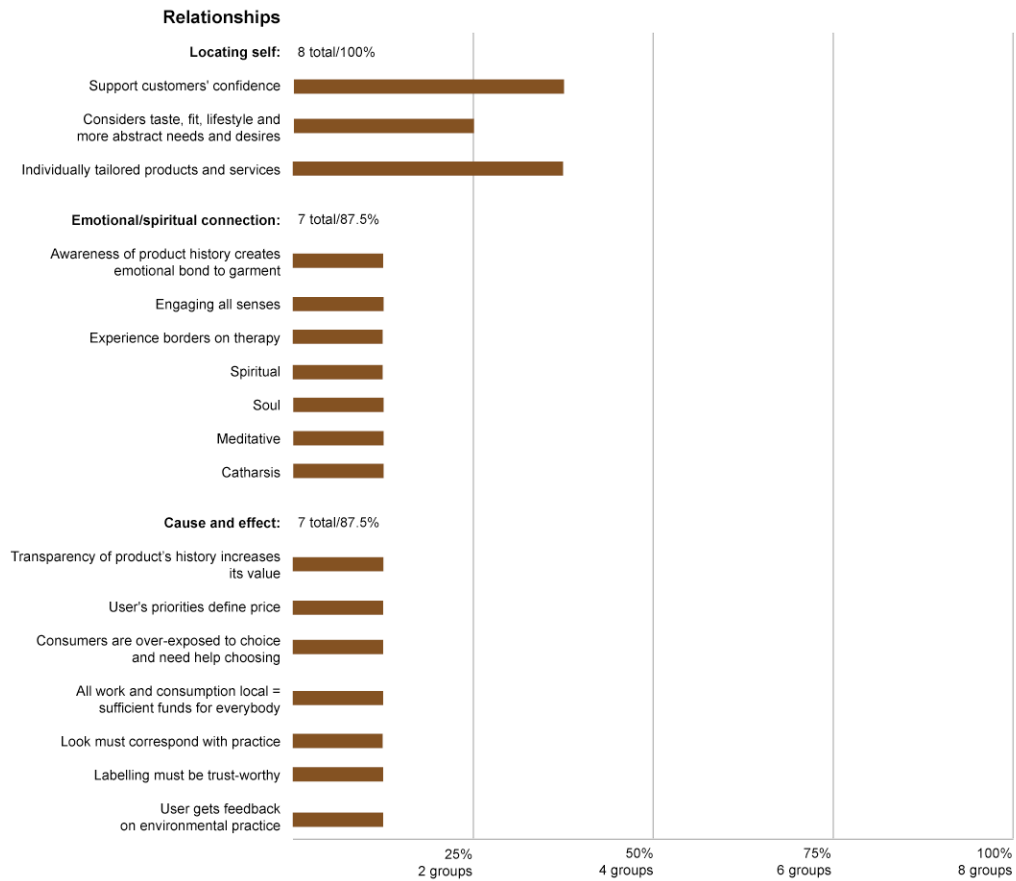


Figure B.8.28 Scenario, Relationships: locating self, spiritual/emotional connection, cause and effect

