

**ARE YOU WORTH IT?
A PRACTICE-ORIENTATED APPROACH TO
EVERYDAY HAIR CARE TO INFORM
SUSTAINABLE DESIGN AND SUSTAINABLE
CONSUMPTION STRATEGIES**

Sabine Hielscher

A thesis submitted in partial fulfilment of the requirements of
Nottingham Trent University
for the degree of Doctor of Philosophy

This research programme was carried out in collaboration with Boots the Chemist

February 2011

© This work is the intellectual property of the author. You may copy up to 5% of this work for private study, or personal, non-commercial research. Any re-use of the information contained within this document should be fully referenced, quoting the author, title, university, degree level and pagination. Queries or requests for any other use, or if a more substantial copy is required, should be directed in the owner(s) of the Intellectual Property Rights.

Abstract

This thesis investigates the potential in applying a practice-orientated approach to women's everyday hair care routines to inform sustainable design and sustainable consumption strategies. It seeks to develop an understanding of the multi-relational elements that make up the practice and to recognise how these elements influence what women do to their hair, and how often, and how these actions therefore impact on resource use. A practice-orientated approach is argued to provide insights into aspects of the dynamics of everyday life that can help design for sustainability to engage with the complexities of routines that are not accessible to current sustainability strategies.

This thesis builds on Shove's (2004; 2003) work on sustainable consumption. Shove (2004) has identified some limitations of current sustainable consumption approaches that try to address people's behaviours and consider the environmental and social implications of products in their use phase. She has recognised that everyday routines are complex and difficult to change through approaches that only consider people's attitudes towards the environment and choices they might make to change their behaviours. In order to overcome such limitations, Shove (2004) has advocated an alternative approach inspired by practice theory (Reckwitz 2002). Her recommendation instigated the need for this research study that examines whether explorative research orientated to practices remedies the current limitations. It does this by reflecting on the potential for design to change practices.

A practice-orientated approach offers a way forward for sustainable designers to look beyond individual behaviours and products to the embodied skills, emotions, temporalities, cultural knowledge and ideas that Schatzki (1996; 2002) has identified as making a practice. This approach emphasises what people consider 'normal' ways of life and the performance of everyday routines. Cycles of the practice enactments rely on the co-evolution of the interconnected elements; their reconfiguration often leads to practices changing, with design implicated in such changes. A practice-orientated approach required that the practicalities and processes of hair care routines be witnessed. This could only be accomplished through an in-depth involvement in women's lives by drawing on an ethnographic methodology. The research is based upon in-depth and evocative interviews in women's homes, interviews

with hair care ‘experts’ and a creative workshop at Boots the Chemist. The research into women’s hair care developed themes surrounding the role of products, the performance of hair care routines, the cycles of their enactment and the influence of social relations, that together, provided insights into aspects of the dynamics of everyday practices. The literature of material culture, practice theory and design aided the process of focusing on the materialisation of the practice of hair care.

Using an explorative and practice-orientated approach, this thesis establishes a contextualisation and empirical verification of the identified deficiencies of current sustainability approaches through an examination of Boots’ product development process. In relation to practices changing, the thesis establishes a deeper understanding of the practice of hair care, including a detailed account of the interconnectedness of its elements, its stability and instability. This understanding has led to an identification of some key factors, including designs that stabilise and destabilise practices and can therefore reinforce current routines but also potentially can bring about change. The thesis argues that an understanding of these factors is not accessible to either Boots’ product development process or current sustainability strategies. It is anticipated that the research will be of particular interest to sustainable design researchers who are interested in changing everyday practices and academics who examine the conceptions of practice theory and the practice of hair care.

Acknowledgements

I would like to give thanks to everybody who has been involved and supported me throughout the duration of my PhD.

Special thanks goes to my supervisory team Tom Fisher, Sophie Woodward, Tim Cooper and Janet Shipton, Andrew Jenkins at Boots the Chemist and all my participants. I would also like to thank the EPSRC and Boots the Chemist for funding this research.

I would not have reached this point without the love of my parents, Neil, my grandma, Binks, my niece, Barbara and my brother.

Contents

	Page
Title page	1
Abstract	3
Acknowledgements	5
Contents	6
List of illustrations and photographs	10
Introduction	11
Why this study?	11
Scope of the study	15
Research question	19
Summary of content	20
Chapter 1 Literature review	24
Introduction	24
Sustainable consumption and sustainable design	25
Current sustainable consumption approaches and the active role of individuals	27
More complex behaviour models	31
An introduction to practice theory – a way of viewing everyday life	34
Current sustainable design approaches	41
Practice theory and design	48
Potential of design to bring about change	51
What women do with their hair and how they wear it	53
Conclusion: Towards a practice-orientated approach	57
Chapter 2 Methodology	60
Introduction	60
Practice theory, design and social science methods	62
Designers using social science methods	65
From pilot study to an ethnographic methodology	67
The methodology adopted: Drawing on an ethnographic methodology	69
Conducting the research and its methods	72

Selecting informants	73
Ethics	76
Initial in-depth interviews	76
Follow-up interviews: Evocative interviews	80
Expert interviews	83
Creative workshop	84
Analysis of the overall research data	87
Summary	90
Chapter 3 Extending the critique: Boots' product development process	93
Introduction	93
Sustainability at Boots and its integration into the product development process	94
The product development process	100
The performance and appearance of hair care products	109
Conclusion	119
Chapter 4 Cycles of 'wearing and doing': Living with hair	122
Introduction	122
The interrelationship between body and hair washing	125
Visual and tactile interactions: Hair is dead or alive?	131
Cycles of 'wearing and doing'	134
Habitual routines	140
Conclusion	142
Chapter 5 Standards developed in the practice of hair care	146
Introduction	146
Framing life situations: End results of dealing with hair	148
Relationship between process and end result	153
Levels of control	153
The visibility of hair	156
Amount of work invested	159
Balancing and counterbalancing: Using hair care products and tools	161
Balancing substances on the hair – counterbalancing 'states' of hair	163
'Healthy' hair	165
Material and intangible 'dirt'	167

Conclusion	169
Chapter 6 In the home: The spatial arrangement of products and tools	174
Introduction	174
Spatialisation: The private nature of dealing with hair at home	175
The reproduction of spaces to do things with hair, reinforcing private routines	179
Ordering hair care products and tools according to their frequency of use	183
Ordering, keeping and divesting	189
Conclusion	197
Chapter 7 Hair care routines: Emily and Odette are doing things with their hair	201
Introduction	201
The wet part: Hair care products ‘do their job’	203
The dry part: Degrees of routinisation	214
Out of the usual routine	223
Conclusion	227
Chapter 8 Social relations and the practice of hair care	231
Introduction	231
Women’s ambivalent relationship with hairdressers	232
Reinventions and disasters orchestrated by the hairdresser	237
Negotiating women’s hair care routines in familial and friendship relationships	246
Like mother, like daughter?	247
Experimenting with hair to serious play	252
Conclusion	256
Chapter 9 Conclusion	260
Contribution to knowledge	260
Sustainable design and sustainable consumption debates	262
Summary of key findings	263
The stability and instability of practices through the practice of hair care	265
Aspects of the multi-relational elements of the practice of hair care	270
Scope of the research and possible future research	275

Bibliography	277
Appendices	294
Appendix 1 Bio-pics and interview dates	294
Appendix 2 Chronology of methods	301
Appendix 3 Interview topic guide	302
Appendix 4 Index of interview themes	306
Appendix 5 Breakdown of how often women shower, take a bath and shampoo their hair per week	307
Appendix 6 Breakdown of places for keeping hair care products and tools	308
Appendix 7 Breakdown of hair care products and hair care tools into the frequency of their use	309
Appendix 8 Report – Creative workshop at Boots	310
Appendix 9 Examples of analysis drawings	336
Appendix 10 Environmental impacts of hair care routine	338

List of illustrations and photographs

	Page
Photo 1: Olivia's shampoo, conditioner, serums	69
Photo 2: Olivia's places of doing things to her hair – the bedroom	69
Photo 3: Olivia's places of doing things to her hair – the bathroom	69
Photo 4: Odette's order of hair care products and tools – the bedroom	176
Photo 5: Odette's order of hair care products and tools – the bathroom	176
Photo 6: Anne's bathroom	178
Photo 7: Anne's bathroom	178
Photo 8: Julie's hair care products and tools in her bedroom	187
Photo 9: Julie's hair care products and tools in her bedroom	187
Photo 10: Julie's hair care products and tools in her bedroom	187
Photo 11: Anne's cupboard	191
Photo 12: Shirley's half used shampoos and conditioners in her bedroom wardrobe	196
Photo 13: Emily's hair care products and tools in her campsite shower and bedroom	204
Photo 14: Emily's hair care products and tools in her campsite shower and bedroom	204
Photo 15: Holly's conditioner	208
Photo 16: Holly's conditioners	208
Photo 17: Bottles containing shampoo and water to create lather – Unilever stand at Wellcome Trust event	211
Illustration 1: Linear approach to the development of products, exemplified by shampoo that bubbles	114
Illustration 2: Feedback loop between consumer and manufacturer, exemplified by shampoo that bubbles	115
Illustration 3: Shove's pinwheel	116

Introduction

Sustainable living has become an increasingly significant issue in our society. Over the last twenty years, a wide variety of research from the social and natural science has drawn attention to the consequences of Western lifestyles on the 'natural' environment (World Commission on Environment and Development 1987). In 1992, Agenda 21¹ challenged countries to take action in achieving sustainable production and consumption, a change of emphasis from the previous exclusive focus on production. For the first time an agenda addressed all social actors, from governments to individuals, encouraging the adoption of sustainable practices. One of the key starting points of this research is Elizabeth Shove's (2004) paper that delineates the limitations of widely accepted approaches to sustainable consumption and is summed up in the following quote,

"Is the challenge of sustainable consumption one of changing human behaviour and lifestyle? I would argue 'no', it is not a question of fretting about prices and barriers or of searching for levers that might be pulled to re-engineer consumer decision-making. Is the challenge of sustainable consumption one of changing dominant ways of thinking about human behaviour and lifestyle? To this question, I have no hesitation in answering 'yes'." (Shove 2004: 129)

On first sight, Shove's (2004) disagreement with changing people's behaviour seems surprising, particularly when thinking about the steady increase of resource consumption and production of waste associated with current Western lifestyles and the need for sustainable change that goes beyond advances in manufacturing. Nevertheless, the statement articulated issues that became the starting point of this research: an approach to change that uses people and their behaviour as a starting point might be misguided when considering the dynamics of everyday life. As illustrated by Shove's (2004) statement, the opportunities for change might not be based on identifying barriers, drivers or incentives to persuade individuals to live a more sustainable life. Indeed, the challenge might be grounded in exploring different ways of living in and thinking about everyday life and what people consider 'normal', including ways of feeling clean, comfortable, connected, relaxed... The limitations of current approaches become apparent when considering that over recent years

¹ Agenda 21 is a programme run by the United Nations, concerning sustainable development. The Agenda was first disclosed at a United Nations Conference on Environment and Development that was held in Rio de Janeiro on the 14 June 1992.

information and marketing campaigns directed towards sustainable consumption have not led to sustained changes in people's practices (Arroy et al 2005; Burgess et al 1998; Barr 2003) in many areas of everyday life.

This research does not provide a concrete solution to the statement above; instead it tries to create the first steps towards it. This examination is grounded in a reflection on the deficiencies² in current sustainable design and sustainable consumption approaches³ that are concerned with the environmental and social impacts within the product's use phase⁴ and that assume positive changes in behaviour towards the environment largely occur through economic, moral and political persuasion or coercion. The research considers the potential of an alternative approach inspired by practice theory (Reckwitz 2002; Schatzki 1996), a way of thinking about exploring everyday life that derives from the field of sociology. The study particularly reflects on the potential for design to change practices.⁵

When I embarked on this study in 2006, I had reached a crossroad.⁶ Throughout my life I have been fascinated by the way people use, interact and live with objects in everyday life. Moreover, I had a keen interest in the 'natural' environment, starting my professional life as a trainee landscape gardener. The eco-design course at Goldsmiths College in London

² The thesis refers to 'deficiencies' in current sustainable design and sustainable consumption approaches but does not claim that these approaches are unsuccessful in bringing about sustainable change. However, the literature review (chapter 1) argues through referring to the current literature on sustainability that they are limitations to the current approaches, in particular when trying to reach a wider audience. Therefore, in the thesis whenever referring to 'deficiencies', they are considered as 'arguable deficiencies'.

³ In this research it might sometimes appear that sustainable design and sustainable consumptions strategies are regarded as one strategy, this is however not the case. What combines the two strategies is discussed in more depth in chapter 1. It is through their interrelationships that the research is able to reflect on current deficiencies.

⁴ The use phase is constitutive of the product lifecycle, including the raw materials acquisition, materials manufacturing, product manufacture, distribution, retail and disposal.

⁵ A practice such as cooking, bathing and hair care, according to Reckwitz (2002: 251) is, "a routinised type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge".

⁶ In the thesis there are shifts between the first and third person. The first person is only used in the introduction and methodology. I site the first person whenever I refer to my personal background. Some elements of my personal background are an essential part of explaining and validating the research approach taken in the study and its cross-disciplinary approach. Further, I make use of the first person whenever I reflect on the impact of the research process on the informants and the data produced. As argued by Oliver (2004: 64) the use of the third person can "imply that researchers are people who followed procedures and protocols, and who tried to distance their own value system from the activity of research". The third person can therefore imply an objectivity that qualitative researchers frequently regard as impossible to achieve. For example, Snape and Spencer (2003: 20) have pointed out that "while researchers can 'strive' for neutrality and objectivity, we [researchers] can never attain this aspiration fully (nor indeed, do we believe that this is possible in other type of social research)". This study acknowledges how my role as a researcher influences, acts upon and informs the research study. This reflexivity can only be fully recognised through using the first person whilst reflecting on the impact of the process on the informants and the data produced in the introduction and methodology.

represented a great opportunity to combine my interests. Here, I was introduced to theories within other disciplines whilst developing a view of design that goes beyond its traditional skills and techniques, through engaging with discourses about society and culture. This approach stressed the need to engage with current affairs and discourses that inspire design thinking for sustainability. Course modules addressed the history and theories of design, and included theoretical influences from sociology, anthropology, material culture and philosophy. Consequently, our design work had to be firmly engaged with a contemporary socio-cultural subject to contextualise design within philosophical, political and environmental issues; to question the role of the designer and the impact of design.

My previous design work was concerned with the psychological durability of the product/human relationship (Chapman 2005). It explored a variety of concepts about improving this relationship by making it more durable, longer lasting and therefore, reducing the amount of waste produced (Hinte 2004). This investigation evoked a personal interest in human/product interactions. However, it did not provide me with a complete understanding of the forces at play, particularly when objects are used and consumed in everyday life. Interactions with objects are grounded in a complex system of material, cultural and social aspects and depending on their configuration have varying impacts on the environment. Moreover, the introduction to sustainable design approaches during my degree often seemed solution-based instead of being explorative towards examining the dynamics of the everyday, as environmental concerns were regarded as extremely pressing and therefore solutions needed to be found and tested quickly. Solutions that concern the use phase of products are often based on specific strategies in order to bring about change. For example, the designer could encourage a psychological bond between products and people (Chapman 2005), direct behaviours through design (Jelsma 1999), encourage slower consumption (Cooper 2005) or slow design (Fuad-Luke 2006) or design services rather than products (Charter and Tischner 2001).

Although my colleagues on the eco-design course were enthused by solution-based strategies, my friends and family members could often not relate to them. Why should they go to the launderette to get to know their neighbours rather than buy a washing machine and meet the neighbours in the local pub? Moreover, having a device that measures the

electricity and water consumed in the house can be useful to reduce costs but the daily shower is still an essential part of their daily life. Strategies are often built on the requirement for people to internalise environmental concerns so that they are inclined to change their current behaviour towards more sustainable ways of living. The question that arose for me at the beginning of this research was whether I should engage with the sustainable design strategies in more depth or explore different avenues. Stumbling across Shove's (2004) paper, 'Changing human behaviour and lifestyle: A challenge for sustainable consumption' the origin of the above quote, I became fascinated by starting with a way of thinking about exploring the activities of everyday life, practice theory, and its conceptualisation of the role of people in relation to sustainable change, rather than with a solution-based strategy to sustainable design.

This research refers to the current work on practice theory that focuses on the sense of 'practice' that has been developed in the sociology of culture, tracing its origins in the work of Bourdieu (1977), Giddens (1984) and others. It has been recently summed up by Reckwitz (2002) and applied in empirical studies (for example Shove et al 2007). Shove (2004) has suggested that practice theory encourages a shift in understanding of people and their behaviour in sustainable consumption strategies, as it focuses on everyday routines and what people take to be 'normal' ways of life. It is argued that practice theory adds detail and subtlety to the analysis of the changing patterns of everyday life⁷ and may provide a useful vocabulary for approaches to design (Shove et al 2007), as it not only emphasises the reproduction of practices in everyday life but also the dynamics of change. Following Ingram et al (2007), design⁸ is not only concerned with the acquisition of products, but also with the forces that are at play when they are used. Practice theory encourages the designer to regard the design and consumption of products as interrelated.

⁷ Practice theory provides a way of thinking about everyday life. Practices are entities that are held together by ways of doing, know how, sets of norms and things (De Certeau 1998; Schatzki (1996); Giddens (1984). This way of viewing daily life calls attention to the collective development of what people consider as normal. It considers people not as passive agents, but as actively integrating their own interpretations when reproducing practices in daily life (De Certeau 1998). A more detailed examination of practice theory in relation to the school of cultural theory and writings on everyday routines can be found in chapter 3 (see also Reckwitz (2002) review).

⁸ In this study the role of the designer is considered in the broadest sense, not just as a creator of things or their shaper but also as possible facilitator for change, developing various design outcomes such as products, graphics, prototypes, concepts, scenarios, systems, services, environments and probes. Design as an activity is considered as the ability of all humans to shape their surroundings (Friedman 2000), but this study concentrates on sustainable design, as an academic and industry profession, developing a variety of outcomes that are part of daily life.

In relation to design, sustainability and consumption, a practice-orientated approach attempts to connect macro level patterns with micro level activities, instead of only concentrating on the behaviour of individuals in the product use phase. Drawing from Giddens' (1984) theory of 'structuration', academic researchers who apply practice theory argue to focus empirical work on the agency-structure dynamics that are involved in the performance of everyday practices. They acknowledge the interplay between individual actions ('agency') and collective norms ('structure'). This recognition does not mean that sustainable changes require 'large scale' innovation, as a change in practices occurs through "a social event made up of tiny, distributed yet inter-related acts of routines" (Scott 2008: 5) with design implicated in such changes.

A practice-orientated approach to design draws attention to the interactions between people and their objects in existing routines, especially focusing on the performance of practices. These performances are influenced by people's bodies, their minds, the knowledge and competence they possess, the discourses they draw on and the emotions they feel – elements that are all interconnected (as concluded by Reckwitz 2002 and emphasised in Hielscher and Fisher 2008). In addition, they hold the practice together through shared competences, conventions and material resources as these elements exist over time (Shove and Pantzar 2007). Following Shove et al (2007), objects and individuals are not explored in isolation away from everyday life but are considered as related. Objects create networks that help to reproduce processes and practicalities of use, as they "are not just semiotically communicative" (2007: 13) in the accomplishment of practices. The potential for design to bring about change is grounded in mutually constitutive nature of practices and things and, therefore, "changing things might accompany changing practices" (Fisher 2008: 235).

The scope of the study and the practice to be explored in order to reflect on a practice-orientated approach was determined by the range of products, tools and services offered by Boots the Chemist⁹ and the people who use them in everyday life. This is because the research was conducted in collaboration with the corporate social responsibility department at Boots the Chemist.¹⁰ This resulted in the examination of women's everyday practice of

⁹ Boots the Chemist, commercially known as Boots, is a UK-based pharmacy-led health and beauty retailer.

¹⁰ The relationship between Boots the Chemist and the research was based on the company providing additional funds to the project (in addition to the EPSRC PhD studentship funding) and resources, such as the expertise of their

hair care¹¹, as these routines consume resources¹² and therefore are implicated in the issues of environmental sustainability. Academics have acknowledged that when applying practice theory in empirical research, it is near to impossible to draw the boundaries of a practice (Christensen and Ropke 2005; Halkier 2006). Everyday activities and products can be part of more than one practice, creating an empirical challenge to define its boundaries. Christensen and Ropke (2005) and Shove and Pantzer (2005) provide some answers to this empirical concern by indicating that the analytical purpose of the research study needs to be considered when defining the practice to be investigated, such as the practice of hair care. This study is particularly concerned with the issues surrounding the environmental sustainability of women's hair care routines and the role of design. It draws attention to the material and ordinary aspects of the practice, including its activities, products and the materiality of hair, instead of prioritising symbolic representations, gender, class and race construction (Biddle-Perry and Cheang 2008) or fashions in hair.

Christensen and Ropke (2005) and Shove and Pantzer (2005) argue that deciding what activities, products and multi-relational elements constitute the practice to be investigated aids the development of its definition. In this study, the practice of hair care is comprised of the routine ways of 'wearing and doing' hair that is regarded as an embodied practice. The 'wearing' of hair not only relates to how women 'wear' their hair but also to the conscious and unconscious carrying of it, the 'act of wearing'. The 'doing' of hair relates to ways of dealing with hair at home but also to the activities that are carried out as part of the practice: shampooing, straightening, and drying, just to mention few. Whilst 'doing' their hair women make use of a variety of hair care tools¹³, such as hairdryers and brushes and hair care products, such as shampoos and serums. They also interact with various hair related

employees. Although the company did not set the research question and was open-minded about the overall approach of the research study, key decisions about the methodology, theoretical framework, practice to be investigated and research question were discussed in regular meetings with Andrew Jenkins, the Sustainable Development Manager – Products, at Boots the Chemist. The relationship can be overall described as workable, open and supportive.

¹¹ The 'caring' of hair is not considered as the process of maintaining a 'good' condition of the hair but rather relates to the 'doing and wearing' of it.

¹² Although the environmental impact of the practice of hair care is felt across the lifecycle of products and tools, from raw material to disposal, this research concentrates only on resource consumption during their use phase.

¹³ The thesis refers to hair care items as hair care tools and hair care products. Hair care products are items such as shampoos and hairspray. They are fluids and liquids that merge with the packaging to become a fast moving consumer good until the end of its life. Some hair care products rely on the use of water and electricity during their use. Hair care tools are items such as hairdryers and brushes. They are solid, hand-held items that usually are long lasting. Some hair care tools also rely on the use of electricity during their use and are therefore implicated in issues of environmental sustainability.

facilities that are built in the environment such as taps and boilers that all define the activities of the practice. Hair care products consist of different ingredients such as surfactants and selenium sulfide and therefore come in a variety of consistencies such as gels and creams that women interact with in everyday life. In this study, the practice of hair care is concerned with activities and products surrounding the head of hair. This excludes any activities that cannot be done alone because it would require the intervention of a skilled professional, such as the restoration of hair, and the cutting of it.

The practice is not only supported by bodily activities and material processes but further by immaterial elements, including ideas about what women should do with their hair, what it means to deal with one's hair and what it is to have acceptable hair (i.e. shared ideas, norms and meanings). In line with a practice-orientated approach, what women do with hair and how they wear it requires mental and bodily activity, including competences and understandings required, for example, to use a brush and hairdryer at the same time or to choose the appropriate heat to use a hairdryer at different stages of the drying process. Women draw on social knowledge and shared understandings to reproduce hair that is socially acceptable. Women also manage various emotions that they have internalised such as feeling irritated by their hair. Defining the boundaries of the practice of hair care through its multi-relational elements and various activities aided the process of examining it empirically. Nevertheless, whilst conducting the research it was taken into account that in everyday life the practice is more vague and abstract, as activities intersect with other practices and products can belong to numerous practices at the same time.

The practice of hair care is universal, yet the aim of this research was not to develop a representative and generalisable account of people's hair care routines; rather it was to work with a smaller non-representative number to gain more in-depth insights into the dynamics of the practice in everyday life. However, during the pilot study it became apparent that there was a demarcation of gender and ethnicity in what is done with hair and how it is worn. This gender and ethnic demarcation was particularly marked by the type of products and tools used. Therefore, because of the scope of the study the sample mainly consisted of

women with Caucasian¹⁴ hair, including three interviews with women of varying ethnic backgrounds to explore the cultural differences and validate the sampling strategy. The decision to work with a sample consisting of only women was based on the possibility of gaining access to the more intimate activities of hair care routines in women's homes, as I too am women. Boots the Chemist's consumer insight manager¹⁵ also pointed out the important role women play when making decisions about hair care products for the whole family and, therefore, the family's hair care routines. The vital role played by women is further reinforced in the literature on consumption and household provisioning (Jackson and Moores 1995). The decision to work with women was not based on examining the gender constructions in the practice of hair care but to reflect on issues surrounding sustainability, concentrating on a smaller sample but in more depth.

The research into women's hair care routines in their homes was conducted over a period of twelve months, drawing on an ethnographic methodology. This approach aided the process of developing trusting relationships with the informants. With some of the women in the study, the relationships developed to a point where the presence of a researcher in their home was no longer intimidating. This methodology provided insights into the multi-relational elements of the practice, and in particular its performance in everyday life and the materiality of hair and its products and tools. In addition to conducting the research with women in the home, in-depth interviews with hair care 'experts' were carried out to engage with current corporate social responsibility strategies, particularly in relation to sustainable design, the product development process and consumer research. This provided insights into the possible interconnectedness between production and consumption. Furthermore, a creative workshop was designed and carried out at Boots the Chemist. As part of the workshop, multidisciplinary teams from industry and academia engaged creatively with the

¹⁴ The division of hair along ethnic lines into Afro/American, Middle Eastern, Oriental and Asian hair (Kingsley 2003: 8) is mainly used by trichologists to mark the "distinct" variation in the material properties hair possess. This division is sometimes used in market research studies in particular the division between Afro/American hair and other ethnic hair types, but is not a categorisation used by social scientists. The decision to use 'Caucasian' hair as sample criteria for this study was considered for a long period, and not made until later in the study after conducting interviews with women of various ethnic backgrounds. The interviews provided insights that the practice of hair care varied between 'ethnic' hair types in relation to the hair care products and tools used, how hair was dealt with and various other aspects of the practice. Therefore, in order to work with a small sample in-depth, the study mainly concentrated on women with 'Caucasian' hair. Still, three interviews with women that had other ethnic hair types were part of the analysis of the research, as they informed the examination of women's hair care routines with 'Caucasian' hair.

¹⁵ The consumer insight manager makes use of analytics and research to examine customer insights and conduct commercial market research to validate and develop, for example, new product developments.

data that was gathered in women's homes. This allowed for a deeper reflection on what a practice-orientated approach could bring to sustainable design debates.

The starting point of the empirical research has been women's hair care routines at home and not decision-making processes at the point of sale. Performances relating to the hair and the use of products and tools are implicated in the issues of environmental sustainability, as resources are consumed. The amount and type of resources consumed often depend on ways of doing things with hair and how often it is done. Recent work by the Carbon Trust¹⁶ and L.E.K. Consulting¹⁷ (2006) on the carbon footprint of shampoo for Boots the Chemist shows the connections between the practice of hair care and resource consumption in the product use stage:

- The carbon footprint for shampoo formulations is dominated by the use stage, accounting for 93% of the total energy consumption and 93% of the total CO₂ in the product lifecycle.
- Each 250ml bottle of shampoo results in use of an average of 218l of water heated to 38°C.

In summary, what makes this research distinctive is that it proposes an explorative and context based approach to sustainable design and sustainable consumption that is grounded in the study of the dynamics of everyday life. The examination sets the 'environment' aside by emphasising the exploration of everyday practices, using practice theory as a starting point in order to re-configure what people consider as 'normal' ways of life (Shove 2004) and more sustainable practices, especially concentrating on resource consumption and opportunities for design. The following research question emerges, considering the current shortcomings of sustainability approaches:

In the context of arguable shortcomings in current sustainable design and sustainable consumption approaches, what potential exists in applying an explorative, practice-orientated approach to everyday activities as the basis for design that may change practices?

¹⁶ The Carbon Trust is a not-for-profit organisation with the aim to move business and the public sector to a low carbon economy. The company provides support to cut carbon emission, commercialise low carbon technologies and save energy.

¹⁷ L.E.K is a global strategy consulting firm that supports companies with strategic issues and business problems.

Although the research looks at the dynamics of change in the practice of hair care, investigating design interventions that transform practice into less resource intensive routines is beyond this research project. Resolving problems is not the main objective but to inform existing sustainable design and sustainable consumption debates. The research represents a starting point in any process that attempts to bring about change, including design. It develops new knowledge and understanding of the ways women's hair care routines develop and play a part in how, and how often, they deal with their hair but needs to be built upon in order to develop design interventions that work and become part of everyday life.

Summary of content

To identify and reflect on the deficiencies of current sustainable design and sustainable consumption strategies and introduce a practice-orientated approach, the first chapter explicates the research question in more depth to contextualise the examination of the practice of hair care. It considers the cross-disciplinary literature on sustainable consumption and sustainable design and particularly the writing of Shove to identify and delineate some of the deficiencies of current strategies that address the use phase of products and attempt to change people's behaviours and attitudes, particularly when trying to address a wider audience. The literature on practice theory, consumption theories, design and material culture is examined to delineate a practice-orientated approach taken in this study and relate it throughout the thesis to sustainability, design and the analysis of the empirical work on women's hair care routines.

The second chapter describes the methodological orientations that underpin the research, as well as the methods employed. In order to gain an in-depth understanding of the practice of hair and to reflect on the practice-orientated approach, the research in women's homes was grounded within an ethnographic methodology. This methodology also included in-depth interviews with hair care 'experts' and a creative workshop at Boots the Chemist. The chapter outlines the pilot study to reflect on the methods and present some of the methodological challenges that evolved from studying some of women's more intimate

activities of hair care. The first part of chapter 2 discusses the design researcher's potentially conflicting role as a researcher and designer. The interdisciplinary approach to the study raised questions concerning the capacity of a designer to utilise social science methods and the interrelationship between the empirical research and the role of design in the study that needed to be addressed.

Chapters 3 to 8 are primarily based upon the work carried out in women's homes, whilst also considering the interviews with hair care 'experts' and the creative workshop at Boots the Chemist. The structure of chapters 3 to 8 is grounded in an analysis of the work conducted on women's hair care routines and was not determined by the practice-orientated approach. As Reckwitz (2002: 257) has argued, "social theories [such as practice theory] are vocabularies necessarily underdetermined by empirical 'facts'". Practice theory aided the examination of a practice-orientated approach to hair care routines in order to reflect on the potential remedies to the deficiencies of current sustainable design strategies. It therefore provided a way of looking at everyday routines. Nevertheless, how the interrelationships of the elements of the practice are played out in everyday life, and whether they are relevant for the performance of the practice, had to emerge from the data. For example, the identification of themes to analyse the interviews arrived from the research data inductively, as the theoretical outlines of practice theory did not provide a pre-defined index to analyse the data.

Before considering the practice of hair care in the context of what women do with their hair and how they wear it, chapter 3 reflects on Boots the Chemist's approach to sustainable design and sustainable consumption by outlining the company's product development process and reflecting on the research project's creative workshop. This examination substantiates the deficiencies outlined in chapter 1 and therefore empirically verifies them. The chapter demonstrates the interrelationship between the production of hair care products and their consumption at home, but it also highlights that the practice of hair care evolves when women wear their hair and deal with it at home, which is examined in more detail in the following chapters. Chapters 4 and 5 consider the wearing of hair on two levels, its interrelationship with the performance of hair care routines and the multi-relational elements that are integrated in the hair care practice, such as bodily and mental activities.

Chapter 4 examines the wearing of hair as an embodied experience and is therefore able to investigate the factors involved in women's hair care routines that play a part in determining how often they do things with their hair and the impact on resource use. The examination points to the practice's material, sensual and emotional dimension. It focuses on how women become aware of themselves and their hair through its presence as a 'non-body', underlining the way women move through the cycles of dealing with their hair and wearing it.¹⁸ Chapter 5 builds on chapter 4 through examining how women's hair care routines correlate with its various 'states' such as 'greasy' and 'frizzy'. The interconnected 'states' of hair generate several standards that women intend to meet with their actions and their utilisation of hair care products and tools. The chapter looks at some of the knowledge and understanding that exists in the practice of hair care of what women should do with their hair, how they should wear it and what they consider as being acceptable hair.

Chapters 6 and 7 move the examination of the practice of hair care into the home. Chapter 6 considers the practice with its products and the body via their trajectories through domestic spaces. An investigation into the spatial arrangements of hair care products and tools in the home draws attention to the numerous features of the practice that reinforce current hair care routines and uncovers the interconnectedness between past, current and future routines. As such, the chapter examines how the spatial arrangements of products and tools impact on the practice of hair care. Chapter 7 draws attention to the processes and practicalities of how women deal with their hair at home, including the various bodily and mental activities and material interactions with hair care products and tools involved and, in particular, the interrelationship of the competences, knowledge and understandings needed to do hair. The examination of the process also points to potential 'ruptures' to women's hair care routines that potentially can bring about change and in the process impact on resource use. The chapter investigates how women deal with them and their overall effect on the practice.

¹⁸ The things women do to deal with their hair take place in recurring cycles – such as the sequence of shampooing it, conditioning it, styling it and 'wearing' it. The interrelationship between sensually experiencing the hair, habitual cycles of dealing with it, and the various social situations for which women do their hair, give these cycles a rhythm. Sometimes sequences of actions have a daily cycle and others twice a day. These cycles and their rhythm determine how, and how often, women deal with their hair.

Chapter 8 contextualises the practice of hair care in terms of social relations such as interactions with the hairdresser, familial and friendship relationships. Following Halkier (200) and Christensen and Ropke (2005), a practice-orientated approach seems to deny the significance of social interactions. Therefore, the chapter investigates their influence on women's hair care routines, as they might have to be adjusted and negotiated through the exchange of knowledge, products and comments on the hair. Discussed here are the relationship dynamics that become apparent through women's hair and hair care routines, raising issues of 'risk' and 'trust' involved in those routines and relationships. The final chapter brings together the overall findings of the thesis, examine the scope of the study and make suggestions for further work. It examines whether a practice-orientated approach could offer an alternative strategy to developing sustainable change that remedies the identified deficiencies of current approaches. This consideration in particular focuses upon how an understanding of the practice of hair care through a practice-orientated approach is able to identify factors that stabilise and destabilise practices and therefore reinforce current routines but also potentially can bring about change. The identification of these factors reveals future work that needs to be conducted in the area of sustainable design that makes use of practice-orientated approaches but also provide starting points for the health and beauty industry to develop design interventions that potentially change everyday hair care routines.

Chapter 1 Literature review

Introduction

Sustainable strategies have been explored within a variety of disciplines, including design, in trying to develop a more sustainable world. This chapter brings together the literature that relates to sustainable design (Fletcher 2008; Chapman and Gant 2007; Walker 2006; Manzini and Jegou 2003), sustainable consumption (Jackson 2005; Darnton 2008; Shove 2004) and consumption theories (Miller 1987; Shove and Warde 1998; Groncow and Warde 2001) to discuss some of the deficiencies of current approaches to sustainable consumption and sustainable design. In particular, this includes design that is concerned with the use phase of the product lifecycle and sustainable consumption research that addresses the change of people's behaviours and attitudes. The limited amount of design research focused on consumption (Lilley 2007) and the interdisciplinary nature of the subject area prompted a broad literature review. In addition to the literature on sustainable design and consumption theories it included literature on material culture (Miller 2005; Dant 2005), hair related research (McCracken 1997; Cox 1999; Biddle-Perry and Cheang 2008) and practice theory (Reckwitz 2002; Schatzki 1996; 2002). This review aided not only the process of identifying the deficiencies of current strategies but of outlining a practice-orientated approach.

Some of the limitations of current sustainable consumption approaches are delineated in Shove's (2004) paper, 'Changing human behaviour and lifestyles: a challenge to sustainable consumption'. This paper represents a key starting point of this research. Shove has built her critiques of current approaches on two characterisations of the role of people in the sustainability debate, 'consumers as decision-makers' and 'consumers as citizens' (2004: 112). This chapter uses these characterisations as framework to explore the deficiencies of current approaches. In addition, it builds on Shove's identification by extending the critique to sustainable design strategies and to recent sustainable consumption approaches that have developed more sophisticated behaviour models.

Throughout the chapter, and reflecting on the deficiencies of current strategies, an alternative approach is put forward, one that uses practices as a starting point. The chapter

develops connections between design and practice theory in order to propose potential opportunities for using an explorative and practice-orientated approach. Further, situating the research within the context of the everyday, the chapter looks at the approach in relation to ‘what women do with their hair’ and ‘how they wear it’. It is argued that this approach is pertinent to understanding the changes in the practice of hair care, including its materialisation and spatialisation. The dynamics of everyday practices are affected by the multi-relational elements such as competences, emotions, understandings and temporal organisations that come together in their performance. Research surrounding sustainable consumption and sustainable design has mainly concentrated on everyday activities such as transport, food, lighting, heating and laundering and not on the practice of hair care because of their greater environmental impact. However, the significant impact of the practice of hair care on resource consumption in the use phase, including its importance for Boots the Chemist, transpires when considering the lifecycles of some of the products involved in the practice of hair care.

Sustainable consumption and sustainable design

Victor Papanek, William Morris and Buckminster Fuller were among the first designers to consider the social and environmental implication of their work. Since then a wide range of design approaches labeled ‘green design’, ‘eco-design’, ‘sustainable design’ and various other terms have developed. Distinctions between these approaches represent differences “on issues of scale, ease of implementation, potential environmental benefits, and the focus of design activity” (Fletcher and Goggin 2001: 15). Nevertheless, recent approaches have mainly concentrated on the principle of efficiency (doing more with less). The emphasis is on improving the environmental profile of products and processes, such as design for disassembly, recycling and dematerialisation. Recent works commissioned by the MTP¹⁹/DEFRA have been successful in applying the principle of efficiency to the design of products that have an impact on the use phase. For example, Kemna et al (2007) conducted a study that examined the ‘Eco-design of water heaters’ in the use phase of products, as part of an overall attempt to adopt the ‘EU directive on Eco-design of Energy-using products’ (EuP).

¹⁹ Department for Environment, Food and Rural Affairs’ (Defra) Market Transformation Programme (MTP)

Although research into the efficiency of products has been widely conducted, the design community has recognised that this strategy should not be the only focus of sustainable design (Sherwin and Bhamra 1998). Efficiency approaches are mainly developed in response to legislation. They concentrate on technical innovations that try to reduce the environmental impacts of manufacturing, disposal and, more recently, the use phase, but still they often disregard the resulting interplay between people and products (Jelsma 1999) in everyday life when products are used. This interplay sometimes diminishes product efficiency improvements – an issue this research project tries to address. The emphasis of sustainable design on post-purchase and the lack of design research in the area (Lilley 2007) highlights the opportunities associated with linking such design explorations to research into sustainable consumption that is sometimes concerned with people's everyday behaviours. The interconnectedness between disciplines such as sociology, anthropology, economics and design becomes apparent when reviewing sustainable consumption and sustainable design discourses that are discussed throughout the chapter.

The term 'sustainable consumption' originated essentially from a policy document, Agenda 21, that derived from the Rio Earth Summit in 1992. For the first time the emphasis shifted from concentrating exclusively on the production process to encouraging all countries to take action in achieving sustainable consumption. One of the chapters in Agenda 21 is titled 'Changing Consumption Patterns', supporting "new concepts of wealth and prosperity which allow higher standards of living through changed lifestyles and are less dependent on the Earth's finite resources" (Jackson and Michaelis 2003: 13). The agenda addressed all social actors, from government, business to individuals, to adopt more sustainable ways of living. Nowadays, the UK government regards sustainable consumption as a key policy issue. Frameworks of programmes have been set out in the sustainable development strategy document 'Securing the Future' (HM Government 2005) that includes a section on sustainable consumption. The document builds on an earlier report on sustainable consumption, 'Changing Patterns' (Defra and DTI 2003).

In the past, governments, businesses and non-governmental organisations (NGOs) have struggled to agree upon a single definition of sustainable consumption and its

implementation (Heiskanen and Pantzar 1997; Jackson 2006). A variety of definitions exist that reflect multiple points of debate, including the identification of the boundaries between sustainable production and sustainable consumption and the extent to which individuals need to change their consumption patterns and behaviours. Nevertheless, all positions emphasise the active role and engagement of people (Hobson 2002; Jackson 2006), through consuming more efficiently and responsibly, such as buying more sustainable products, or simply by consuming less resources and products (Jackson 2006).

Current efforts from government and business have mainly concentrated on changing behaviours and attitudes towards sustainable consumption, focusing attention on potential barriers, informational incentives, economic instruments and social reinforcements (Heiskanen and Pantzar 1997; Barr 2003). Strategies have often focused on barriers to purchasing sustainable products and services, trying to aid the process of people to make sustainable choices rather than on more sustainable ways of living and product use (Lilley 2007). Over the years, such approaches, and in particular educational campaigns have not led to sustained changes in people's practices (Barr 2003; Arroy et al 2005; Burgess et al 1998) in many areas of everyday life. They were unsuccessful in creating radical changes within the mainstream. Indeed, despite of years of adverts informing people about adopting more environmentally conscious behaviours, energy is consumed during daily activities more than ever (Siegle 2006). The limitations of current strategies become particularly apparent when considering everyday life at home, work and during leisure activities.

Current sustainable consumption approaches and the active role of individuals

Some of the deficiencies of current sustainable consumption approaches are identified in Shove's (2004) paper, a critique this chapter develops in more depth. Shove identifies three ways in which people as agents have been positioned in the sustainability debate in her discussion of "the conditions under which sustainable forms of consumption are expected to arise" (Shove 2004: 119). Each of these positions is based on varying "conceptualisation of behaviour, lifestyle and consumption" (Shove 2004: 111), implying different possibilities for interventions to achieve sustainable consumption. The characterisations provide a framework for the critique of current approaches.

The first position, 'consumers as decision-makers', assumes that individuals rationally respond to certain conditions and that manipulating these conditions will bring about changes in behaviour. The second, 'consumers as citizens', assumes that change can happen through value-driven 'bottom-up' initiatives initiated by groups and individuals. People are regarded as instigator of change, rather than as barriers. The first and second characterisations support the idea that lifestyles are 'chosen' and consumption is an expression of individual preference. Therefore, strategies for change often rely either on information provided to link rational choice with sustainable behaviours, or on ecologically motivated individuals to change their consumption patterns.

Shove (2004) distinguishes these widely recognised positions with a third that encourages a shift of understanding of people as agents in the sustainability debate to 'consumers as practitioners'. It focuses on everyday life, in particular routines and what people take to be 'normal' ways of life that are embedded in socio-technical systems (Shove 2004; Quitzau and Ropke 2008). People 'carry' practices, in other words practices exist through people's routinised bodily and mental activities, their understanding and know-how. Consumption processes are influenced by the way practices are organised and performed as part of a moment that reproduces everyday life, rather than purely by individual choice or their own personal values (Warde 2005). It is by considering what people take to be 'normal' ways of life, including wider socio-technical systems, that change can occur on a broader scale and, therefore, Shove advocates the third characterisation when discussing new approaches to sustainable consumption. With this in mind, this research tries to examine sustainable design using a practice-orientated approach in order to discuss potential remedies to the deficiencies within approaches to current sustainable consumption.