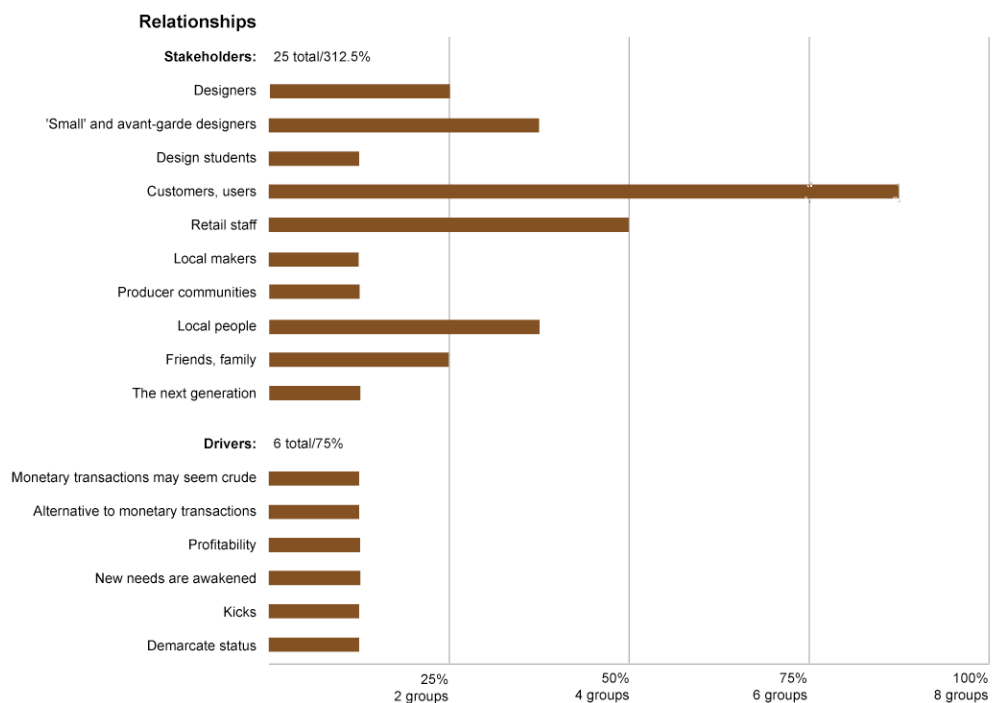


Figure B.8.29 Scenario, Relationships: stakeholders, and drivers

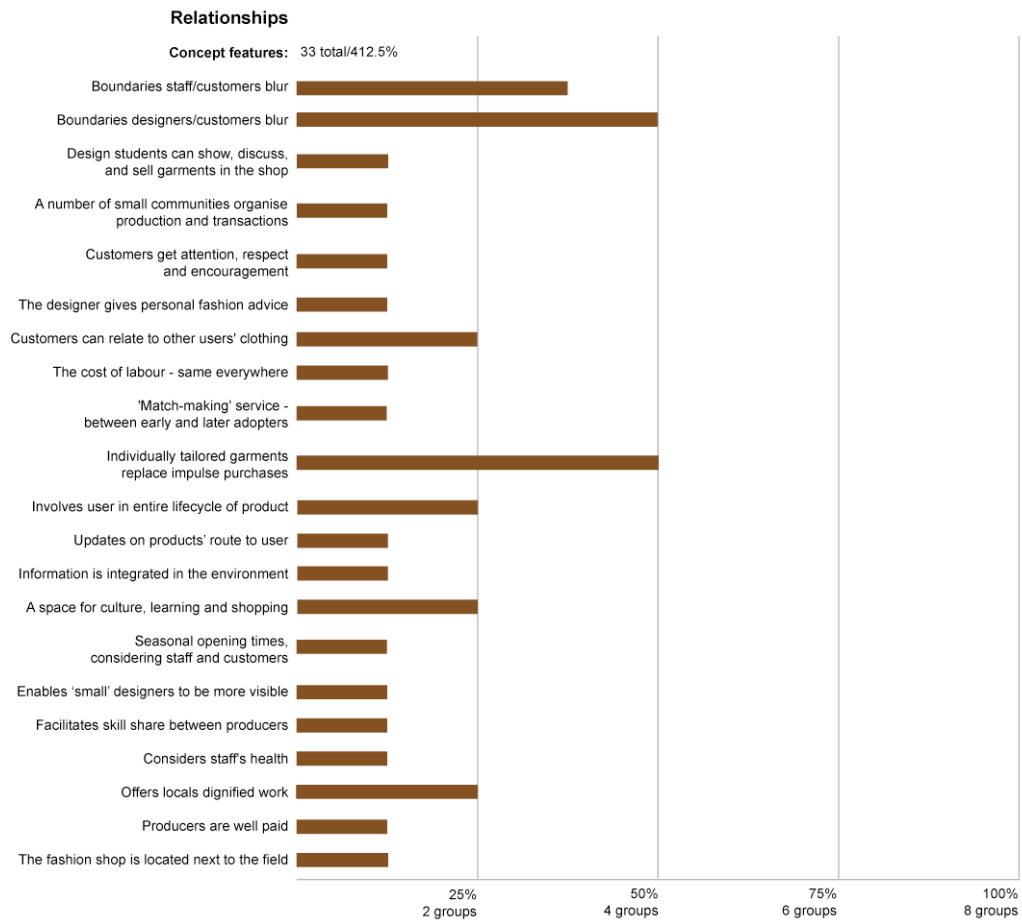


Figure B.8.30 Scenario, *Relationships*: concept features

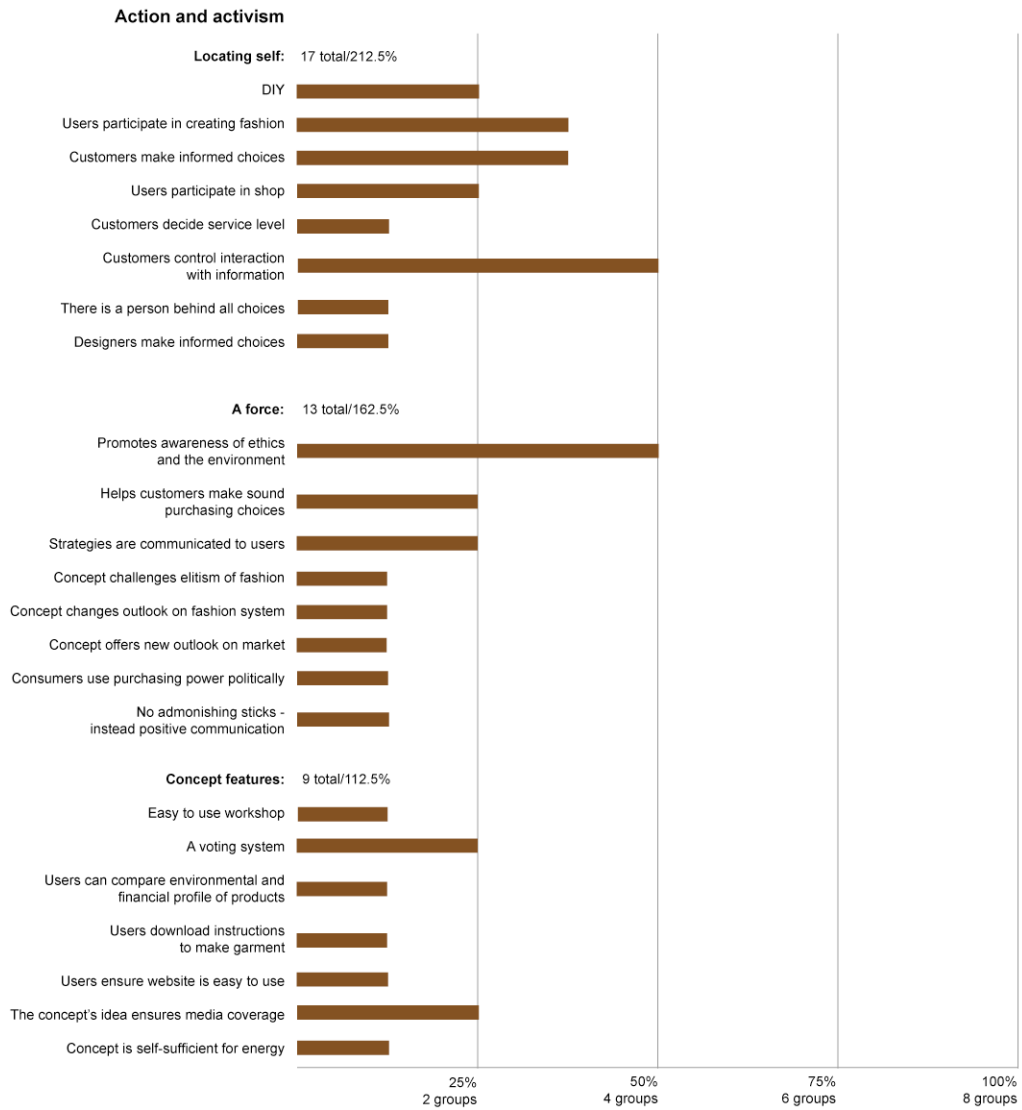


Figure B.8.31 Scenario, *Action and activism: locating self, a force, concept features*

APPENDIX C. List of published work

Appendix C List of Published work

C.1 Book chapters

Tham, M. 2008. Modets energi – symbolikens roll i hållbar design. In Energi - Hur design kan göra skillnad, edited by K. Sylwan and J. Stål. Göteborg: Camino.

Tham, M. 2008. Foreword. In Design för hållbar utveckling: ekologi, ekonomi, kultur.

Stockholm: Raster. Original edition, Thorpe, A. 2008. The Designer's Atlas of Sustainability, Washington: Island Press.

Tham, M. 2008. Mode, Tid och Ekologi: System för hållbara modeögonblick. In Grön Design, edited by C. Bertilsson and M. Hellmark. Stockholm: Naturskyddsföreningen.