Considering the first position in more depth, Shove (2004) argues 'consumers as decision-makers' are often regarded as autonomous individuals who make rational choices. Jackson has pointed out that there are shortcomings of sustainable consumption approaches that apply the rational choice model, as "there are cognitive limitations on our ability to take deliberate action" (2005: vii). This way of positioning people and emphasising the agency of the individual is evident in educational interventions, for example, the former campaign

'Are you doing your bit?' (DEMOS/ Green Alliance 2003). It used a variety of media outputs to circulate environmental information, such as switching off lights to save energy. People were encouraged to engage with environmental effects of their behaviours and potential savings they could make if they changed. Steps towards behaviour change were provided, including essential sources of information (Barr 2003).

Such campaigns often presume that change towards sustainable consumption is mainly a matter of individual behaviours and attitudes as well as resultant choices people make. Although there might sometimes be a link between people's attitudes towards the environment, their behaviours and the decisions they make, sustainable consumption strategies seem merely to focus on the 'micro-level', on the individual consumer (Burgess et al 2003). It is argued that individuals can 'choose' their lifestyles and therefore, if they are committed to the environment, they will automatically change their behaviours. People need to be made aware, persuaded and motivated one-by-one to adopt more sustainable behaviours. They respond either to education and information or to positive incentives. If these strategies do not have the desired effect, penalties can be enforced to prohibit certain unsustainable behaviour (i.e. 'carrot and stick strategies').

Shove (2009b) regards such research agendas and approaches as 'self-fulfilling', as they often start by identifying incentives for behaviour change and people's positive attitudes towards the environment, and if they do not succeed in bringing about change certain barriers are assumed. Similarly, if choices towards more sustainable consumption do not take root, people's habits must be the cause. Strategies are implemented to lift barriers that hinder sustainable behaviours in order to create a link between beliefs and actions. Some of the barriers to behaviour change have been associated with people experiencing competing values of achieving either a 'good life' or a more sustainable world (Edahiro 2004). Even when lifting barriers, it has been recognised that the relationship between behaviour and attitude is in some instances close to non-existent, the so-called 'value action gap' (Darnton 2008). What people say or believe does not always correspond to their everyday actions.

Sometimes, the scarcity of information is regarded as a hindrance to people changing their behaviours. A number of research studies have actually confirmed that people, at times, lack

knowledge and understanding in relation to environmental effects of their own behaviours (see Birtwistle and Moore's (2007) study in relation to clothing), in particular when considering the sometimes hidden environmental effects of consuming resources. Overall, academics, policy makers and businesses have realised that the provision of information and other strategies based on the assumption that individuals can choose their lifestyle have only achieved limited success (UNEP 2003; Barr 2003; Jackson 2005; Darnton 2008). What is considered as 'normal' ways of life is not only driven by people's rational choices but moreover, through habits, social norms, systems of provision and the practices in which people participate, something a practice-orientated approach considers (Shove 2004; McMeekin and Southerton 2007; Southerton et al 2007; Munneke 2007).

Not all approaches towards sustainable consumption are founded on the assumption that change occurs through the provision of information, incentives or penalties. When positioning 'consumer as citizens' Shove (2004) refers to the work of Spaargaren and van Vliet (2000) on ecological modernisation. Instead of motivating people to behave in more sustainable ways, ecological modernisation and eco-efficiency models (Schmidheiny and Zorraquin 1998) advocate innovative technological and economic advances that allow current standards of living to continue by using fewer resources. Ways of life are not challenged but different means are found to sustain what is considered 'normal'. People instigate pro-environmental change to their lives instead of having to be persuaded, as they create 'bottom-up' environmental innovations. People are involved in establishing consumption and production cycles that build on alternative ways of providing resources that are often based on more localised systems such as wind turbines.

Although researchers who are concerned with ecological modernisation recognise some of the shortcomings of the attitude-behaviour tradition and that the achievement of lifestyles are not completely based on individual choice, Shove (2004) has identified some limitations to the approach. It still heavily relies on people's agency and willingness to participate in 'bottom-up' initiatives to bring about change. Moreover, environmental gains created by innovative technologies and products that increase resource productivity and efficiency, such as energy efficient light bulbs or washing machines, are frequently reversed through an expanding growth in the consumption of products and resources (Sanne 2002). Indeed,

frequently product efficiency improvements are overshadowed by a general increase of consumption (Cooper 2000).

Shove (2004) has summarised the limitations of both characterisations that try to facilitate more sustainable behaviours as being grounded in the need for individuals to internalise environmental concerns, making them more observable and noticeable in order to bring about change. Both characterisations assume that “lifestyles can be ‘changed’ by force of political, moral and environmental commitment, or through economic and other forms of persuasion” (Shove 2004: 119). Some of these strategies might be successful for reaching a small group of people but, when trying to access a wider audience, they seem to overlook the dynamics and co-dependencies of everyday ordinary life. These approaches emphasise accounting for resource consumption without considering that in everyday life people do not consume resources such as water and electricity but use and live with appliances, tools and products that make lighting, bathing and cooking and certain experiences possible. People consume ‘cultural energy and water services’ (Wilhite et al 1996). Moreover, Shove (2004) turns to Redclift (1996) when arguing that these approaches rarely question “normal and acceptable standards” (2004: 117) and “social and cultural representations of the good life” (2004: 118). They mainly deal with issues surrounding efficiency (i.e. doing more whilst using less resources), avoiding discussions about ways of life that rely on current resource levels to achieve accepted levels of comfort, mobility and cleanliness (Shove 2004). These strategies do not examine the various contexts and practices where consumption occurs (Burgess et al 2003).

More complex behaviour models

Some of the limitations of the above-described approaches have started to be more widely acknowledged in academia and industry and with policy makers and designers. More complex behaviour models and behaviour change models based on social-psychological theories have begun to emerge (see Darnton (2008) and Jackson (2005) for a detailed review). Frequently, they emphasise the need for a holistic understanding of people’s actions, motivations and behaviours and engage either with changing behaviours of the individual or societal levels of change.

Whilst it is argued that the implementation of these models may well provide more fruitful alternatives when thinking about holistic approaches to sustainable consumption and sustainable design, they still have some shortcomings. Darnton (2008) has outlined one of those limitations. He has recognised that these models are difficult to translate into interventions for change, as they are simplified versions of what happens in everyday life. Even Jackson (2005: 6) has acknowledged that the literature on behaviour models “borders on the unmanageable”, as it comprises over sixty models. Therefore, it might be challenging to identify which models might be most beneficial for change and in relation to various everyday contexts. Darnton (2008) and Jackson (2005) stress the need for empirical studies to develop such behaviour models in relation to various phenomena in everyday life.

A lot of the models are still based on trying to create connections between decision-making behaviour and environmental attitudes in order to gain greater acceptance of sustainable products and services. For example, Hirschl et al (2002) examine the adoption of new product use patterns that when taken up by individuals prolong and intensify the use of products. To evaluate the likelihood of individuals to engage with the alternative use patterns, they applied various factors, such as demographics, attitudes and values and time management, to develop various user profiles. Overall, most of the models discussed by Jackson (2005) and Darnton (2008) are based on psychological models of decision-making, such as ‘Needs-opportunity-ability’ models and the ‘Attitude-Behaviour’ model. Shove (2004), Spaargaren and van Vliet (2000) and Heijs (2006) have argued that more focus needs to be placed on habits and socio-technical arrangements of practices, rather than on emphasising research that evaluates the acceptance of products and services and considers individual behaviours.

In addition to reviewing numerous behaviour models, Darnton (2008) and Jackson (2005) consider possible strategies, including key areas for behaviour change. They focus upon participatory problem solving, social learning and community based social marketing as a potential way forward for more holistic approaches²⁰, particularly when identifying and

²⁰ More holistic approaches do not merely rely on decision-making processes that might change people’s behaviours but also start to consider that behaviours are deeply embedded in institutional and social contexts.

addressing particular target groups²¹. Research into these approaches and their achievements are still scarce but various NGOs have started to apply them. For example, social marketing approaches²² (Peattie 1999; McKenzie-Mohr and Smith 1999) are grounded in more sophisticated behaviour models, employing theories of consumption developed by anthropologists and sociologists. In addition to concentrating on raising environmental awareness, these approaches investigate how to work with social norms and appropriate social learning tools.

The UK campaign 'Action at Home' is a social marketing campaign organised by the Global Action Plan²³. It aims to provide practical actions by developing eco-teams, including six to eight households that commit to monitoring their consumption patterns. Each household receives a four-month plan that introduces them to an 'efficiency-focused rationalisation discourse' in order to change their lifestyles. The plan covers waste, water, transport, shopping and energy. Although the approach is overall more holistic than educational campaigns, the main emphasis remains on the individual and often disregards the complex dynamics of everyday life (Burgess et al 2003). Hobson's (2002) analysis of the effects of this campaign implies that participants often felt they had no power and were offended at the suggestion that they should consume less. The campaign had little impact on lay people and therefore Hobson (2002: 95) concludes that the, "rationalisation of lifestyles makes little (common) sense". Similarly, the UK government's 4E's approach (DEFRA 2008) – Exemplify, Enable, Encourage and Engage - is built on more sophisticated behaviour models and provides strategies of how people will change their behaviours. It builds on social marketing strategies, developing a link between environmental behaviour and demographics to address groups of people in a more tailored and direct way (Sustainable Consumption Roundtable 2006). Although the strategy recognises that more needs to happen than persuading people to change their behaviour, it still has the tendency to

²¹ Particular target groups for social marketing campaigns can be based on Defra's Environmental Segmentation Model (2008) that divides the population into seven categories related to their environmental behaviour: Positive Greens, Waste Watchers, Concerned Consumers, Sideline Supporters, Cautious Participants, Stalled Starters and Honestly Disengaged. This segmentation makes it possible to direct tailored environmental behaviour changes to specific groups.

²² Social marketing is an approach that uses marketing tools in combination with other theories, concepts and techniques to realise numerous social goods, for example, sustainable behaviour change.

²³ Global Action Plan is an environmental charity that focuses on sustainable behaviour change. The charity provides households, communities and workplaces with ideas for small practical actions on how to change their behaviour to pursue a more sustainable lifestyle.

concentrate on individual behaviour and, in particular, on learning how to act in more sustainable ways. These strategies do not allow for debates or address ways of life.

The move towards more complex behaviour models should be welcomed. Models that simplify the complex nature of everyday life might aid the process of developing more holistic strategies for change when applied by policy makers. Models of consumer behaviour and of behaviour change provide policy makers with a schematic description of behaviour, including fixed elements and their established interrelationship, such as the relationship between values and behaviours, to develop an understanding of what motivates certain behaviours. In contrast, an approach based on practice theory provides a way of looking at everyday life, a ‘vocabulary’ (Reckwitz 2002) to explore its complexities rather than a model that describes it. The use of practice theory rather than behaviour models when thinking about the potential for design to change practices might be considered as more appropriate, because practice theory builds on the designer’s ability to engage with complex issues and systems and to discover new relationships between, for example, people and objects (Buchanan 1995). Practice theory can provide designers with a way of thinking about the design context in a new light, developing more meaningful questions and enquiries into changes for sustainable consumption. This process can be regarded as a “conceptual repositioning” of the design context (Wright et al 2006: 9). This way of viewing the use of theories from other disciplines in the design process will be discussed in more depth in the methodology chapter (chapter 2).

An introduction to practice theory – a way of viewing everyday life

Practice theory encourages a shift of understanding people as agents in the sustainable consumption debate - people are regarded as ‘practitioners’ - the third way of characterising the role of people, as argued by Shove (2004). The emphasis changes from the role of individuals and their behaviours in product use to exploring “social practices ordered across space and time” (Giddens 1984: 2), a more systemic approach to sustainability, design and consumption. Studies of everyday practices recognise the interplay between collective behavioural norms (‘structure’), as individuals are constrained and influenced by larger systems through regulations and social processes and individual actions (‘agency’) through

aspects such as habits and attitudes. Practice theory therefore reconnects macro level patterns with micro level activities. Consumption is not only a reflection of individual preferences but perceived to be a result of engaging in practices in everyday life.

To date, there is no accepted and agreed version of practice theory, particularly regarding its definition, concepts and elements (Ropke and Christensen 2005). Practice theory is a collection of theoretical elements rather than a coherent theory (Warde 2005). These elements are based on the works of philosophers such as Bourdieu, Giddens, Garfinkel, Heidegger's early work and later work of Wittgenstein (Reckwitz 2002). Practice theory particularly builds on Giddens' 'structuration theory' wherein people and social systems cannot be regarded as separate from each other, as they affect each other. It is further influenced by Bourdieu's concept of 'habitus'. The concept is concerned with the patterning of social life that emerges out of the behaviours of many individuals, establishing through their shared understanding what actions are considered as acceptable. Although varieties of influences are clearly apparent, most of the writings have emphasised routines, objects and competences as being essential parts of practices and their exploration in everyday life (Shove and Pantzar 2005). The regularity of the reproduction of mundane activities in everyday life is acknowledged to play a major part in creating standards of what is considered as 'normal' in society.

Conceptual works by Reckwitz (2002) and Schatzki (1996; 2002) have started to position practice theory in relation to theoretical explanations of 'actions' and 'social order' in sociology, against more classical models – 'homo economicus' and 'homo sociologicus'. The actions of the former are established by "individual purpose, intention and interest" (Reckwitz 2002: 245). Social order develops as a collection of individual choices and, as such, has been criticised because of its tendency to underemphasise irrational behaviour and overemphasise individual's cognitive capacity to process a variety of options. Actions, in the model of 'homo sociologicus', are grounded in collective conventions and rules. Reckwitz (2002) has suggested that the theory of practice overcomes some the limitations of these models. Practices such as cooking, laundering and bathing are sustained not merely by norms or rational choices but by routines. People are not considered as merely self-directed and rational nor "judgmental dopes who conform to norms" but are "practitioners"

(Reckwitz 2002: 256). They are agents, who contribute to the changing consumption patterns. Practice theory is a form of theory of culture²⁴, which understands social order and individual behaviour as interdependent. The theory of practice offers a view of human actions where cultural practice is the “site of the social”. Reckwitz (2002: 241) further distinguishes practice theory from other theories of culture that emphasise mental qualities, symbols and signs or interactions between people. For Reckwitz, a practice is,

“A routinised type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge.” (Reckwitz 2002: 251)²⁵

These elements come together in everyday life, as individuals integrate them into the performance of everyday routines and in the process reproduce a practice. In addition, they hold the practice together through shared competences, conventions and material resources as these elements exist over time (Shove and Pantzar 2007). A practice is a performance of a routine and at the same time a pattern of these performances. When concentrating on practices rather than people or things, change towards sustainability no longer relies on motivating or persuading individuals to change their behaviour but on the reconfiguration of everyday practices, including their performance and materialisation.

“The approach offers a distinctive perspective, attending less to individual choices and more to the collective development of modes of appropriate conduct in everyday life. The analytic focus shifts from the insatiable wants of the human animal to the instituted conventions of collective culture, from personal expression to social competence, from mildly constrained choice to disciplined participation. From this angle, the concept of ‘the consumer’... evaporates. Instead the key focal points become the organisation of the practice and the moments of consumption enjoined.” (Warde, 2005: 146)

Giddens (1984) draws attention to the routine performance of daily activities through his

²⁴ Four theoretical groups make up the school of cultural theory: ‘cultural mentalism’, ‘textualism’, ‘intersubjectivism’ and ‘practice theory’. The differences of these four groups are based on what they consider as the central unit of social enquiry. Textualism emphasises signs and symbols. Cultural mentalism focuses on the mind. Intersubjectivism concentrates on interactions between people, whereas practice theory focuses on social practices (Reckwitz 2002).

²⁵ The elements of a practice have been defined in different ways such as a more simplified version by Shove who divides the elements into ‘skills, stuff and image’. The research has used Reckwitz’s (2002) definition of a practice because of his attempt to position practice theory.

distinction between 'practical' and 'discursive' consciousness. The former relates to actions that are repeatedly performed consciously but not entirely rationally because they are familiar and deeply engrained in daily life. 'Discursive consciousness' is associated with people's ability to examine and evaluate their behaviours when they reflect on them. According to Warde (2005: 140), "performance in a familiar practice is often neither fully conscious nor reflective". The routine nature of a practice is explained through its repetitive reproduction but this does not mean that it cannot change over time (Warde 2005). The performances of practices in everyday life are essential to keeping practices alive but are also responsible for their transformation (Reckwitz 2002; Schatzki 1996; 2002). Concepts surrounding the 'decay' and 'innovation' of practices explain ways in which routines can continue and change over time (Shove et al 2007), though change does not necessarily require discursive consciousness, as the regular performance of practices can bring about change.

Cycles of enactment rely on the co-evolution of the elements of practices, as they are interconnected and must be aligned to reproduce routines in everyday life. A reconfiguration of these elements in everyday life may lead to practices changing because they are destabilised, as they are not only reproduced and sustained but change over time and space. Some of the elements can disappear, such as record players that are almost obsolete or interconnections between elements can be broken, such as women's belief that it is dangerous to wash their hair when they are menstruating. People create new combinations between new and existing elements. Transformations do not rely on the development of new things, ideas or skills but on the arrangement of the elements and their integration into everyday life – how they fit together (see Shove and Pantzar 2005 for a detailed review of how elements of a practice such as ideas of walking, social and physical skill and walking sticks link together to create and develop the practice of 'Nordic Walking'). New links can create transformations in practices but also the breaking of existing links such as the revival of bicycle commuting in the UK. These factors destabilise and restabilise practices, as they are reproduced over time but they can also cease to exist. The reconfiguration of practices can occur internally through experimentation, learning and improvisation (Warde 2005). The new existence of a practice can grow by 'recruiting' people to its performance (Shove and Pantzar 2007: 154). The practice develops in order to continue its existence.

Practices also exist beyond their performance and individual routines, as they are socially grounded in shared states of emotions, understandings, a network of things, norms, and embodied know-how. They can consist of various activities that are performed in daily life but can also be recognised as ‘coordinated entities’ – a pattern of various activities (Schatzki 1996; Warde 2005), both dynamics are at play within practices. Practices do not only change internally but also externally through technological innovations, economic situations and institutional arrangements. Further, experimentations and learning do not only occur individually but also collectively, as routines are refined and adapted and therefore connecting individual reproductions of practices with collective norms. “The patterning of social life is a consequence of the established understandings of what courses of action are not inappropriate” (Warde 2005: 140). Practices are not necessarily connected to a specific thing, place, time or person. A practice is,

“A type of behaving and understanding that appears at different locals and at different points of time and is carried out by different body/minds.” (Reckwitz 2002: 250)

The systems that emerge from practices as entities are often integrated in industrial, scientific, corporate, commercial, regulatory and infrastructural processes but also in the lives of everyday people, groups of friends and families. They consist of various actors with their own strategies, interests and expectations (Munnecke 2007) all influencing the development of practices and their elements. These strategies have the potential to lock people into specific technical, economic and social systems and everyday practices that rely on current unsustainable patterns of consumption.

According to Shove (2003), the examination of the elements of practices does not uncover the direction in which these practices might change, for example if they become less or more resource intensive. Despite this, it is possible to identify triggers that can bring about change. These triggers have an impact on the co-evolution of the elements and the practice as a whole. Examining the reproduction and transformation of the practice of laundering, including how it has changed, Shove (2003) not only follows the history of ideas associated with laundering or track the integration of individual objects, instead she also proposes an examination of the various “system of systems” (2003: 138). The ‘system of systems’ make-

up the whole practice in relation to ‘how the laundry is done (steps and stages, skills and expertise)’, ‘when to launder (cycles and flows)’, ‘why launder’, ‘what are the tools of laundering (devices, appliances and chemicals)’ and ‘what is there to launder’ (Shove 2003: 134). Together, these features develop an understanding of ‘what it means to do the laundry’, transpired from the elements of the practice involved (Shove 2003: 134). Each aspect outlined by one of the questions can stabilise and destabilise laundering and therefore their interaction can bring about changes in the practice as a whole.

The challenge for sustainable consumption and for this research is to develop an understanding of practices, including the interconnectedness of the various elements that make-up a practice, as they can rely on the consumption of more or less resource intensive ways of life. Moreover, it is essential to consider how practices comprise wider systems that influence the standardisation of what is considered ‘normal’ ways of life, including the relationship between everyday practices at home and systems of provision. The research study develops an understanding of the multi-relational elements of the practice of hair care in the context of what women do with their hair and how they wear it in order to reflect on a practice-orientated approach, in particular in relation to the role of design and its potential to change practices. In order to examine the potential directions in which practices might change, Shove (2003) advocates the examination of their lifecycles. Such an exploration requires a historical examination of practices alongside an investigation of their current reproduction in everyday life: how practices arise, persevere and disappear and the co-evolution of various elements involved. Although a historical examination of a practice might be essential when thinking about changing routines towards more sustainable ways of living, due to the limited timescale of this research and its orientation on design the main emphasis is on developing an understanding of the current practice instead of examining it over time. The research only occasionally looks into hair related activities that were conducted in the past.

This research builds on recent work that uses practice theory in empirical studies of the ‘sociology of consumption’, that sometimes reflect on issues concerning sustainability (Shove 2003, Southerton 2006, Christensen and Ropke 2005), design (Shove et al 2007; Julier 2007) and consumption (Warde 2005). Examples include explorations into the use of

iPods (Julier 2007) and ICT technologies (Christensen and Ropke 2005), the uptake of Nordic walking and leisure activities (Shove and Pantzar 2005), the emergence, development and disappearance of showering practices over time (Hand et al 2005), the temporal organisation of everyday life (Southerton 2006), and the trajectories of practices in relation to cooking (Halkier 2006). The application of practice theory to empirical studies has initiated an identification of the possible shortcomings of the theory.²⁶ In addition to the issues of defining the boundaries of practices and applying its elements in the examination of everyday routines, Warde (2005) and Christensen and Ropke (2005) have argued that there might be “an unlikely degree of shared understanding” (Warde 2005: 136) that is assumed in the philosophical portrayal of practice theory. Practices might be more diverse in everyday life. Christensen and Ropke (2005) go further by criticising that Reckwitz’s (2002) writings on practice theory partly disregard the effects of social interactions on the changes of practices. They argue that Reckwitz (2002) seems to imply that all practices are carried out by individuals in isolation from others. Consequently, they advocate that empirical studies should include the social interactions that are constitutive of practices. The possible shortcomings of practice theory are discussed in more depth in chapter 8, particularly in relation to the empirical findings from the examination of the practice of hair care.

In relation to design, the application of practice theory has been developed in a workshop series entitled ‘Designing and Consuming’, a project that is part of the ‘Cultures of Consumption’ programme²⁷ (Shove et al 2006; 2007). It explored the relationship between design activities and consumption theories to arrive at a new conceptual model for design that aids the process of creating innovations. The outcomes of the project are documented in a ‘Practice Orientated Product Design’ manifesto (Shove et al 2006). The project investigated competences in ‘Do it yourself’ (DIY) projects and its relationship to the other elements, the reproduction of the practice of photography after introducing digital cameras and the relations between ‘having and doing’ that impact on the realisation of practices in kitchen renewals. Overall, the research attempted to introduce an exploration of practices as an approach to designing that advances user-centred design (Shove et al 2007) and to

²⁶ Some of the methods applied in current studies that draw on practice theory are discussed in chapter 3.

²⁷ The Designing and Consuming project was part of the Culture of Consumption research programme funded by the Economic and Social Research Council and the Arts and Humanities Research Board. The programme aimed to study consumption in a global context, deepening the understanding of consumers and consumption to draw attention to economic, cultural and political implications for the future.

provide an understanding of possible assumptions and tendencies that come together when design decisions are made. In order to connect design with practices, Shove et al (2007) point out the need to not only reveal things as part of practices but also explore their role and therefore link practice theory with science and technology studies and studies of material culture.²⁸ This research combines and builds upon current work in relation to sustainable design. It does not try to develop practice theory but reflect on a practice-orientated approach to the examination of everyday life in relation to the role of design and its potential to change practices, a ‘practice-orientation’. The next section reflects on the deficiencies of current sustainable design approaches that can be identified when reflecting on the performance of practices in everyday life.

Current sustainable design approaches

Designers engaged in sustainable design have recognised the limits to some of the sustainable consumption approaches,

“It is hard to buy green, or be green, if the ways in which daily life is organised force you into un-green behaviour. Posters and ad campaigns that tell people to behave sustainably are a pointless diversion” (Thackara 2007: XVII).

Information campaigns, according to Thackara (2007), have only limited success, since sustainable change can only occur through integrating people into the process of change. For Thackara (2007), solutions for a sustainable world currently exist or have been present in the past. Therefore, the designer’s role is to gather and share these solutions and facilitate their development into the mainstream. Up to now, sustainable designers have proposed numerous solutions, as they stress the urgency in moving towards a sustainable world.

²⁸ Practice theory moves routines, practical knowledge, things, bodily movements and ideas to the centre of exploring social phenomena. Although practice theory explicitly mentions things as an important factor in the shaping of social phenomena, their role is still unclear (Shove et al 2007). A number of studies concerned with practice theory are still mainly concerned with the communicative role of things rather than with their pragmatic usefulness. Some research in the field of science and technology studies (STS), in particular Latour’s work, and in the field of material culture stress the active and pragmatic role of things in constructing social phenomena. Material culture studies examine physical objects used within groups of people as mediums to understand their culture and STS explore the relationship between technological innovations, scientific research and developments in society. In order to emphasise the active role of things, Shove et al (2007) advocate a development of practice theory that refers to STS and studies of material culture.

Solutions that are based on ‘doing more with less’ (i.e. water and energy efficiency approaches)²⁹ have been implemented. Nevertheless, they have been widely critiqued as being incremental and undermining the need for radical change (Richardson et al 2005; Walker 2006). Sustainable design solutions that try to go beyond incremental changes have started to emerge. Within these approaches the focus shifts from improving the product’s efficiency to design challenging consumption patterns and lifestyle aspirations (Richardson et al 2005). They are grounded in the development of product service systems and alternative product use patterns (Marchand 2004; Charter and Tischner 2001). Other approaches try to prolong the psychological durability of individual products through their design (Chapman 2005; van Hinte 1997) and to block unsustainable behaviour through the design of intelligent products³⁰ (Lilley et al 2005). Moreover, these solution-based strategies apply need-focused approaches to design (Fletcher and Goggin 2001) and work with ideas surrounding slow design (Fuad-Luke 2006) and slow consumption (Cooper 2005).

These approaches, on first sight, seem to be promising, as they move away from more incremental approaches, but currently they have not been able to progress into the mainstream. Similar to sustainable consumption approaches, they often rely on individuals to make sustainable choices or to become motivated citizens. The complex nature of consumption patterns in daily life is often not fully considered. For example, some approaches are based on ideas that people’s individual behaviour can be manipulated and controlled through single design solutions without considering that people interact with complexes of products to perform various activities in daily life. Others work with a static interpretation of ‘needs’ as a given factors for design to respond to and therefore hardly ever take into account that people’s needs are an outcome of dynamics systems that design regularly influences. As will be discussed in more detail below, some of the limitations surrounding sustainable consumption approaches can also be translated into proposed sustainable design solutions.

²⁹ Water and energy efficiency design solutions are, for example, based on design for disassembly, reverse manufacturing or recycling approaches, in addition to design strategies that consider the environmental impacts of materials or optimise resource consumption through alternative technologies.

³⁰ An example of an intelligent product would be a television that reduces its energy use in relation to the owner’s activities. The television could trace the owners movements based on the information gathered via ubiquitous communication with other devices in the home. If the owner was answering the phone, the TV decreases the volume and brightness for the lengths of the call (Lilley 2007).

Sustainable design solutions that still heavily rely on environmentally committed individuals adopting them in daily life are product service systems. These alternative product use patterns often try to reconfigure the organisation and distribution of products. Designers create provision systems in which products can be shared and rented. The use phase is intensified and fewer products need to be produced with potential environmental and social benefits. Although product service systems have the potential to challenge current ways of living, they heavily rely on environmentally committed individuals to take them into the mainstream. One of the major challenges to adopting product service systems is the cultural shift necessary for individuals to prefer sharing a product to owning it (UNEP 2001). Although car and bike sharing systems have started to emerge over the last years, a general shift towards a post-ownership society has not taken place.

Some solution-based approaches do not necessarily rely on people being motivated by their environmental commitment to participate in product service systems or buy more sustainable products. Instead of persuading people to take up sustainable services and products, these approaches rely on products to provide eco-feedback whilst using them so that people are informed about how many resources they use and therefore change their behaviours (Wever et al 2008). Two other approaches that do not rely on people's environmental commitment are strategies that either attempt to control behaviour through inscribing them within objects to make them more sustainable (Verbeek and Slob 2006), or encourage the development of intelligent products to reduce resource intensity without interfering with people's behaviour (Rodriguez and Boks 2005).

What role these product-based approaches will play in the future is still to be decided but as indicated by Lilley (2007) they provide only incremental starting points to addressing the issue of sustainability. Such single product-based design approaches often disregard the fact that products are not frequently used in isolation in daily life. Products, such as 'intelligent ones' are part of everyday practices and linked to larger patterns of social behaviour. People regularly adapt such products in ways not anticipated by the designer. The designer's intended use of the product is open to the resistance of the person using them (Shove et al 2007). People, for example, can misuse or overuse such products. Therefore, products that were meant to influence people's behaviours in such a way that they decrease resource

consumption could potentially increase it. Shove et al (2007) have argued that if designers make use of such approaches, they potentially try to control the uncontrollable. Currently, discussions of these approaches do not consider the changing patterns of people's behaviours over time and their impact on existing products that try to 'script' current behaviours.

In addition to falling short on similar limitations as some of the sustainable consumption approaches, most of the sustainable design strategies that consider the interactions between people and things are solution based. They concentrate on individual actors and products, rather than being explorative towards a particular everyday context. Frequently, solution-based approaches disregard the dynamics of everyday life, where products are part of everyday practices. Designers develop a design for sustainability strategy and try to apply it to an everyday context, instead of being more explorative and trying to understand practices in context before considering a design solution. The emphasis on design solutions somehow limits the innovation of new design concepts and ideas for sustainable consumption (Thorpe 2007). A practice-orientated approach moves beyond the examination of single products and individuals. This way of looking at the everyday might open-up the possibility for new opportunities – providing “ingredients rather than recipes” (Thorpe 2007: 4). The research tries to link practice theory to design in order to arrive at more explorative design strategies.

A practice-orientated approach does not involve a fundamental rejection of the approaches described above. These strategies for sustainable design are certainly valid and should not be disregarded. Concentrating on one approach that represents an absolute solution should probably be avoided (Chapman and Gant 2007), as sustainable change can occur on different levels and through a variety of triggers. Diversity is important (Fletcher 2008). A practice-orientated approach highlights the limitations and broadens the possibilities of existing approaches. Instead of working with a single product/person model, a practice-orientated approach draws attention to the exploration of existing practices of which individual products are part of complexes of objects. They all shape the practice, as they are interdependent of each other, providing a more systemic approach rather than being single product-based solutions.

Current sustainable design approaches are not only based on product-based solutions. Some of the strategies take a need focused approach or work with the idea of slow consumption (Cooper 2005), advocating that people would live a more fulfilled life if they would consume less, stressing the danger of materialism. Discussions on ways of living are often combined with questioning today's levels of consumption - why people consume and use large quantities of products and what they expect to gain from them. Although these approaches move away from relying mainly on product-based approaches, they similarly undermine the complexities of everyday life. Cultural theorists and sociologists have outlined some of the limitations of sustainability approaches that make use of need-focused discourses (as discussed in more depth below). Firstly, they disagree with the categorisation of human needs and secondly, they point out that these approaches often work with a static interpretation of 'needs' and therefore hardly ever take into account that needs are an outcome of dynamics systems.

A need-focused approach to sustainable design focuses on people – their choices, actions and expectations rather than on products, building on Maslow's (1954) and particularly Max-Neef's (1991) theory of human needs (Fletcher et al 2001). According to Max-Neef fundamental human needs are stable over time and space. Unlike Maslow, he avoids a hierarchical explanation of needs, as they vary from protection and substance to affection and creation. Although needs are assumed to be stable, ways of meeting them can potentially change through material and non-material satisfiers that have varying environmental implications. Currently, designers who advocate a need-focused approach to sustainable consumption believe that non-material needs are frequently met with 'pseudo' material satisfiers when considering today's consumption patterns (Jackson 2005). Needs have become insatiable and the desire for the new has seemingly reduced people's attachments to each other and estranged people from their own well being, with threatening influences on the environment (Scitovsky 1976; Illich 1977). Therefore, people need to engage in alternative lifestyles ('downshifting') to meet their unmet needs (as advocated for example by Marchand (2004) in relation to sustainable design).

Although the literature on environmental values and morals (Kalof and Satterfield 2005) is extensive and cannot be dismissed, cultural theorists and sociologists disagree with the

categorisation of human needs. The critique is expressed in Baudrillard's (1986: 24) statement, "the desire to moderate consumption or to establish a normalising of needs is naïve and absurd moralism". Miller (2006) agrees with Baudrillard (1986), as he affirms that considering consumption as something 'intrinsically evil' leads to a moral position that frequently inhibits empirical studies of actual consumption in everyday life. Material possessions cannot be regarded as being either good or bad. According to Miller,

"What worries me is that this bogey of a deluded, superficial person who has become a mere mannequin to commodity culture is always someone other than ourselves..." (Miller 2006: 224)

Miller (2006: 224) has suggested that consumption is often part of complex practices and grounded in numerous contradictions, as people "engage in a constant struggle to create relationships with things and with people". People try to counter and sometimes live with the antisocial potential of their possessions. Instead of regarding consumption as 'bad', Miller advocates conducting research into everyday life to explore the contradictions and complexities of consumption practices, through an ethnographic enquiry. These studies can potentially counteract research conducted in the light of moral stances, as they often fail to grasp the dynamics of daily life (Miller 2006). Using pseudo satisfier and human needs as a starting point to examine people's lives might provide researchers with analytical categories that do not represent everyday life and therefore do not aid the process of developing an understanding of its dynamics and opportunities for practices that rely on fewer resources than current ones.

An understanding of demand through the identification of human needs might potentially undermine the complexities of everyday life. Similarly, to the need-focused approach to consumption, market researchers concern themselves with the identification of 'needs'. It is a basic principle in which industry and design is grounded (Shove et al 2007). Market researchers and designers often do not question the origin of a 'need' but rather take it for granted and regard it as something that has to be met through an innovation.

"Most people in the west, including policy analysts, have developed habits of thought that emphasise individualism, personal freedom and consumer

sovereignty. The chief goal of society is assumed to be meeting human ‘needs’ and ‘preferences’ as efficiently as possible.” (Michaelis 2003: 931)

Although they do not question ways of satisfying human needs and debate current consumption patterns as proposed in some of the sustainable consumption literature, market researchers and sustainable consumption researchers seem to work with a ‘static’ interpretation of ‘need’ (such as Fletcher et al 2001; Jackson et al 2004; Fletcher 2008). A shared position is that the identification of needs is necessary in order for market researchers to develop innovative products that sell and for sustainable consumption researchers to consider how human needs can potentially be met through mainly non-material means. A practice-orientated approach assumes that needs and consumer demands are not static as they do not simply arise through individual desires but emerge from the reproduction of practices in everyday life. Consumption is not grounded in meeting individual needs or satisfying desires, as needs arise from performing practices (Shove et al 2007). Things are constitutive of practices and therefore implicated in developing new practices and “with them new patterns of demand” (2007: 10). Designers should not simply respond to consumer ‘needs’ but consider them as a construct that is malleable and that is influenced by product innovations.

This research project takes an empirical approach to investigating the everyday practice of hair care. It does not advocate strategies to consume less or consume more efficiently, rather it is an exploration into the organisation of everyday life and what people do when they consume. Focusing on practices brings to the fore ideas about what is considered ‘normal’, such as the changing nature of what it means to feel clean, as meanings that surround certain ‘needs’ are not static but change over time. For example, Shove’s (2003) study on laundering concludes that nowadays the washing of clothes is frequently associated with freshness and self-respect rather than with removing dirt to make items clean. The evolving ideas of what it is to wear clean clothes also impacted on the way clothes are washed. Clothes used to be boiled to remove germs whereas nowadays clothes are washed at lower temperatures. Even the frequency of washing clothes has changed from once a week to more frequent washes. The changing nature of meanings and needs have resulted in more or less sustainable practices over time, as they rely on different material forms. The value of a practice-orientated approach to design is therefore based on moving beyond the designer’s

aim to develop individual products and fulfil individual needs. Instead, designers start to explore and support practices in everyday life. Practice theory might provide a valuable approach to engage with the changing dynamics of everyday life and with what people consider ‘normal’ ways of living when examining the potential for design to change practices.

Practice theory and design

Practice theory adds detail and subtlety to the analysis of the changing patterns of everyday life. It may also provide a useful vocabulary for approaches that aim to change practices towards sustainability through design. Margolin (2002) points out that design research up until now has not constructed theories that consider things in relation to people in order to explore how people organise and live with the objects they surround themselves in everyday life. Although designers are empathetic towards people using their designs, as examined in concepts of ‘user-centred design’, ‘interaction design’ and ‘inclusive design’, consumption processes are frequently outside the realm of the investigation (Ingram et al 2007). People’s behaviours are largely examined to develop an understanding of how people respond to various product features to ‘enhance’ their overall design. Focusing on practices attempts to address the connectedness between design and consumption cycles, as people’s “practices stimulate design” and “new products stimulate new practices” (Ingram et al 2007: 3). Although the work of some sustainable designers consider the use phase of products, they do not necessarily engage with the connections between people and their objects in existing routines, ideas and performance of activities. A practice-orientated approach moves the sustainable design emphasis from developing new products and services to re-configuring practices. As Ingram et al (2007) have suggested, a practice-orientated approach brings together the sociological concepts concerned with consumption in everyday life such as ‘appropriation’ and ‘scripting’³¹ in a framework that analyses objects, people’s bodies, their minds, the knowledge they possess and understanding, the discourses they draw on and emotions they feel – elements that are all interconnected with one another.

³¹ Latour’s concept of ‘scripting’ refers to the scripts written into everyday objects, enabling and disabling certain actions. ‘Appropriation’ tries to understand how people embed objects into existing routines in everyday life.

“It is in the performance of practices that users and products come together, in complexes of skills, meanings, materialities and temporalities” (Shove et al 2006).

A practice-orientated approach to design goes beyond more commonly used product-centred and user-centred approaches. Although user-centred design considers the role of people and objects in the design process, they are often explored in isolation, as single users and individual objects rather than as networks and away from everyday life. Objects in practices are considered as networks that help to reproduce processes and practicalities of use in daily life. Instead of concentrating on individual objects, practices emphasise the complexes of things that come together in the performance and have agency – “agency not only of individual artefacts but of interrelated complexes of stuff” (Shove et al 2007: 3). It therefore goes beyond more common product-centred and user-centred approaches to design (Shove et al 2007). The emphasis shifts from examining individual people and individual objects, such as cars and their drivers, to practices and their performance (i.e. driving, getting petrol, building roads, etc.), including social structures at all scales.

Ingram et al (2007) have suggested that IDEO³² and Philips are still frontrunners when it comes to considering the interrelationship between products and people, as they do not use individual products as a starting point for designing but verbs such as cellphoning. In relation to sustainable design Julier (2007) has indicated that although sustainable designers Manzini and Jegou (2003) do not explicitly express that they examine practices such as taking children to school, they seem to have a practice-orientated approach to their work. Considering their focus on ways of living, it may be that their work comes close to a practice-orientated approach but they still heavily rely on the active involvement of ‘creative communities’ and individuals to instigate change. Although Manzini’s and Jegou’s work should not be underestimated, and can be considered as coming very close to a practice-orientated approach, practice theory tries to move the sustainability debate away from individual actors and their behaviours to the reconfiguration of practices.

Considering IDEO’s approach and Manzini’s work, a practice-orientated approach seems to be, on first sight, exciting and appropriate to design and sustainable design that is concerned

³² IDEO is a design and innovation consulting firm.

with the use phase of products. At this juncture, it is possible to summarise its appropriateness into three points. Firstly, practice theory seems to be one of the first social theories that regards subject-object (people and products) relations as significant as subject-subject relations, making it relevant for design. Warde (2005) and Reckwitz (2002) have suggested that objects have importance in that they make certain practices possible, echoing the work on the relationship between objects and people conducted by writers in science and technology studies such as Latour (1992).³³

“Social change is a change of complexes of social practices, it presupposes not only a transformation of cultural codes and the bodies/ minds of human subjects, but also a transformation of artefacts (a relationship which deserves closer study).” (Reckwitz 2002: 213)

According to Reckwitz, cultural mentalism, textualism and intersubjectivism³⁴ acknowledge that people are able to identify, translate, explain, interpret and understand objects, but they regularly dismiss that people use them in everyday life. In practice theory, objects are not only regarded as symbols but are used in motion as part of everyday practices. Bodily and mental activities can potentially be influenced through limitations and allowances of the materiality³⁵ of objects.

Secondly, rather than analysing the cultural significance of objects, their acquisition and ownership, practice theory focuses attention on the often ordinary processes and practicalities of use with regards to objects which play a significant part of reproducing daily life and potentially for sustainable design (Shove et al 2007, Warde 2005). Thirdly, the theory of practice combines an ability to account for both reproduction and innovation of

³³ Although studies that apply a practice-orientated approach often draw on actor-network theory and science and technology studies (for example Latour 1992) in order to emphasise the role of things, this research mainly examines the potential of applying practice theory to sustainable design. Actor network theory often addresses questions surrounding the outcome around things and their dispersion as innovations. These issues are important for this research but they only represent a small part of the overall examination into everyday routines. Practice theory provides a way of thinking about not only things but also everyday routines and their performance. The use of practice theory is therefore regarded as more beneficial for this research.

³⁴ A more detailed outline of theoretical groups that make up the school of cultural theory can be found on page 35.

³⁵ Materiality in the thesis refers to the active and constitutive role objects play in configuring everyday practices, as they are “pragmatically useful” (Shove et al 2007: 13) and have a material impact on daily life (Dant 2005). Objects are not only significant because people buy and acquire them but also because people interact with them, as they often make daily activities possible. In addition to objects’ pragmatic usefulness, materiality refers to the material interactions between people and objects (and in the thesis also the material interaction between hair and body). These interactions are frequently intimate and embodied, as they are shaped by people’s bodily sensations of sight, smell, taste, sound and touch – people experience and interact with the material world through their body (Dant 2005).

practices that may lead to a practice changing. These dynamics of change impact on the amount and type of resources that are consumed and therefore are relevant for sustainable design. Practices can change internally by improvisation and experimentation and externally through changes in institutional arrangements, economic situations and technological innovations (Christensen and Ropke 2005). This invokes the principle that Reckwitz identifies whereby practices change through the "'breaking' or 'shifting' of structures" through "everyday crises of routines". The understandings, procedures and objectives of practices vary in practitioners and change over time, as things and people co-evolve in the performance of practices through internal and external influences. Therefore, changes to routines might also due to developments in the design of things.