Sadowska, N. and M. Tham. 2005. Minding the Gap: Using artefacts to navigate private, professional and academic selves in design. In Beginnings: Experimental Research in Architecture and Design, edited by K. Grillner, P. Glembrandt and S. O. Wallenstein. Stockholm: AKAD/AXL Books.

Tham, M. 2005. Trend Fore Casting. In Agents of Change: A decade of MA design futures, edited by J. Wood. London: Goldsmiths, University of London.

Fletcher, K. and M. Tham. 2004. Clothing Rhythms. In Eternally Yours: Time in Design, edited by E. van Hinte. Rotterdam: 010 publishers.

C.2 Papers/ conferences

Tham, M., and H. Jones. 2008. Metadesign Tools: Designing the seeds for shared processes of change. Paper read at Changing the Change, 10-12 July, Turin.

Tham, M. 2008. Sustainability and Design. Workshop held at Institut Teknologi Bandung, 11-12 August, Bandung, Indonesia. Sponsored by the British Council.

Tham, M. 2008. Sustainable Fashion Futures. Paper read at The Future of Fashion, 1 February, at University College of Borås, Borås, Sweden.

Tham, M. 2008. Opening speech and moderating at Fashion and Sustainability – Paradox or opportunity, 31 January, at Stockholm Fashion Week at Berns, Stockholm, Sweden.

Tham, M. 2008. Opening speech and moderating. Paper read at Volvo Eco-design Forum, 28 January, at Volvo Sport Design at ISPO, Munich.

Tham, M., and H. Jones. 2008. Sustainability and Design. Workshop held at Tembi Crafts Village, 17-19 January, Yogyakarta, Indonesia. Sponsored by Goldsmiths, the British Council, Senada.

Tham, M. 2007. Sustainable Fashion Forecasting – exploring alternative paradigms for fashion design. Paper read at Dressing Rooms, 14-16 May, at Oslo University, Oslo.

Tham, M. 2007. New Paradigms for Fashion. Paper read at Design Boost, 17-19 October, at Malmö University, Malmö.

Tham, M., and A. Lundebye. 2007. Fashion 2027. Workshop held at Green is the New Black, 30 April-5 May, at London College of Fashion, London.

Tham, M. 2006. Fashion, Trend-Forecasting, Sustainability. Paper read at Organic Exchange, 11-14 September, at Rabobank Auditorium, Utrecht.

Tham, M. 2005. The Metabolism of Clothing. Paper read at Interrogating Fashion, 30 November, at London College of Fashion, London.

Sadowska, N., and M. Tham. 2004. The Stored Wisdom: Artefacts as gap minders between the 'professional self', the 'personal self' and other individuals. Working papers in Art and Design 3:1-9. Faculty of Art and Design, University of Hertfordshire.

Tham, M., and G. Sundberg. 2004. Fashion Fear Factory. Workshop held at Future Design Days, 13-15 November, at Stockholm Design Fair, Stockholm.

Fletcher, K., and M. Tham. 2003. Clothing Lives! Paper read at Product Life and the Throwaway Society, 21 May 2003, at Centre for Sustainable Consumption, Sheffield Hallam University, Sheffield.

C.3 Exhibitions

Tham, M. 2008. Advisor for Eco Chic – Towards Sustainable Swedish Fashion. The Swedish Institute.

Tham, M. 2008. Lecture and workshop on Slow Fashion, and contribution to exhibition with Lifetimes project (Fletcher and Tham, 2004). Fashion and Sustainability. Istanbul: Garanti Gallery.

Tham, M. 2007. Introduction to exhibition catalogue. Fairmade - Swedish Ethical Fashion, at Style at STHLM. Stockholm: Stockholm Fashion Fair and Svensk Form.

Tham, M. 2003. Curating of Design med agenda på 2000-talet, at Pret-a-protester om Mah-Jong 1966-76. Stockholm: Riksställningar/Futurniture.

C.4 Expert interviews

Ben Saad, M., and D. Dahlqvist. 2008. Recycling. In Velvet. Sweden: Sveriges Television.

Rundström, M. 2007. Ekomode. In Gomorron Sverige. Sverige: Sveriges Television.

Bergstedt, T. 2007. Ekologiska kläder har blivit mode. In P1 Morgon. Sweden: Sveriges Radio.

C.5 Appointments

Board member of Mistra, The Foundation for Strategic Environmental Research. Sweden. 2008.

Visiting Professor of Fashion, Beckmans College of Design, Stockholm. 2007.

Co-facilitator and contributor, The Sustainable Fashion Academy, Stockholm. 2007.