Potential of design to bring about change

Bhamra and Lofthouse (2007) and Dewberry (1996) have pointed out that sustainable design practitioners working in industry rarely receive the opportunity to address environmental and social issues in the design brief. The present limited role of designers, as opposed to engineers and marketers, can be regarded as frustrating (Dunne 1998), as industries do not draw on the full potential of design. Much of the sustainable design and sustainable consumption debate has been predominately carried out by academics rather than practitioners (Chapman and Gant 2007). Although strategies for change have been developed outside the commercial setting, discussions still stress the need to create links between academia and industry, including the various actors such as government, NGOs, business and designers.

The UK government has started to recognise the important role of design as a vehicle to bring about sustainable change (HM Government 2005). Research into sustainability has been criticised for being descriptive, mono-disciplinary, implementation-based and needing more explorative and multidisciplinary approaches. Design is based on these virtues because its very nature it is reflective, informed by other disciplines and pragmatic – making connections between people and practice (Heiskanen and Pantzar 1997; Fletcher et al 2001). According to Rust (2004), designers have always been interested in the implications of their design work on people's experiences, a role that has never been widely acknowledged. To

concentrate on the physical outcomes of design, including their form and visual identity clearly demonstrates to the world what designers do. Nevertheless, the role of design most importantly requires designers to develop an understanding between the relation of things and people in use (Rust 2004), including the dynamics of everyday life. Here, the role of designers is not just as a creator of things or their shaper and stylist but as an ‘advocate’ and facilitator for change, who recognise their social and ethical responsibility within a system of consumption and production (Papanek 1985). They contribute to the system as well as responding to it (Fisher et al 2008).

Rather than taking the traditional role of problem solvers (Julier 2007), designers can critique and comment on current ways of life (Dunne 1998, Walker 2006) and gather multidisciplinary teams to build scenarios for future living (Manzini and Jegou 2003). Designers potentially have a significant part to play in changing practices, as they actively create objects and systems that are constitutive and therefore to some extent define practices - of what people do, how they think and how they live their life (Dunne 1998). Objects and systems play a part in configuring everyday practices, as they make performance of practices possible - objects are “tied to action” (Schatzki 2002: 106). They connect people and their practices to complex consumption patterns that frequently rely on energy and water intensive processes.

Shove et al (2007: 146) have suggested that the ways design innovations configure and script practice are not easy to “control or anticipate”. People frequently discover unanticipated ways of making use of innovations (Overbeeke et al 2002). Innovations do not always create new practices but are integrated into existing ones, including complexes of things. This requires a negotiation between current things, meanings, understandings and competences with new ones that are not simply predicted. Producers, people, designers and various other actors impact on changes in existing practices. They need to understand the dynamics of existing practices to be able to explore the role of things in reproducing and shaping practices (Shove et al 2007), something this research tries to address in the context of women’s hair care routines.

What women do with their hair and how they wear it: a practice-orientated approach

Cox (1999) and McCracken (1997) have concluded that social sciences have paid little attention to women's hair. Recent works on hair often stress the symbolic, ritualistic and religious nature of hair (Sherrow 2006; Biddle-Perry and Cheang 2008), as it identifies women by announcing their age, gender, religious beliefs, occupation and other aspects of life. Historical work often reflects the emphasis on the symbolic nature of hair by documenting developments of styles and their interpretations (Cox 1999). These 'spectacular' aspects of the ways women do things to their hair are relevant to understanding the 'wearing' of hair, but they do not represent the full story. Much of what women do is performed in private, as part of a network of everyday routines and habits – it is anything but spectacular, even though some of the results may be. The aspiration to look fashionable and the influence of trends is only one of many interests for women, balanced by practices, family relationships and social occasions (Woodward 2007). Studies that could complete the story of what women do with their hair are widely missing, stressing the importance of empirically interrogating this unseen moment of what women do with their hair at home.

Considerations of hair, its products and tools in a Western context tend to take for granted the performance and materialisation of the hair care practice. In this research, the 'doing and wearing' of hair is regarded as a practice. This approach draws attention to the ordinary nature of the performance of hair care in everyday life. In order to reproduce the practice in everyday life, women interact with a variety of products, tools, facilities and fluids whilst carrying out a variety of activities in spaces that define the activities. The tools, products and appliances develop a network of objects that make the practice of hair care possible. Each object relies on the working of another, as they come together to create what Molotch (2003) has described as a 'hair care project' that women join, perform and participate in. The practice is not only supported by bodily activities and material processes but by immaterial elements, including ideas of what women should do with their hair, what it means to deal with one's hair and what it is to have acceptable hair.

In line with a practice orientated approach, what women do with hair and how they wear it requires mental and physical activities, including competences and understandings required,

for example, to use a brush and hairdryer at the same time, or to choose the appropriate heat setting to use on a hairdryer at different stages of the drying process. Women draw on social knowledge and shared understandings to reproduce hair that is socially acceptable. Women also manage the various emotions they have internalised, such as feeling irritated by their hair as part of their hair care routine. As indicated by a practice-orientated approach, regular performances of the hair care practice reinforce and sustain the various elements of the practice and transform them through their reconfiguration. These daily hair care routines create ‘normal’ standards of what there is to be cared for and the means of achieving them.

The emphasis on the practice of hair care moves this study beyond the semiotic analysis of hair, its products and hair care routines. Women use a variety of embodied interactions when they deal with their hair but also when they wear it. The practice of hair care is therefore considered as an embodied practice³⁶, as the hair and hair care products are ‘worn’ on the body and have materiality. In order to understand hair, its products and tools as material entities, in addition to working with a practice-orientated approach, the study also refers to literature on material culture and Merleau-Ponty’s phenomenology of perception. Gell’s (1998) work on material culture, and applied to hair in this research, is useful when considering the material impacts of hair, its products and tools. The material propensities of hair, such as its ability to change its shape, impact on the woman’s intention of how she would like to wear her hair. The hair often does not ‘behave’ as it should. In the process hair, its products and tools become agents that modify the way women feel about, wear and deal with their hair.³⁷

In the research, hair care products and tools are explored mainly when used or worn on the hair, as active agents. They are not only used in everyday life but also sorted and kept around the home. Places of keeping and sorting products and tools often represent the life trajectories of temporal and spatial orders of women’s hair care routines. The products and tools in women’s homes partly form “fossilised evidence of the history of an individual” (Levi-Strauss 1966: 22). They may represent either previous hair care routines that women

³⁶ As hair is part of the body, the materiality of hair can only be understood as an embodied practice (see Entwistle (2000) outline of clothing worn on the body as an embodied practice). This moves the examination beyond textual analyses of hairstyles and fashion, as hair and its products are seen phenomenologically. Women experience their hair and its products through bodily sensations of sight, touch, smell, taste and sound channelled via their perceptions.

³⁷ Gell’s work on material culture, in particular on the ‘agentic’ capacity of things, is discussed in more depth in chapter 4.

used to carry out or even routines that women have not yet performed but aspire to perform in the future. These hair care routines might not only represent women's individual routines but also the emergence, development and disappearance of the practice of hair care as an 'entity' (Schatzki 1996) that is shared with numerous women over time and space, entering and leaving everyday life.

The investigation of a practice as an entity takes this research beyond women's individual actions and defines social practice as the central unit of analysis. This shifts the emphasis to shared routines, conventions and collective understandings (Schatzki 1996). The research explores practices beyond the individual but across a spectrum of practitioners to investigate their mutual relationship (Munnecke 2007). Similarities and differences in the performance of practices are not grounded in the preferences women have towards certain hair care routines but in the organisation and configuration of the various elements that make-up the practice (Warde 2005). As argued by Warde (2005), minimising the individual as the unit of analysis to emphasise practices does not exclude the descriptions of internal differentiation of women's performance. These descriptions create the building blocks of this study to discuss the potential remedies a practice-orientated approach might provide to the deficiencies of current sustainable design and sustainable consumption strategies. This discussion particularly includes the deficiencies of current strategies that examine products in use and try to 're-engineer' the behaviours of individuals.

Performances of the practice of hair care are implicated in the issues of environmental sustainability through the consumption of three material groups: water to wet and rinse the hair, electricity or gas to heat the water or for hair care tools, and products that are employed such as shampoo. In addition, secondary consumption can be taken into account, such as the use of towels that need to be laundered. Studies on sustainable consumption in the home usually choose laundering, showering, lighting, heating and eating as the main areas for investigation. The practice of hair care might be an unlikely context to choose when examining issues of environmental sustainability. Still, when following the lifecycle of the numerous hair care tools and products a variety of environmental impacts become apparent; the raw material extraction and refining, ingredient manufacturing, product manufacturing, impact on use and disposal (see for example Eskeland et al (2005) for a detailed review of

the lifecycle impact of shampoo). Eskland et al (2005) have found that the use phase of shampoo accounts for a significant environmental impact on the overall lifecycle, in particular the use of water. Similarly, a recent study by the Carbon Trust and L.E.K. Consulting (2006) for Boots the Chemist has concluded that the use phase accounts for the largest carbon footprint when considering the product lifecycle of Boots' 'Botanics' shampoo. The significance of the use phase becomes apparent when taking into account that women only use a small amount of product in relation to high volumes of water and electricity to heat and pump the water when shampooing their hair.³⁸

These findings account for only part of the environmental impact of the practice of hair care in the use phase, as it does not account for the energy consumed to power hair care tools, the waste produced from used packaging and unwanted appliances and eco-toxicity of some of the chemical in hair care products. Whatever the precise level of the environmental impacts, the amount and type of resources consumed and waste produced as part of the practice of hair care is not a 'given'. Indeed, Shove has demonstrated that our current daily showering habits displaced the traditional British bathing routines (Shove 2003). Similarly, ways of dealing with hair have not always involved current levels of resource consumption. Over the centuries, women did not wash their hair with water and shampoo but employed a variety of different substances to dry-shampoo their hair. For example, during the sixteenth and seventeenth centuries women wiped the hair with sponges immersed in scented water and powder before combing it each day. It took until the 20th Century for women to start washing their hair with shampoo and water in the comfort of their own home. Piped water was provided to UK cities from the 1880s, but it was not until the 1930s when most middle class homes were supplied with hot and running water, and the 1950s for many working class homes (Hand et al 2005). Even technology behind the synthetic shampoos women use today was not introduced until the 1960s. Although this brief history fails to consider the co-evolution of all the elements that make up the practice of hair care, concentrating mainly on technological, chemical and infrastructural elements, it draws attention to both the various elements that reconfigure the practice of hair care and that it has not always relied on the use of water and electricity. A practice-orientated approach to the practice of hair care

³⁸ A more detailed outline of the environmental impacts of hair care is included in Appendix 10: environmental impacts of hair care routines.

potentially focuses upon its dynamics, as it changes over time and space and relies on various levels of resources.

Conclusion: Towards a practice-orientated approach

This chapter has considered literature from sustainable design, sustainable consumption, material culture and practice theory. The review has facilitated the process of identifying the deficiencies of current sustainable design and sustainable consumption approaches that are concerned with the use phase of products and changing consumer behaviour, as they currently have not led to sustained changes in people's practices. In addition, it described a practice-orientated approach that aids the discussion of its potential remedies to the deficiencies that inform debates on sustainable design and sustainable consumption.

Convincing individuals that they need to change their behaviour, to live a more sustainable life, was never going to be easy, nor is it arguably a possible undertaking, as highlighted by this literature review. Instead this research project aims to put an emphasis on examining an approach to change that considers the dynamics of everyday life, including its contradictions and complexities in order to question and possibly change ways of life. Although transformations into sustainable practices are beyond this research project, it attempts to examine the relationship between the stability and instability of practices. It therefore moves the emphasis of achieving sustainable change from persuading people to be activists to reconfiguring everyday practices and questioning what people consider as 'normal' ways of life. This change of emphasis has the potential to start reaching a wider audience, as individuals no longer need to internalise environmental concerns. The study is concerned with developing an understanding of the dynamics of everyday practices, in particular exploring issues surrounding the amount of resources consumed and not with finding ways of encouraging people to make more sustainable choice and develop attitudes towards environmental change.

Considering the literature on practice theory and the work of Shove, the chapter is able to propose an approach to the dynamics of everyday life that accounts not only for the reproduction, but also the change of everyday routines, underlining its potential to provide a

possible remedy to current approaches. A practice-orientated approach sets ‘the environment’ aside and examines everyday practices, using practice theory as a starting point. Shove’s et al (2007) research has explored the potential use of practice theory in design, whilst examining the context of DIY, digital photography and the design of kitchens. This study examines how a practice-orientated approach can be applied to the context of women’s everyday hair care routines to inform sustainable design and sustainable consumption debates. In this examination sustainable design and sustainable consumption approaches are included that explore products in use and try to ‘re-engineer’ the behaviours of individuals.

Given that the issues surrounding sustainable design and sustainable consumption are not examined through people’s attitudes towards the environment but in terms of the performance of practices in the context of women’s hair care routines, an understanding of how they wear their hair and what they do to it at home in everyday life was pertinent to the study. The literature on practice theory points to the examination of the performance of the hair care practice in everyday life, including its multi-relational elements. Regular performances of the practice of hair care reinforce and sustain the configuration of elements but they also play a part in changing the practice. As suggested in this chapter, practice theory aids the process of viewing hair, its products and tools beyond their symbolic meanings, as they are used as part of a hair care routine and make the performance of the practice possible. The literature on practice theory and material culture is useful in exploring the materiality of the hair care practice including material interaction with hair and hair care products, detailing even further the examination of the role of design in configuring everyday practices.

The exploration of women’s daily hair care routines sheds some light on the centrality of the reproduction of the practice in everyday life and its materiality that is still relatively unexplored in academic research on design, sustainability and in the social sciences. The examination of the materiality of these hair care routines provides a secondary outcome of the study. In order to gain an in-depth understanding of the practice of hair to reflect on the practice-orientated approach, the research in women’s homes was conducted drawing on an ethnographic methodology. The methodology therefore had to address various challenges

and discussions, such as the how to gain access to the practice of hair care that is performed mostly in the privacy of women's homes and the multidisciplinary approach. All of these considerations form the main focus of the next chapter.

Chapter 2 Methodology

Introduction

The methodology for this study transpires from the overall approach outlined in the previous chapter. It is an approach that is explorative, context based and practice-orientated. Therefore, the methodology needs to account for such an approach and the overall aim of the study. The aim is to discuss the possible remedies a practice-orientated approach might provide to the deficiencies in current sustainable design and sustainable consumption strategies, whilst considering the potential for design to change practices. The context of this examination is ‘what women do with their hair’ and ‘how they wear it in everyday life’, the practice of hair care. The methodological orientation of this research has to take into account the issues surrounding the exploration of everyday practices. Academics, who have adopted practice theory, argue that this approach requires researchers to investigate the procedures and practicalities of everyday routines.

Although empirical studies have started to apply practice theory to the examination of everyday activities (Halkier 2006; Christensen and Ropke 2005; Shove and Pantzar 2005), some of the methodological insights are still in development. Practice theory is a collection of theoretical elements (Warde 2005) and therefore its definition, concepts and elements but also its application to empirical studies still needs to be agreed upon (Christensen and Ropke 2005). This also includes methodological orientations. The methodology of this research needed to take into account the limited knowledge available of how to investigate everyday practices. In addition, it had to consider ways of examining the intimate practice of hair care that is mainly carried out alone, especially without the presence of a researcher. Women regularly perform their hair care in private at home, unless a close friend or family member is present. Considering the in-depth involvement with a context offered by ethnography through developing a familiarity with informants over time and its explorative approach to examine everyday activities, this chapter discusses how the research was conducted using an ethnographic methodology.

In order to describe the methodological approach, the chapter looks at its differentiation to traditional ethnographies carried out by social scientists (Mason 2002; Hammersley and Atkinson 1995), and ethnographies that are conducted as part of a design process that aims to produce design outcomes. The use of an ethnographic methodology in this research has the potential to initiate concerns over the feasibility of a researcher with a background in design and their utilisation of social science methods and the role of the ethnographic data gathered as part of this research. To support the approach, this chapter reflects on current debates in design and the social sciences surrounding the designer's skill and ability to make use of social science methods, in particular those relating to an ethnographic methodology.

The research data was gathered from various sources and incorporated several methods. At first a pilot study was conducted that was based on six semi-structured interviews in people's homes, between April 2006 and October 2006. As a result of the pilot study, an ethnographic methodology was adopted consisting of in-depth and evocative interviews³⁹ with twenty-four women in their homes. This included documentations of the places where women do things with their hair and where hair care products and tools are kept, between April 2007 and March 2008. In addition to the work with the female informants in their home, nine in-depth interviews with hair care 'experts', for example, hairdressers were conducted from December 2005 to March 2008. Over the time frame interviews were carried out with extreme sample⁴⁰ of six women, including women who had not washed their hair for several months. Finally, in November 2008, a creative workshop was carried out at Boots the Chemist. It engaged workshop participants, such as employees at Boots with the work conducted in the women's homes. Throughout the research study informal methods were utilised, based on keeping an introspective diary, reviewing current hair magazines, market research studies and historical literature on hair, observing women do things to their hair in the gym and filming friends, as well as watching several films on You-Tube. The

³⁹ The interviews were in-depth, in that the themes addressed during the interviews were explored flexibly to engage with the rich and detailed context and to develop an understanding of the complex processes and experiences (Kvale 1996) of the practice of hair care. As part of the evocative interview informants relived and re-enacted experiences of the activity under investigation through encouraging a 'state of evocation' (Light 2006). Both methods will be discussed in more depth later in this chapter.

⁴⁰ The 'expert' sample included employees at Boots the Chemist and hairdressers. The extreme sample consisted of women who wear and deal with their hair in an 'unusual' or 'radical' way. The selection of the informants will be discussed later in this chapter.

methods are discussed in detail in this chapter, including practical issues and a rationale for their use.⁴¹

Practice theory, design and social science methods

Empirical studies that have applied a practice-orientated approach to the investigation of the dynamics of everyday routines are able to provide some methodological insights of relevance to the study. Shove et al's (2007) study on the practice of DIY comprised an in-depth involvement with the informants. In addition to conducting in-depth interviews, the researcher walked around the informants' homes looking at present and past DIY projects. During these walks, the researcher and informant discussed stories behind the use and acquisition of numerous products and tools that they found in the informant's toolbox. Halkier's (2006) empirical application of practice theory as part of her research into cooking practices has suggested that to engage with practices in everyday life the researcher must examine the various tacit procedures and practicalities involved in conducting the activities under investigation. Moreover, the trajectories of the practices, skills and emotions needed to reproduce the practice in everyday life should be examined. For Halkier (2006) the emphasis on examining the procedures and practicalities of everyday activities invites an ethnographic methodology. Such a methodology allows researchers to 'hang-out' with informants in their own cultural context, enabling the researcher to examine the practice in question.

An ethnographic methodology underlines an open-ended approach to empirical research that is explorative in its orientation and relies on a range of methods to gather data. Informants' actions and accounts are explored in their everyday setting and are therefore highly context-based. The researcher investigates the mundane and often considered to be boring aspects of everyday life (Hammersley and Atkinson 1995). The in-depth involvement with the informants, as advocated by ethnography, aids the process of gaining access to even more intimate and private practices (Woodward 2007), such as the practice of hair care. Ethnography represented a methodology appropriate for this study. However, designers have been criticised for using ethnographies in design related research, and therefore in order to

⁴¹ A visual chronology of the methodology is included in Appendix 2: chronology of methods.

defend the approach taken in this research the next section examines some of the issues raised surrounding the use of ethnography in design before demonstrating how this study differs from the disputed approaches.

Satchell (2008) has suggested that design, particularly user-centred design, has benefited greatly from drawing on various social science approaches to develop a greater understanding of the design context in question. Prior to the interest in ethnography, design firms and academics frequently employed cognitive psychologists to examine the usability of products (Norman 1988). However, these methods often failed to explore the use of products in their wider cultural context, something ethnographic studies encourage. Ethnographies provide a more holistic view of the context under investigation and are considered as solving the discrepancy between ‘what people say they do and what they actually do’ (Wasson 2000) in everyday life. Ethnographies, conducted as part of the design process often differ from more traditional ethnographies conducted in anthropology, particularly in terms of the length of time spent doing the fieldwork⁴², as they are usually shorter. Although there are apparent benefits of using ethnography in design, its application is widely debated. Debates are based on questions surrounding who should conduct the research (the designer or the social scientist) and the transferability of data gathered into the design process without reducing the rich findings.

Designers have been criticised as being narrow visioned in any understanding about what they generate when exploring a context in question. From a social science perspective, the designer’s instinct is to create potential design outcomes without undervaluing a holistic understanding of the cultural context. Therefore, they are frequently regarded as not being suitably qualified to conduct any form of ethnographic enquiry or apply any social science method (Lebbon et al 2002; Button 2003). Although designers explore the current setting when conducting ethnographies, they are often interested in an imagined situation at the same time. These two aims might create a potential tension. Designers seek to identify design problems and develop solutions to them when exploring the current context. According to Button (2003), this inconsistency often means designers rationalise ways of

⁴² In order to acknowledge the differences between traditional ethnography and the variation of applying ‘ethnography’ in design, Millen (2000) has developed ‘rapid ethnography’ whereas Salvador et al (1999) call their approach ‘design ethnography’ and Hughes et al (1995) offer a ‘quick and dirty’ approach to ethnography.

gathering and analysing data to develop design criteria rather than to reflect on the richness of cultural context. Designers produce “a superficial overview of the setting, lacking any analytic sensibility” (Button 2003: 379). For Button, designers often only confirm design decisions that have already been made before entering the field. These statements imply that the analysis and the consequent understandings of the setting do not originate from a rigorous involvement in the cultural context and are not based on the application of formal and valid techniques.

Lebbon et al’s (2003) and Button’s (2003) criticisms⁴³ assume a certain interrelationship between design researchers conducting an ethnographic study and being engaged in developing design outcomes at the same time. The criticism is mainly directed towards research that makes use of social science methods as part of a design process with the main aim to develop or test new products. This is where this research differs, as it is not ‘user research’ to inform design outcomes. Although a design entity (i.e. the workshop⁴⁴) was produced as part of this research, this study clearly differentiates itself from design research interested in developing design outcomes that Archer (1995: 11) has termed as ‘research for the purpose of practice’.⁴⁵ The aim of the workshop was not to create design outcomes but to use it as a creative tool in the research process to reflect on the research question.⁴⁶

The emphasis of this research is on questioning whether researchers or designers who are interested in sustainable design and sustainable consumption are currently asking appropriate questions when considering ways of looking at everyday activities and engaging with change. The research project reflects on the roles of design, whilst examining the possible remedies a practice-orientated approach could provide to the deficiencies of current

⁴³ The criticism is mainly based on the literature coming from the field of HCI (human computer interaction). Although the literature is concerned with human computer interaction and not everyday hair care practices, this thesis draws on the field of HCI because of its efforts to create links between social science methods and design. These discussions are of interest to many areas of design and across the disciplines.

⁴⁴ The process of designing a workshop for this research and its final configuration is regarded as a design entity in itself.

⁴⁵ Archer (1995: 11) divides design research into ‘research about practice’, ‘research for the purpose of practice’ and ‘research through practice’. This research does not fall easily into any of these categorisations, as it ought to be termed interdisciplinary research (concerned with social science methods and theories and sustainable design discourses). Therefore, the above section does not try to categorise what type of design research this study might represent but to clearly differentiate it from design research that aims to conduct research to develop design outcomes.

⁴⁶ The role of the workshop is discussed in more depth on page 83.

sustainable design and sustainable consumptions strategies.⁴⁷ The study mainly makes use of social science research methods to examine an everyday practice, whilst drawing on some design thinking.⁴⁸ The methodology therefore required an interdisciplinary approach, providing insights and therefore an understanding of the multi-relational elements involved in everyday activities. The question that might still exist is who should conduct such an interdisciplinary research study: a researcher with a background in design, or a social scientist who might be more ‘qualified’ to conduct an ethnographic study. This question is examined in more depth in the next section.

Designers using social science methods

Considering the discussion above, the study mainly makes use of social science research methods to examine an everyday practice, whilst drawing on some design thinking. The methodology therefore required an interdisciplinary approach that allowed a design researcher to develop an understanding of the multi-relational elements involved in the conduct of daily activities. Being at the interface of disciplines has been recognised as challenging in relation to “having sufficient knowledge of another’s language, practice, perspectives and ways of looking” (Wright et al 2006: 7). In the past, research into sustainability has been criticised for being mono-disciplinary and in need of more explorative and multidisciplinary approaches (Heiskanen and Pantzar 1997; Fletcher et al 2001), and therefore research at the edge of disciplines might create more meaningful research outcomes, such as design orientated research with an interdisciplinary approach.

⁴⁷ The research is only able to make suggestions about how this approach could be most effectively integrated into a design process. Further research would be required to establish its use. The use of practice theory in design processes might be for instance based on more design-led methods early on in the design process and involve interdisciplinary teams to develop solutions and design outcomes for changing practices.

⁴⁸ Ethnographers draw upon different analytical perspectives to examine various features of everyday life. The use of ethnography in design is often grounded in ethnomethodologically-informed ethnography (Hemmings and Crabtree 2002). It aims to study the “methods” that people employ to make sense of everyday life activities and avoids any form of ‘interpretation’ (Hemmings and Crabtree 2002; Garfinkel 1996). This is where this study differs. It aims to provide ‘thick descriptions’ of the practice under investigation to not only produce accounts as the informants related to them, but also to examine deeper meaning structures (Van Manen 1990). The study therefore applies an interpretive approach to ethnography. In addition, in coherence with most ethnographic research the study acknowledges a lack of objectivity (Atkinson 1992) and therefore the local and partial nature of the analysis. It claims to offer only one interpretation of the practice of interest that is potentially one of many.

Blevis and Stolterman (2008: 344) have argued that, “design is not a single disciplinary pursuit in its nature.” Numerous design consultancy firms and degree courses, such as the design course at Goldsmiths College, London, equally support this view. Theories and methods developed in the social sciences next to more design related theories create a grounded basis for explorations into design. Ward (2007), a design tutor at Goldsmiths College, points to this view through his response to Nigel Thrift’s (2005) quote on the work of social scientists,

“I have what I think is a pretty good test of whether a person is a social scientist or not: do they eavesdrop on a fairly regular basis on other people’s conversations on trains and planes, on buses, in the street, and so on?” (Thrift 2005: 338)

“I think being an eavesdropper is a solid trait of any designer worth their salt.” (Ward 2007)

Designers are not only interested in creating new ‘stuff’ but also in people and their interactions with the material environment. The boundaries between design and the social science become blurred when considering the work of design in this light.

Nowadays, designers often acquire knowledge, particularly in higher academic degrees, of how to conduct research that draws on social science methods. This training provides designers with the skill to be able to carry out research to a high scientific standard (Boess et al 2008). This training has created design researchers with both design and research skills.⁴⁹ Boess et al (2008) stress that the benefits of designers gaining such research skills is still under-investigated, in particular the issue how both researching and designing can be meaningfully integrated in a research project. Here, the emphasis of the discussion changes from questioning if designers are qualified enough to conduct an ethnographic enquiry to what they, and equally the social scientists, could bring to such studies, exploring potential benefits and drawbacks in more depth. The questions that arise in this study are therefore based on reflecting on what a designer could bring to a study that uses practice theory as a starting point and draws on ethnography.

⁴⁹ Similarly, my knowledge of methodologies applied in the social science started to grow during her undergraduate degree and was deepened through the PhD study. It was particularly supported by attending two courses at the Essex Summer School for Social Science Data Analysis and Collection.

One possible advantage a designer might have when examining a practice is a keen interest in wanting to engage with everyday things and understand the fugitive qualities of people's experiences with the material world. Designers work with things and experience them in a professional realm, they gain tacit knowledge which they can draw on to be able examine embodied interactions with things. Through the designer's strong interest and physical engagement with the material world, they are in tune with current research studies in the social sciences that stress the need to investigate embodied experiences and material interactions that people develop with their objects instead of emphasising the examination of their symbolic meaning.

The products and tools involved in women's hair care routines, including the hair itself, have materiality, something that designers are particularly interested in as they mould, shape and engage with the material world. The methodology of this study stresses the importance of developing an understanding of the materiality of hair, its products and tools, through the use of sketches and evocative interviewing techniques and the presence of hair care products and tools in the research process. In the past, hair has been examined because of its symbolic and ritualistic nature (Biddle-Perry and Cheang 2008; Cox 1999; Sherrow 2006; McCracken 1997). Nevertheless, the significance of the sensual and physical interactions women have with their hair transpires when exploring the practice of hair care through an ethnography.

From pilot study to an ethnographic methodology

Between April and October 06, a pilot study was conducted that consisted of six semi-structured interviews. These were not only carried out but also analysed during that time. At this stage there was no predefined selection sample criteria. The sample therefore consisted of three women and three men of varying ages. In addition to experimenting with numerous methods, the pilot study aided the understanding of how to establish access to the informants and how much time was needed to be spend with them to arrive at a point where people were happy to share intimate accounts of what they do with their hair. It soon became apparent that spending time with informants and having an open approach often created a relaxing and trusting environment in which the informants felt happy to talk about the more

intimate interactions with their hair. Therefore, it was favourable to work with a smaller number of female informants⁵⁰, spending longer with each of them. The aim was not to create a representative and generalised account of people's hair care routines in Britain but to work with a non-representative number.

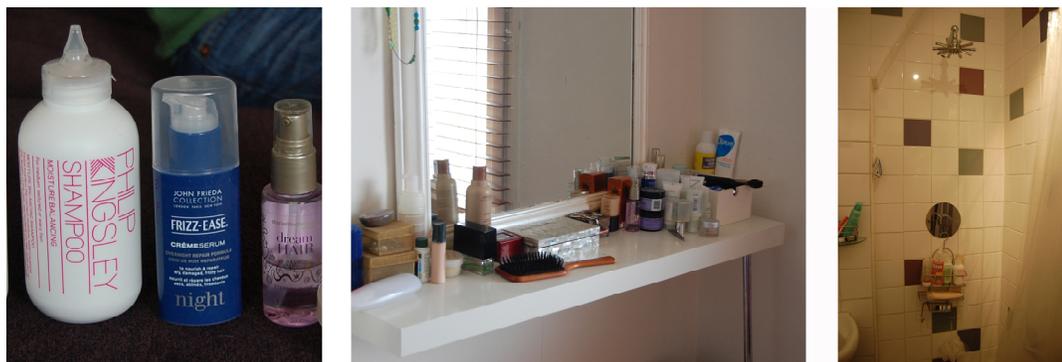
The six pilot interviews gathered data that consisted of a broad overview of people's understandings and perceptions of performing their hair care routine at home. The informants talked about social interactions, issues they have with their hair, products and tools they own and buy, and past experiences that related to their hair care. These accounts were valuable in developing an overview of how women differentiated between the varying 'states' of hair such as 'greasy' and 'shiny' and what hair care products do and fail to do to their hair. However, the women's responses sometimes felt pre-programmed and therefore seemed to be based on discourses women had good knowledge of, potentially influenced by the media and conversations with friends and family.

The verbal accounts that were gathered in single semi-structured interviews in women's homes, as part of the pilot study, did not shed light on the processes and practicalities of 'doing and wearing' hair. A methodological question arose about the coherence between women's verbal accounts of how they deal with their hair and what they actually do with their hair in everyday life (Deutscher 1973). Women particularly struggled to verbalise daily tactile and visual experiences with their hair and its products and tools during the interviews. Accounts started to flow when women were talking about interactions with their hair, about occasions in the past, or their thoughts were triggered when products and tools were readily at hand during the interview. This was an encouraging indication that it was possible to gain an understanding of these interactions and processes, but more creative methods and a more explorative and holistic methodology was required.

Towards the end of the pilot study visits to the informants' homes were longer. They also did not always consist of only one visit to the women's home to engage with their hair care routines. Instead of merely relying on verbal accounts, various sources of data were used such as notes, photographs, hair care products and tools (Hammersley and Atkinson 1995)

⁵⁰ The process of selecting the sample for the main study is discussed in more depth on page 72: selecting informants.

and numerous research techniques (Mason 2002). The visits became less structured and more explorative, including more informal conversation with family members and friends (Fetterman 1998). Women disclosed the various places where they do things to their hair and keep their hair care products and tools around their home. Sometimes women even demonstrated their use. It was possible to gather research data in more ‘natural’ settings (Hammersley and Atkinson 1995). Products and tools had an integrated part in the open-ended interviews that also involved the gathering of more retrospective accounts and developing a more contextualised understanding of women’s hair routines. The more visual insights of women’s hair care routines, such as photographs (see example photographs 1/2/3 below) and the evocative interviewing technique⁵¹, aided the process of accessing more ‘observational’ insights without having to conduct detailed observations.



Photos 1/2/3: Olivia’s shampoo, conditioner, serums and places of doing things to her hair

The methodology adopted: Drawing on an ethnographic methodology

The methodology adopted during the main study has much in common with ethnography, considering the more in-depth involvements towards the end of the pilot study. Nevertheless, numerous definitions of ethnography exist that illustrate clear differences between traditional ethnographies and this research methodology. Ethnographies derive from researchers going into ‘the field’. Researchers live with communities or groups of people to participate in everyday activities overtly or covertly over an extended period of time, creating a first-hand experience of a social setting (Mason 2002). Participant

⁵¹ The evocative interviewing technique was not used as part of the initial pilot study, as insights into this technique emerged at the beginning of the main study in July 07. Before including them into the methodology, the interviewing technique was piloted on three women in August 07. A more in-depth discussion about the technique can be found on page 79.

observation and informal conversation often create the main source of data (Hammersley and Atkinson 1995). The emphasis of this research was not about immersing one's self into a community to conduct participant observation, as only a few informants knew each other and therefore did not create communities. Participant observation did not feature prominently in this research. Activities carried out in the home, especially the performance of hair care routines, are often considered as being private and intimate. The act of shampooing, conditioning, drying and styling hair is mainly performed alone. Therefore, gaining access to these activities to carry out detailed participant observation posed a methodological challenge for this research (Halkier 2006; Woodward 2007).⁵²

Nevertheless, anthropologists who primarily employ ethnographies have recognised that in the contemporary Western world, including Britain, everyday activities mostly occur in homes and not in spatially bounded communities, unless they are based in an institutional setting (Woodward 2007; Hockey 2002). Social scientists have therefore developed methodologies that make it possible to conduct ethnographic research into these settings. Therefore, it is possible to argue that this research draws on an ethnographic methodology, using a large number of the methodological insights from ethnography to conduct this study. Insights into an ethnographic methodology allowed for a deeper immersion into the research setting. This immersion was characterised by an in-depth involvement in a woman's life, gathering holistic and contextualised accounts of their hair care routines.

An ethnographic methodology focuses upon an in-depth and interactive involvement with informants. It recognises that the division between the researcher and the informant is not clear-cut and therefore the researcher needs to be aware of his or her own position (Snape and Spencer 2003). I am a woman who has Caucasian hair. I grew up in the Western world and do my hair daily. During the research process, I maintained a weekly hair diary in order to reflect on my actions and thoughts around my hair care. The use of a diary has similarities to the introspective recollection technique advocated by Holbrook (1995) and given qualified backing by Campbell (1997). Qualitative researchers, especially ethnographers, often use personal insights in a meaningful and sensitive way (Mason 2002), whilst at the

⁵² In addition to verbal insights, visual data was gathered. This included taking photographs, whilst wondering through women's homes and accounts gained through the evocative interviewing technique. These methods generated more 'observational' insights.

same time taking a non-judgmental stance when conducting the research (Snape and Spencer 2003). The diary provided a basis for me to build an awareness of my own assumptions of hair care routines to try to avoid imposing them onto the informants. It assisted in the process of being aware of the potential ideas the informants might create about my own hair care routine when they reflected on the way I choose to wear my hair. Overall, my hair care routine did not purposefully change for the study, but I was aware that I did not have any 'artificial' colour in my hair and used no styling products or electrical hair care tools. After the first visit to the women's homes, some of them pointed out that they were glad that I had 'normal' hair, as they expected it to be more 'extravagant' because of my interest in hair care.

Each encounter with the women was slightly different. My hair, on numerous occasions, gave the impression to the women that I was a 'novice' in hair care, and this was expressed by some of the informants. Particularly when working with Ann-Marie, who had not shampooed her hair for several months, and Kendra, who had Afro-Caribbean hair, I was placed not only in the role of a novice but also had to engage with ways of doing things with hair and using products that were completely new to me. Even when working with women who deal with hair that is similar to my own, a 'deliberate naïveté' (Kvale 1996), was useful in not only demonstrating an openness and interest in the women's activities but also to encourage them to talk about the processes and practicalities of 'doing' hair care in more depth. Numerous times during the interviews women asked if they were 'boring me to death', as they were talking about mundane activities in great depth. Therefore, sometimes taking the role as a novice in hair care aided the process of women feeling more engaged in explaining and demonstrating how they were doing thing with their hair, as if they would show it to a friend.

Ethnography acknowledges the interactive dynamic of the relationship between researcher and informant. This includes the recognition that during data gathering a researcher is part of the creation of reality, as knowledge is produced through the interaction between both the researcher and the informant (Kvale 1996). This interaction was not only apparent when considering my role as a novice, particularly with regard to some of the activities of hair care, and sometimes further developed through sharing hair care stories with the women.

These approaches aided the creation of a relaxed and open atmosphere in which the women felt that they could talk even about the more intimate issues concerning the 'doing and wearing' of hair such as the use of dandruff shampoo. Although the overall approach towards each woman was flexible and open, the relationship and its consequent depth varied. The interactions could not be pre-programmed and they develop over time. Therefore, the relationship with each woman was signified through varying depth. Different amount of time was spent with each of the informants (Hammersley and Atkinson 1995). Interactions with women that did not go much further than spending a long afternoon together created a substantial and important part of the evidence base for the thesis. Even more brief encounters were based on women talking about the activities of hair care in an in-depth interview and demonstrating their hair care tools and products. The understandings obtained of the practice of hair care are based on the depth of each relationship and the methods employed.

Conducting the research and its methods

The ethnographic research in women's homes was mainly carried out in two areas of Britain, Kent and South Yorkshire, between April 2007 and March 2008. The home was the site of the research, where women do things to their hair and keep their hair care products and tools. These places, products and tools were regarded as the starting point of examining the practice of hair care that also occurs outside the home. The research process include various methods: in-depth and evocative interviews with women and documentations of the places where women do things with their hair, and where hair care products and tools are kept in women's homes. In addition to the work in women's homes during this time, in-depth interviews were carried out with 'experts' in hair care and with an extreme sample. Finally, in November 08, a creative workshop at Boots the Chemist was conducted as part of the research. The research methodology also included some informal methods, as summed up at the beginning of this chapter. There follows a discussion of the chosen methods and the rationale for using them and an outline of the sample strategy and ethical issues that needed to be considered.

Selecting informants

The 'doing and wearing' of hair affects most people, regardless of gender, age, occupation, religion, interest in hair and ethnicity. Despite this universality, for reasons of practicality, the sample was limited to women who have Caucasian hair after the pilot study. Differences in gender and ethnicity are marked in ways of dealing with hair by the type of hair care products and tools used, which result in distinct hair care routines. The important role of women in hair care was pointed out by Boots the Chemist's insight manager who regarded women as often being the decision-maker for their male partners, particularly regarding how to do things to their hair and what to use for it. Therefore, the sample consisted of women and not mixed gender.

To be able to explore the processes of what women do with their hair and ways of wearing it in-depth in their cultural context, informants were first selected on the basis of their willingness to spend time with me. Given the personal and private nature of what women do with their hair, the issue of allowing access to their homes created another determining factor in the selection process. As there were no predefined selection criteria in relation to socio-demographic factors at the beginning of the research, other than the sampling decision to work with women, numerous hairdressers in Sheffield were approached to gain access to potential informants. Leaflets were left on the counters, inviting women to take part. Soon it became apparent that the hairdresser was an unsuitable 'gatekeeper' (Lewis 2003), as they were frequently concerned about asking their clients to participate in the study. The hairdressers did not know me and therefore could not vouch for my integrity. The prospect of asking their clients to let a stranger into their home (a place a lot of hairdresser do not even enter) discouraged the hairdressers to ask their clients to participate in the study.

The issue of accessing potential informants was resolved through using the University's e-mailing system and my own social networks as a starting point for accessing women. Once a few women agreed to participate in the study, they often suggested friends and family members who were interested in taking part. This snowballing and convenience sampling approach facilitated the participation of women that were eager to take part and willing to give up their time. I had previously interviewed some of the women for a separate research

project, during which they asked me about this study, demonstrating an interest in this research and a willingness to participate. The participation of these women provided a real advantage, as a number of them had already invited me into their homes and they therefore felt familiar with having me around.

The entire sample consisted of twenty-four women⁵³, not including the pilot study. This number emerged whilst conducting the research and was not pre-planned. Informants' accounts were gathered until an in-depth understanding of the practice of hair care could be developed, which indicated that the sample was of an appropriate size. The sample was diverse: the ages ranged from late teens to early seventies, and it included women with various abilities and interest in hair care, hair characteristics, family unit compositions, employment activities and income levels. With regard to examining practices, Warde (2005) points out that the examination of practices transcends more established socio-demographic factors, as they can be conducted with varying levels of competences and degrees of involvement.

“Considering agents' capacities we might differentiate between long-standing participants and novitiates, theorists and technicians, generalists and specialists, conservatives and radicals, visionaries and followers, the highly knowledgeable and the relatively ignorant, and the professional and amateur.” (Warde 2005: 138)

Therefore, the group of informants was not only selected considering socio-demographic factors but also women's involvement in hair care routines. In view of these sampling criteria, the sample group had to be diverse in terms of socio-demographic factors, though the small sample size meant it was not possible to incorporate all aspects of diversity. A lot of the factors and their importance emerged throughout the research and could not be predetermined beforehand⁵⁴. Instead of listing all the facets at this point, a short background introduction to each woman is included in Appendix 1. In addition to providing socio-demographic information, the summary outlines some features specific to the women's hair

⁵³ Although the research conducted was built upon the study of individual women 'doing and wearing' their hair, the practice of hair care is the central unit of investigation. As highlighted by Shove (2003) these routines hold the multi-relational elements of the practice of hair care and the outputs of social institutions together.

⁵⁴ Although the importance of the various sample criteria were not predetermined before carrying out the research but evolved whilst conducting it, this does not mean that certain criteria, such as age and attitude towards hair care were not considered right from the start. A list of sampling criteria was created during the pilot study but their importance and new additions were made during the major study.

care routines. Throughout the thesis, background information about the women is provided at points when particular hair related situations are examined.

In addition to working with the women in their homes, in-depth interviews were conducted with nine ‘experts’ in hair care and six women who formed an ‘extreme’ sample, who wear or deal with their hair in an ‘unusual’ or ‘radical’ way and therefore initiated an exploration into a wide variety of hair care routines. These women also aided the process of spotting innovative ways of dealing with hair. The sample included women who did not shampoo their hair for several months, one woman who wore dreadlocks, and another who lost her hair through chemotherapy. Moreover, it consisted of women from different ethnic backgrounds who had Asian, Middle Eastern and Afro-Caribbean hair. These interviews made it possible to explore cultural differences and validate the sampling strategy. What these women did with their hair varied greatly to women with Caucasian hair, not only in terms of the use of products and tools but also in the length of time spent on their hair.

The ‘expert’ sample consisted of people who work with hair in a professional capacity, ranging from professionals who cut women’s hair, help women to do their hair at home, check-up on the health of the hair and work on the production and retailing of hair care products and tools, such as hairdressers, occupational therapists and medical practitioners. Boots’ corporate social responsibility department collaborated on the study which gave access to various employees who work on the product development process of hair care products. In-depth interviews were conducted with the sustainable development manager for products, the sensory evaluation manager, the ‘Botanics’ brand manager, the consumer insight manager, the scientific advisor for hair care and a formulation developer.

In addition of the interviews, a workshop at Boots the Chemist was carried out with three teams, each consisting of five participants. The groups consisted of a multidisciplinary mix of people, from science, sociology, design, marketing and geography. Some of the participants worked in academia and others in industry. Each was personally invited to take part in the workshop. Therefore, the selection process was based on an invitation list that was composed with the sustainable development manager at Boots the Chemist.

Ethics

Due to the intimate nature of this research several ethical issues arose that required consideration. Every women in the study was notified of the purpose of the research, what it would entail and that their accounts would be used as part of a PhD thesis. In addition, Boots' involvement in the study was explained to each informant. The informants were assured of their anonymity outside of the research team and guaranteed that any details that might reveal their identities would be altered within the thesis. The introduction to the study regularly occurred via an initial phone call or face-to-face visits. In addition, their permission was obtained to audio-record the interviews and take photographs of the places where women do things with their hair and keep their hair care products and tools. Women were informed that they could withdraw any of their accounts if they wished them to be absent from the final analysis, and that they could leave the study at any stage. Informed consent was also obtained from the expert sample. During the workshops the three inspirational films that were shown included film clips of women doing things to their hair. These clips were collected through filming some hair care routines of my friends and family members. Before showing the films at the workshop, each friend and family member was informed about how the clips would be used and in which context they would be used in, so that they could give an informed permission to use the film material.

Initial in-depth interviews

An in-depth interview in the woman's home was the foundation for each first visit. The interview often included an exploration of the places where women do things to their hair and keep their hair care products and tools. Sometimes the interviews started with the informant escorting me to the various places in their home, talking about each item and how they used them. At times, this excursion finished with the informant demonstrating the hair care products and tools in use. On other occasions, I first settled down with the informant to talk about their hair care routine before setting off on an excursion around the home. In all circumstances, the women brought their hair care products and tools along to the place where longer conversations took place, mainly in women's living rooms but sometimes in bedrooms or bathrooms. It was interesting to observe which hair care products and tools

women chose to take to the interview before exploring the places where they are kept. Women often left behind hair care products they had not used for months or did not like. During the excursions, the places where women do things with their hair and keep their hair care products and tools were documented. This documentation included a list of all products and tools even if no longer used.

The interviews were in-depth and therefore the topics defined in the interview guide⁵⁵ were explored flexibly, in order to engage with the rich and detailed context and to develop an in-depth understanding of the complex processes and experiences (Kvale 1996) involved in hair care routines. The interview guide was tested and changed on numerous occasions throughout the pilot study. Interview topics surrounding the processes and practicalities of the practice were central to the development of the interview guide. It derived from a reflection on the performance of hair care routines and the materiality of hair and its products and tools, and included prompts that instigated questions that explored women's lived experiences.⁵⁶ The topics detailed on the guide explored the various activities of hair care in-depth, rather than focusing on the individual symbolic meanings of each hair care product and tool. The study considered hair care items as pivotal for the performance of shampooing, conditioning, drying, straightening, styling and also wearing the hair, rather than being static and stored. The activities of hair care were explored as part of the performance of the practice, but also as part of a wider cultural context such as in relation to the formation of social relationships. The multi-relational elements of practices were not directly translated into topics for the guide, as their exploration developed throughout the study.

The interview guide was based on the following topics: steps and stages of hair care routines, the use of products, tools and techniques, descriptions of end results, the temporalities of hair care routines and contextualisation of the practice of hair care in relation to social relations. Each in-depth interview began with the following open question: "To get us started, could you describe to me the things you do and think about with regards to your hair in a typical week?" The question could take the interview into numerous

⁵⁵ An outline of the interview guide is included in Appendix 3: interview topic guide.

⁵⁶ The topics for the guide were identified and evolved whilst conducting the pilot study interviews and analysing them whilst reading the literature on practice theory and carrying out some of the more informal methods, such as the introspective diary.

directions, depending on the women's responses. Especially after the pilot study, the topic guide was so familiar to me that the interviews became more flexible and tailored around each informant. The guide was used as an 'aide memoire' (Burgess 1984) rather than providing a structure to the interviews. Although the interview guide provided some foundation to each interview, unexpected themes were allowed to emerge, whilst my responses happened spontaneously and in response to the informants' answers (Ritchie and Lewis 2003). In combination with active listening and open questions, rapport emerged and enabled women to feel at ease. It was explained to the women that there were no right or wrong answers (Rubin and Rubin 2004) to the questions. An interest was shown even in the most mundane aspects of their hair care routines.

The guide evolved when initial encounters demonstrated that the women sometimes found it difficult to communicate the routinised and implicit elements of the performance of hair care routines. In everyday life routines are often carried out subconsciously. These accounts often started to flow when the informants were in the places where they do things to their hair or had their hair care products and tools in front of them. They were able to pick them up and interact with them, demonstrating how they worked. The visibility and tangibility of products and tools during the interview triggered thoughts that initiated women to reflect on their hair care routine and for me to observe some of their 'doing'. The women were often able to gain access to accounts that they often do not have to verbalise in everyday life such as the different sensual experiences when using shampoo. Hair care products and tools sometimes provided visible traces of use, deepening women's accounts, such as the dust on products frequently indicated that they were no longer part of women's hair care routines. The study largely engaged with the materiality of hair and its products and tools through the use of physical objects in the empirical work but even in more depth through the evocative interviewing technique (as discussed below).

The interviews were tape-recorded. Photographs were taken of the places where women do things to their hair and keep their products and tools, in addition to each item and the woman's hair. Although all of the women were happy for me to take photographs of their products and tools, and were familiar with the process of having a picture taken of them, for me to wander around the home and photograph various places in their home was unusual to

them (Prosser and Schwartz 1998). Most of the time, the photographs were taken after the interview. Frequently, I could wander around the home alone, as the women felt more familiar with me. The photographs provided some tangible details which were useful when reflecting on the interview accounts after the visit, providing a 'sense of being there'. The documentation of some of the physical elements, not only of the environment but of the products and tools, indicated how most of the hair care items were used in combination and some of descriptions used by retailers and manufacturers that otherwise might have been missed (Prosser and Schwartz 1998). Overall, the photographs provided an overview of what each woman owned and used, sometimes demonstrating activities women participate in, performed in the past, or aspire to do.

Each interview was transcribed verbatim. During this process the interview guide was reviewed, the interview situation was documented (i.e. if I was able to build a relationship with the informant) and themes that arose were noted down (Rubin and Rubin 2004). The iterative process between the write up of the data and conducting the data gathering (Fetterman 1998) was considered as essential in order to build an awareness of the emerging themes (the analysis of the interviews is discussed in more depth on page 86). The photographs aided this process, as I was able to engage with and familiarise myself with women's products and tools as well as the places where they do things to their hair outside of the interview situation. They were used during the follow-up interview to trigger women's memories (Prosser and Schwartz 1998) and mainly created a substantial part in the analysis, providing visual accounts next to mainly verbal ones (Prosser and Schwartz 1998).

The in-depth interviews provided detailed descriptions of women's hair care routines, including insights into the varying levels of commitment to reproduce the practice. Women's accounts of how often they deal with their hair identified the order in which they are carried out, such as the different steps and the effects of this on the reproduction of their hair care routines. The interviews created a basis upon which to develop an understanding of the processes and practicalities of how, and how often, women do things to their hair, and the interrelationship between the current configurations of the multi-relational elements of the practice. Moreover, insights were gained into what women tried to achieve and what they considered to be 'normal' hair and hair care routines, including expectations and

standards that existed. In particular, accounts from the past pointed to the trajectories of practices and the role of family members, friends and experts in influencing the women's hair care 'careers'.

During the analysis this data provided the foundation for the exploration of possible remedies a practice-orientated approach might provide for the deficiencies of current sustainable design and sustainable consumption approaches. It also was of interest to examine whether women actually choose how often they deal with their hair and how they wear it, an assumption some sustainable consumption approaches are based on. Although the in-depth interviews provided rich and detailed accounts, the emphasis on the processes and materiality of 'doing and wearing' hair still sometimes felt generalised. Whenever I elicited stories, beginning a question with 'tell me about a time...' (Hollway and Jefferson 2000), the accounts of lived experiences (in particular of sensual and material interactions and emotions) were richer and even more detailed, as women were able to reflect on particular situations. The evocative interviewing technique provided an opportunity to gain insights into sensual and emotive accounts based on processes of women's hair care routines without having to observe the informants. These interviews often created the basis for later interviews.

Follow-up interviews: Evocative interviews

A familiarisation with what the women did with their hair and how they wore it happened prior to the subsequent visit. The in-depth interviews were transcribed and photographs were studied. During this process, I was able to collate photographs and themes that needed to be picked-up on during the follow-up, evocative interviews. The evocative interviews were carried out with more than half of the informants. This interviewing method is based on a style of questioning that has been developed by Pierre Vermersch (1994). Light has adopted this method for design research studies and applied it extensively. The method aims to, "gather accounts of an experience to some extent" (Light 2006: 177). The experience under investigation is relived during the interview through focused but unstructured questioning,

encouraging the informant to enter a ‘state of evocation’⁵⁷. According to Light (2006), the method gathers detailed accounts of lived experiences and processes, away from verbalised memories, generalisations and opinions. In the study the method aided the process of gaining access to detailed ‘retrospective’ accounts not only of the performance of how women do and wear their hair but also of how it is experienced, developing a richer understanding of the practice of hair care. During the interview informants became aware of their felt experiences, including material and sensual interactions with products and tools but also emotions and experiences with hair such as feeling, touching, smelling and looking.

The method facilitated the process of gaining detailed insights into the processes and practicalities of hair care routines that could not be gathered through observations because of the intimate nature of some of these activities. The method therefore clearly differentiates itself from observations and in-depth interviews. Light points out that even when eliciting past stories from informants based on memories during in-depth interviews, accounts are often affected by rationalisations. Informants struggle to reconstruct the stories, sometimes relying heavily on “rehearsed repertoire of stories” (2006: 177) similar to what occurred during the pilot study of this research. In addition to drawing attention to the shortcomings of in-depth interviews, Light points to the obstacles when observing informants,

“Users cannot be expected to give a detailed account or answer probing questions in the context and simultaneously maintain coherence in carrying out the task that they are attempting to comment upon.” (Light 2006: 177)

According to Petitmengin (2006), the verbal accounts gathered during observations are usually limited to the judgments and comments that the interviewee expresses about the task in progress, representing only a small part of the activity. Informants are so involved with the task in hand that they only partially aware of the way they do it. This could be ignored if the emphasis of the research is to observe and gather generalised verbal accounts and observations but if the aim is to engage with detailed accounts of interactions, experiences

⁵⁷ Ann Light (2006: 178) has clarified the ‘act of evocation’ through the following description, “Stop reading for a moment and imagine the last time that you went upstairs... Do you have a picture of steps ahead of you in your mind, or are you recalling a series of noises, such as doors closing below you and the scuff of your shoes, or feel of a handrail? In trying to remember, did you stare up and beyond this page, or down and away... That moment was the act of evocation. You may have noticed that the start of your recollection hinged on a specific sensory memory such as smelling polish or seeing the black strip on the edge of each stair”.

and emotions, asking the informants to talk whilst carrying out the task may not be useful (Light 2006).

During the evocative interview it is possible to gain more 'observational' insights and detailed accounts of experiences. The informant is encouraged to think about a particular episode in great detail, involving the activity under investigation. If the episode is part of a series of similar events, then one – the first, the last or the most memorable – is chosen for analysis: "tell me about the last time..." The adoption of a single occasion to reflect upon is essential for the evocation process. This gives the best chance that what is described is relived in detail, rather than being based on assumptions or memories. At the beginning of the interview, women were asked whether they agreed to explore in great detail a recent episode relating to their hair care routine. A comprehensive introduction to the interview is significant not only to create a relaxed environment but also to build the informants' understanding of the particularities of the method such as reasons for possible interruptions and the use of detailed questioning. The introduction made the women aware that they would go over certain parts of the episode numerous times and that I might interrupt them, asking a variety of questions. Questions are grounded in aiding the process of rediscovery or the visual, tactile, auditory, olfactory and kinaesthetic context through sensual questioning such as 'what did you hear, see, feel, smell at the time' and the spatio-temporal context of the experience through 'where and when' questioning (Petitmengin 2006).

Light (2006) has argued that unlike in-depth interviews, the evocative interviews had no pre-planned structure or topic guide, as the episodes to be explored were decided upon between informant and interviewer just before the interview. Therefore, the content and direction of the interview was flexible and in accordance with the informant's episode and experience, to facilitate a progression of the 'evocative state'. The flexible approach allows the researcher to deal with experiences and processes as lived by the informant. Although the questioning is non-directive, it focuses on the episode and the interviewer decides when and where more detail needs to be uncovered. This was often combined with interrupting the informant so that they stay with the experience through reformulating questions. On first sight, this might sound alarming when considering other interviewing techniques but here it is essential to concentrate on one particular episode in great depth. Through these interruptions the

researcher is able to ask for clarification and more detail. In order for the method to be successful the interviewer needs to develop a great deal of fineness and firmness as well as building a trusting relationship with the informant, so they were willing to engage in the process. Overall, the interviewing technique explored particular episodes rather than general descriptions of lived experiences and processes through its various dimensions (Petitmengin 2006).

Deciding what episode to work with during the interview sometimes created a hurdle; where an episode starts and ends was not easy to determine. At first, episodes were drawn on that reflected women's everyday hair care routines, such as getting ready for work. However, throughout piloting the interview⁵⁸ method it seemed more appropriate for the informants to choose the episode. For women to enter the 'state of evocation' was not easy, as they were unfamiliar with talking about mundane activities in such depth.⁵⁹ Therefore, episodes were easily mixed-up. This was usually avoided by letting the women re-discover the whole of the episode before going back over it again, so that the women were able to enter the 'state of evocation' and re-enact it in more depth. Although the method used supplied mainly detailed accounts of women dealing with their hair on a particular day, the analysis of the evocative and in-depth interview occurred simultaneously and therefore the division between the data gathered is not clear-cut.

Expert interviews

The in-depth interviews with various experts were conducted between 2005 and 2008. The purpose was to develop a working relationship with Boots the Chemist and to investigate the product development process and consumer research. The choice of experts as interview subjects was also based on an exploration of the interrelationship between production and consumption, including an examination of the wider systems that the practice of hair care is

⁵⁸ In August 2007 the evocative interviews were piloted after the initial pilot study was completed. The sample consisted of four women. My understanding of the method was based on academic writings that included example interviews to examine the technique in progress. In addition to the reading, I was fortunate enough to contact Anne Light who was trained by Vermersch, the founder of this type of questioning. She provided private tuitions on how to use the interviewing technique.

⁵⁹ The women responded differently to the evocative interview. Some of the women enjoyed the focused and non-directive approach of the interviewing method, as they could talk about a particular episode instead of their hair care in general. Others got more impatient with this type of questioning, as it required a lot of concentration from the informant.

part of. A methodology purely based on interviews with Boots' employees would have been at risk of uncovering not more than the contemporary fashion of hair care and would have excluded insights gained through an approach inspired by practice theory. As pointed out by the consumer insight manager at Boots, consumer research carried out for the product development process is based on gaining insights into the 'point of sale' and not into the dynamics of everyday hair care routines at home. The concentration of efforts mainly on the acquisition of hair care products and not on what is happening in the home represents one of the shortcomings of Boots' product development processes, in particular when these efforts try to address issues of sustainable living. Therefore, the interviews with the experts at Boots greatly shaped the content of chapter 3 that extends the critique of current sustainable consumption approaches and therefore sets up the context of this research in more depth. The interview guide and the content of the interviews varied, depending on the expertise of the informant.

Creative workshop

After completing the work in the informants' homes in March 2008 and conducting a first analysis of the interview material, a creative workshop at Boots Head office in Nottingham was conducted in November 2008. The aim was to examine the practice-orientated approach in relation to sustainable design and sustainable consumption strategies in creative activities. It explored the approach in relation to design thinking using multidisciplinary teams, consisting of employees at Boots, academics and industry actors.⁶⁰ In this research, the process of designing the workshop and its final configuration was regarded as a design entity in itself. It was used as a tool in the research process to reflect on the overall research question. This position has similarities to what Fallmann (2007) has identified as 'design-orientated research', in which design entities seek to engage with the development of new knowledge by including them into the research process. The emphasis of the research was therefore not on the development of marketable design outcomes but on seeking new knowledge through the use of design entities in the research process. Design activities consisted of developing the creative outputs for the workshop, such as developing

⁶⁰ The multidisciplinary teams at the workshop consisted of employees at Boots the Chemist from the formulation, packaging, CSR and marketing department and academics and industry actors from design, sociology, anthropology and business.

inspirational films and creative activities used in the workshop. These activities were clearly documented and critically reflected upon, addressing issues of rigour in qualitative research.

The objectives of the creative workshop were explained to the participants as being based on sharing of stories surrounding everyday hair care routines that were gathered as part of the study in women's homes. The aims were also explained to the participants: to identify and explore opportunities for changing everyday practices and to develop these into interventions that could deliver improved sustainability. The term design intervention was chosen, since participants were encouraged to think about opportunities for practice changing in a broad sense, not only considering product-based interventions.⁶¹ Although the participants were encouraged to engage with the data gathered in women's homes, the overall intention of the workshop was not to evaluate the potential of the design outcomes or the usefulness of the data to develop them, but to investigate the discussions that arose. This examination aided the process of exploring whether the discussions and outcomes engaged the participants with a way of thinking about everyday routines inspired by practice theory, and if these discussions addressed some of the deficiencies of current sustainable design and sustainable consumption approaches.

To focus the discussions within the workshop, three key themes were developed from the data analysis of women's hair care routines: 'products and techniques', 'temporalities of practices' and 'using and keeping products and tools'. During the workshop, participants were divided into multidisciplinary groups, each working on one of the key themes. A PowerPoint presentation introduced the participants to the workshop aims and objectives, the PhD study, including a brief introduction to practice theory and women's hair care routines so that each participant could engage with the ethnographic material in a meaningful way. The presentation particularly focused upon the performance of hair care routines and material interactions with hair, its products and tools that result in a resource intensive use stage. The introduction to practice theory and the approach taken in the study was only brief, as the main emphasis of the workshop was not for participants to reflect on and evaluate the approach, but to engage with it through creative activities.

⁶¹ Design interventions can be products, graphics, prototypes, concepts, scenarios, systems, services, environments and probes.

In addition to the PowerPoint presentation, the participants were introduced to the workshop themes through three ‘inspirational’ films⁶² that were completed prior to the workshop. They consisted of images, quotes and film clips gathered during the work in women’s homes and when observing friends and family members.⁶³ Each film was based on a story and therefore had two main characters: a female character who represented the twenty-four women in the study and a product character. The design of the films was meant to reflect the richness and complexity of the data gathered through applying a practice-orientated approach to the examination of women’s hair care routines. I was therefore aware of not reducing the complexity of the data gathered, whilst creating the content for the films. The aim was not to provide participants with easy to access “usage research for design” so that they could develop marketable design outcomes (Boess et al 2008: 1). Workshop participants were allowed to bring their own interpretations to the films. They were regarded as inspirations that engaged the participants with a way of looking at the everyday in terms of what women do with their hair and how it is worn. Instead of providing answers to design, the films were meant to challenge participants’ ways of thinking and ask questions geared towards practice changing, sustainable design and sustainable consumption.

Although there was a pre-planned structure to the workshop, the methodology was flexible. I guided the participants through the introduction and workshop activities in accordance to what felt appropriate at the time, whilst considering the overall research question of the study. The workshop participants were provided with engaging and inspirational materials such as different coloured pens, paper, hair magazines, glue, play-doh and cards on each table to illustrate the active role of the participants during the event. In addition to the participants, a drawer/artist was employed to capture the group discussions that emerged during the activities. The decision to use a drawer instead of a scribe or tape-recorder was to emphasise the creative nature of the workshop and to inspire the participants to think and work not only with words, but visually. Even though the drawer was not sketching what the participants were saying all of the time, the fact that he was drawing provided a sense of focus to the discussions. Several of the workshop participants considered the presence of someone drawing as liberating.

⁶² A synopsis for each film is included in Appendix 8: workshop report.

⁶³ After the pilot study, I started to film and observe friends and family members, shampooing, conditioning, drying and styling their hair. The film clips provided some of the visual material for the inspirational films.

After introducing the participants to the themes and viewing the films, they were introduced to the three creative activities: ‘responses to the films’, ‘re-birth’ and ‘random links intervention’.⁶⁴ The IDEO’s method cards⁶⁵ and design projects that are conducted on the degree course at Goldsmiths College inspired these activities. The activities engaged participants not only in writing about hair care but also in making and drawing. The workshop concluded with a review session of the outcomes developed by the groups, using a ‘Dragon’s Den’ format⁶⁶. This session was filmed with a video-recorder in order to collate the final discussions.

The aim of the workshop was to build on the work conducted in women’s homes, which comprised the main plank of the methodology, to see whether the workshop discussion in response to the ethnography addressed some of the deficiencies in previous sustainability approaches. The discussions and design interventions that arose during the workshop in particular aided the process of reflecting on the role of design to change practices.

Analysis of the overall research data

The analysis of the ethnographic material began whilst working with the informants in their homes. Data collection and data analysis was part of an iterative process. As a result the analysis of the data had much in common with an ethnographic data analysis (Hammersley and Atkinson 2007). Each interview was transcribed in the qualitative analysis software ‘Transana’ (2006)⁶⁷ after each interview. It allowed for a quick, accurate and verbatim transcription of the interviews. The qualitative analysis programme ‘Nvivo’ (2006)⁶⁸ aided the process of creating an index for the analysis of the interviews⁶⁹ and to develop research

⁶⁴ A detailed outline of the workshop activities is included in the outcome section in Appendix 8: workshop report.

⁶⁵ IDEO Method Cards are a collection of fifty-one cards that describe a variety of different research methods. These methods are meant to help researchers and designers to understand the people they are designing for. They have been developed by a design consultancy called IDEO.

⁶⁶ The idea of using a ‘Dragons’ Den’ format was based on the TV programme called the ‘Dragons’ Den’. In the programme people can pitch their inventions to potential investors i.e. the ‘Dragons’ jury’ who then have the opportunity to question the inventor in order to decide if they would like to invest.

⁶⁷ Transana is a software package that allows researchers to transcribe, manage and analyse high volumes of audio and digital video data.

⁶⁸ Nvivo is a qualitative data analysis computer software package that helps the researcher to manage and analyse high volumes of unstructured data. The software allows the researcher to easily theme, sort and arrange data and search for relationships within the data through built in searching, linking and modelling tools.

⁶⁹ The index is included in Appendix 4.

themes.⁷⁰ The identification of the themes started with a familiarisation phase of the interview data, reading and re-reading the interviews. At this stage the names of the themes were kept close to the language of the informants, including words such as ‘greasy’ and ‘healthy’ to describe the hair. The themes were therefore not pre-determined but developed throughout the data collection and analysis (Hammersley and Atkinson 1995). All of the data was of equal importance, only through the process of reflection, exploration and discovery detailed descriptions of the practice of hair care emerged and the analysis started to take shape.

The index of themes was regularly reviewed. Themes were added and grouped. For example, all the themes that described various states of hair were grouped into a code called ‘standards’. Patterns and repetitions were identified across the interviews, such as comparisons between women who washed their hair daily and the ones who shampooed their hair less frequently. Particular attention was placed on parts of the data that at first created more questions than answers. For example, Pamela’s account of her hair sometimes just feeling like a scarf was initially regarded as a peculiar description but after considering the accounts of other women initiated a closer investigation of the relationship between body and hair (as discussed in chapter 4). These closer investigations often initiated the writing of more detailed descriptions that outlined these phenomena. The process of writing and re-writing the ethnography became a substantial part of the synthesising of the data (Hammersley and Atkinson 2007).

The development of detailed descriptions derived from the emergence of more defined themes. These themes were based on the various routine activities involved in hair care, including women’s interpretations and evaluations of their actions. The important role that sensual interactions with hair play in determining how and how often women dealt with their hair emerged early on in the research process. The identification of themes, such as cycles of dealing with hair, visual interactions with hair, descriptions of hair and emotions involved in hair care initiated an exploration of the interrelationship between those themes. This examination was the basis for writing detailed descriptions of the various factors

⁷⁰ During the pilot study, the interviews were indexed with pen and paper but because of the sheer volume of the interviews conducted I decided that the transcription and the sorting of the data was simplified by using a computer programme. The data management tool speeded-up the process of sifting and sorting through the data in accordance to the key themes.

involved in determining how often women deal with their hair, exploring for example issues concerning the ability to control the hair or the balance of substances on it (discussed in chapter 4/5). The identification of themes relating to practicalities and processes of dealing with hair facilitated a detailed description of the steps and stages women take when dealing with their hair and an understanding of the role of products, tools and skills involved (discussed in chapter 7). The role of friends, family members and hairdressers emerged as significant for the development of routines. These themes, relating to the various social relations that impact on the informant's hair, developed into exploring issues of trust and risk (discussed in chapter 8).

In addition to using more conventional social science techniques for the analysis of the data, I engaged with it through the visual material gathered and the production of films and sketches. The visual material consisted of photographs of the places where women do things to their hair and keep their hair care products and tools and films of women dealing with their hair. The photographs and films provided visual traces of women's hair care routines, providing more 'observational' insights. They played a crucial role in exploring the relationship between the conduction of hair care routines, places of 'doing' hair at home and the frequency of using certain products and tools (discussed in chapter 6). Breakdowns of these elements were created for each woman (for example Pamela: frequently uses four tools and three product, etc.) and collated in three tables⁷¹. These breakdowns made it possible to compare numerous factors that impact on women's hair care practice, such as factors that reinforce current routines.

In addition to mapping out the relationship between themes in breakdowns, sketches⁷² and during writing exercises, planning the workshop assisted the analytical process. As part of the planning process, interview themes had to be translated into a visual language to create the 'inspirational' films for the workshop participants. This process of visualising some of the data sparked new questions that were left unexamined during the process of creating interview themes (i.e. building knowledge through drawing or making). In return the data produced by the workshop participants in response to the films, such as drawings, brainstorming and 3D models, aided a deeper reflection on the role of design to change

⁷¹ The tables are included in Appendix 5/6/7.

⁷² Example sketches are included in Appendix 9.

practices. For example, the workshop participants created design interventions that considered not only material aspects of the practice to bring about change but also social ones, initiating a more in depth engagement with various social relations outlined in the ethnography. Overall, the data gathered during the workshop, the literature on material culture and practice theory facilitated turning the detailed descriptions of women's hair care into a detailed understanding of the multi-relational elements that make up a practice.

In the following chapters, quotes of the informants, descriptions of their hair care routines, topics discussed during the workshop and quotes from the 'expert' interviews are incorporated into the thesis. The descriptions' from the female informants form the main data source. Whenever appropriate these description include photographs of the places where women do things to their hair and where they keep their hair care products and tools. The interview quotes, photographs, workshop discussions and drawings that make up the thesis all inform each other. They are not "cherry-picked" (Spencer and Pahl 2006: 221), but are grounded in the analytical process that considered the numerous data sources.⁷³

Summary

The focus of this research is upon examining a practice-orientated approach in the context of women's hair care routines. Although methodological insights of research projects that draw on a practice-orientated approach are still in development⁷⁴, researchers (Halkier 2006; Shove et al 2007) stress its emphasis on the performance of the practice in everyday life. Researchers have therefore adopted methodologies that allow for an in-depth involvement with informants, enabling them to explore the practicalities and processes of everyday routines. The chapter has argued for a methodology that, at least from the outset, is ethnographic in intent, as it allows for an in-depth involvement with the women that were involved in the study. Such an involvement allowed for an examination of women's hair care routines in more 'natural' settings (Hammersley and Atkinson 1995) through longer and not always single visits to their home.

⁷³ The interview quotes throughout the thesis are marked with quotation marks.

⁷⁴ Although methodological insights of research that draws on a practice-orientated approach are still in development, the focus of this research is not on testing or developing a methodology. Methodological insights are noted in the conclusion but they are only secondary.

The pilot study demonstrated that the activities of what women do with their hair are considered private and intimate, highlighting the inevitability of a more explorative approach and the use of more creative methods, as observations were only rare. In order to conduct the study using ethnography a crucial aspect of the methodology was to explore alternative strategies to gain more ‘observational’ data and not merely rely on verbal accounts. A more unstructured involvement with the women and other strategies such as the incorporation of hair care products and tools during the interviews, investigation tours around the home, and evocative interviews allowed insights to emerge into the practice of hair care through visual, verbal and written accounts. Similarly, the workshop at Boots the Chemist provided an opportunity to engage with the practice-orientated approach through creative activities that explored some of the ethnographic data in multidisciplinary teams.

The use of an ethnographic methodology can initiate concerns over the feasibility of a designer utilising social science methods and the role of ethnographic data gathered as part of this study. Therefore, the first half of the chapter described the clear differences between ethnographies that are conducted as part of a design process that aims to produce design outcomes and the methodology of this study. This research never attempted to be a user study. The involvement of social science methods was not meant to identify women’s hair care needs to inform design outcomes, but to question the feasibility of current sustainable design and sustainable consumption approaches and inform debates about change, including the role of design, through exploring a practice-orientated approach. A practice-orientated approach to examining women’s hair care routines and the use of an ethnographic methodology, promises a change of emphasis. Instead of concentrating on individual behaviour, sustainable design approaches explore the dynamics of everyday practices. This approach requires the examination of the interactions women have with their hair, products and tools in existing hair care routines. Women and their hair care products and tools are not explored in isolation from everyday life but considered as related.

The following chapters engage with the analysis of the data gathered during the expert interviews and the creative workshop, but particularly with the work carried out in women’s homes. Before examining the practice of hair care in the context of what women do with their hair at home, the next chapter empirically verifies the deficiencies of sustainable

consumption approaches through investigating Boots' product development process. The chapter draws attention to the interrelationship between production of hair care products and their consumption at home but also stresses that the practice of hair care evolves away from the production processes when women wear their hair and deal with it at home. These hair care routines are examined in considerable detail in chapters 4 to 8.

Chapter 3 Extending the critique: Boots' product development process

Introduction

This chapter presents a discussion of an analysis of the interviews conducted with the employees at Boots the Chemist⁷⁵, commercially known as Boots, to explore their approach to encouraging sustainable consumption, whilst reflecting on the product development process. It particularly explores Boots' consumer research that develops insights into product innovations. In the analysis of the interviews, it transpired that Boots characterise their 'consumers as decision-makers' (Shove 2004) whenever they develop strategies for sustainable consumption. Boots' efforts to change people's behaviours towards sustainability are founded on the idea of providing customers with sufficient information so that they can make a sustainable product choice at the point of sale. As outlined in the literature review (chapter 1), this approach has been criticised as it disregards the complex dynamics of everyday life. This chapter substantiates that criticism, exemplifying it in Boots' sustainable consumption approach and the product development process. The criticism is therefore empirically verified, which enables a deeper reflection on the remedies a practice-orientated approach can provide to strategies examined in chapter 1. In this chapter such a reflection is supported by outlining some of the activities and discussions from the creative workshop⁷⁶ that was conducted as part of this research. Concentrating on practices has the potential to change Boots' approach to sustainable consumption, from one that tries to influence choice making at the points of sale to one that examines the 'doing and wearing' of hair in everyday life.

The first part of this chapter reflects on Boots' sustainable consumption approach whereas the later part delineates Boots' product development process. Despite the fact that designers

⁷⁵ The company consists of 3200 health and retail outlets, of which 2900 have pharmacies and 290 have optician practices. In addition there are two head offices. Initially founded as a family based business in 1850, Jesse Boot sold the company to the American United Drug Company in 1920. In 2006 a merger with Alliance UniChem plc meant that Boots Group plc developed into Alliance Boots. Boots continues to be a manufacturing chemist, selling about sixty percent of its own products. Additionally, they are involved in the whole supply chain, from creating product ideas to retailing through its network of shops. Some of the brand products Boots sell are manufactured by other suppliers, such as 'Head and Shoulders'. The marketing team continuously try to re-develop Boots' brand identity, which is currently based on the following values: partnership, trust, service, entrepreneurship and simplicity.

⁷⁶ A full report of the workshop can be found in the Appendix 8 of the thesis. Key points of the report are included in this chapter to reflect on the potential of a practice-orientated approach in relation to Boots' product development process.

do not lead the produce development process at Boots, a product's conceptual development through to the point of manufacture had noticeable similarities with a design process. The description here of the process in this chapter is not intended to be a comprehensive examination, rather it provides a review of Boots' approach to gaining consumer insights and their development into product outcomes. This makes it possible to identify how Boots positions its consumers within the overall product development process, considering them as individuals who can articulate their needs and make rational choices but have subjective experiences. The process often disregards the producer's influence on what women do with their hair and how they wear it. Therefore, this chapter not only allows for a substantiation of the critique, but it offers a reflection on the interrelationship between producers, such as companies like Boots, and consumption, such as practices at home, from the viewpoint of Boots' employees that clearly differs from a practice-orientated approach. This differentiation is further revealed through referencing key debates discussed during the creative workshop that engaged with the practice of hair care through creative activities.

Whilst reflecting on the relationship between producers and consumers, this chapter considers the factors that influence the practice of hair care so that it changes or stabilises. Shove's (2003) model of a pinwheel, representing the impacts of shifts in routines that can make practices more or less resource intensive and Bijker's (1997: 84) concept of 'closure' are used to explain the stabilisation of women's hair care routines. The research shows that in Boots' product development process, the way that products are positioned in relation to the claims made for them, their performance and their appearance, achieves 'closure' in respect to certain features of their design. Although Boots is in a unique position of being involved in the whole supply chain, from developing the product idea to producing its own innovative products, to retailing them in the shop, an incremental approach to sustainable consumption emerges from the analysis of the interviews.⁷⁷

Sustainability at Boots and its integration into the product development process

Boots' dedication to sustainability is described on their website, it states:

⁷⁷ The following account of Boots' product development process and sustainability work is based on interviews that were conducted between 2005-2008 with the sustainable development manager for products, the sensory evaluation manager, the Botanics brand manager, the consumer insight manager, the consumer product evaluation manager, including new product introduction and development, the scientific advisor for hair care and a formulation developer.

“Our commitment to sustainability means that we place corporate social responsibility as an integral part of our corporate decision-making process, with effective leadership at the highest level.” (Boots 2009)

Although the emphasis of this statement has to be seen within the wider climate where there is an expectation of companies to be involved in corporate social responsibility, it appears to be accurate when considering the work of Boots’ corporate social responsibility (CSR) team over the last few years. Since creating a CSR team in 2003, a framework for a CSR strategy was established, comprising four areas of concern: community (community and healthcare), environment (carbon management), marketplace (stewardship and integrity) and workplace (employee wellbeing). Within the area ‘environment’ Boots includes approaches to product sustainability that try to embrace the whole product lifecycle from raw material, production, and distribution to use and disposal.

Boots considers the analysis of environmental impacts during the creation, manufacturing and retailing of products in five different areas: product stewardship (chemicals, biodiversity), waste reduction (lean product design, transit packaging), resource efficiency (use of materials, optimum packaging levels), supply chain (supplier assessment, ethical assessment) and innovation (sustainable product design). This list highlights the emphasis on efficiency during production rather than on the environmental impact of the product’s use phase and the dynamics of everyday life at home. Currently, Boots’ sustainable consumption approaches are directed towards quantifying the environmental impact of products during their whole lifecycle, to build an understanding of potential measures that could illustrate the overall environmental impact of each product to their consumers. It is hoped that, with this information, consumers will be able to make sustainable product choices at the point of sale. Boots regards their ‘consumers as decision-makers’ when it comes to making the ‘right’ choice for the environment (as defined by Shove 2004).

The communication surrounding sustainability issues to consumers remains incremental. The consumer insight manager explained that their approach to sustainable consumption is often based in the customer’s lack of interest in issues surrounding sustainability when it comes to their hair care routine, as the development of products still relies on the articulation

of consumer's 'unmet needs'. When buying hair care products the need for value and quality to achieve hair that looks and feels 'right' is still a higher priority than 'saving the planet'. The consumer's interest in sustainability issues in relation to their hair care routine seems to be low.

"People are thinking about themselves and not the planet [...] Sustainability is not in the forefront of their mind." (Boots' consumer insight manager, (21.08.07))

Similarly, the scientific advisor for hair care stressed the importance of the performance of products to achieve certain looks. Customers would not be willing to give them up to purchase more "natural" products or change their practices. The sustainable development manager for products expanded on his colleague's statements, explaining that consumers regard Boots' products as being "hygienic" and "clean" and therefore environmentally sound. This perception has implications for the consumers' behaviours at home, as they do not perceive the need to change them. Moreover, Boots' is unwilling to "shout" too loudly about sustainability in case they lose their consumers' trust.

Sustainable design and sustainable consumption strategies in Boots' product development process therefore rely heavily on the interest of the consumer in the issues of sustainability and the expressions of their 'unmet needs'. The CSR team explain the lack of concern expressed by the consumer through the invisibility of the environmental effects when consumers buy new products, and in particular when they use them at home. Products are often small and therefore do not produce masses of waste; similarly the use of electricity is often invisible. The hidden effects of consumption have been widely recognised, as consumers "readily accept new objects that are powered by electricity, yet rarely contemplate where the power is coming from" (Van Hoff 2003). The CSR team's approach to influencing consumers' behaviours and attitudes towards the environment is based heavily on making these invisible environmental effects more visible. Firstly, the team concentrates on impacts that are more apparent to the consumer, such as the accumulation of waste through product packaging. Secondly, they try to find ways to quantify the environmental impacts of products throughout its lifecycle to communicate these measures

to the consumer, particularly on the product packaging at the point of sale so that they can make the ‘right’ choice.

According to the sustainable development manager, redesigning the packaging of products has a variety of different potential impacts on reducing resource use in consumption and production. Firstly, packaging is physical and therefore a thing that can be designed to be more environmentally friendly and secondly, it can also communicate sustainable messages, encouraging customers to change their behaviours towards the environment. One of the first sustainable design projects that Boots undertook was the recycled packaging project. The recycled packaging project started as a pilot project that was funded by the UK government’s Waste & Resource Action Programme (WRAP) and developed to such an extent that today the ‘Ingredients’ and ‘Botanics’ toiletries ranges are packaged in containers that consist of thirty percent recycled plastic. According to the Botanics brand manager, this was made possible because consumers readily expressed an interest in the environmental impact of product packaging which manufacturers use to sell their products. Boots is keen to increase the recycled packaging content of each bottle but struggles to obtain plastic that can be recycled into toiletry containers. Work continues to develop new packaging concepts, such as refillable packaging so that consumers can make sustainable product choices when they buy hair care items. Numerous packaging concepts were also developed by one of the groups during the creative workshop⁷⁸ at Boots the Chemist, demonstrating the potential to reduce environmental impacts by redesign.

Having successfully introduced recycled packaging, the CSR team attempted to go a step further, enabling consumers to make a choice towards sustainable products. The team regards Boots’ unique position, where over fifty percent of Boots’ own product brands are designed and produced in-house, as an opportunity to develop a more “holistic” approach to implementing sustainability in the product development process. This approach considers the whole product lifecycle, from concept to use and disposal at the end of a product’s life. In 2007/08 the team developed a database to record, measure and report on the CSR performances in each part of the businesses so that they could assess and measure the overall environmental impact of each product. Currently, every new product is examined as part of

⁷⁸ An outline of the workshop is included in Appendix 8: workshop report.

a risk assessment. Criteria for the sustainable development of products are part of this assessment model. Although the team has been able to integrate sustainability criteria into the product development process, they wanted to find a way of communicating the environmental impact of products to the consumer.

The team has started to examine various measurements that could quantify the environmental impact of each product. Using a rating system, the environmental impact of each product could be made visible to consumers, enabling them to make the 'right' choice. At first, the team worked with the 'Carbon Trust'. They conducted a lifecycle assessment of two shampoos, measuring their environmental impact and quantifying the impact into a carbon rating. To trial the rating with consumers, the team piloted one of the shampoos that stated the carbon impact of the product in Boots' stores. Boots forwarded a questionnaire to consumers through their Advantage Card⁷⁹ system, examining what consumers knew about the emission of carbon and if they were interested in the subject. The results showed that although consumers were willing to reduce the carbon impact of products, they often struggled to relate to the carbon rating, as it seemed too abstract. Currently, the CSR team is working with the Green Alliance⁸⁰ on the concept of designing out waste throughout the product lifecycle, using the concept of waste rather than carbon as a measurement. It is hoped that when using the concept of waste reduction, consumers can more easily relate to the product ratings at the point of sale. As pointed out by the sustainable development manager, waste is something that consumers generally want to avoid and a concept that relates to their everyday life, as it connects to saving money and being economical. The work with the Green Alliance is still in progress.

Boots and its CSR team seem to adopt a low risk strategy when considering the implementation of sustainability into the product lifecycle and the new product development process. Efforts to engage consumers in sustainable behaviours through communicating a product's environmental impacts draw attention to an approach that is mainly concerned

⁷⁹ Boots' advantage card is a customer loyalty card that rewards customers in order to encourage their loyalty to the company. Each time a customer makes a purchase, its system is notified and certain amount of award points are added to the account of the consumer. These points provide the customer with various discounts. In addition to encouraging the customer to be loyal, the companies often use the data for their market research to get insights into the customer's buying behaviour.

⁸⁰ Green Alliance is a charity and company limited by guarantee that works closely with businesses and the third sector to bring policies of climate change and environmental issues into the mainstream.

with providing consumers with meaningful information. The consumer is informed and made aware so that they can choose sustainable products. Instead of using a practice-orientated approach to sustainable change Boots conforms to Shove's (2004) characterisation of 'consumers as decision-makers', as they perceive it as the most viable strategy for change. The limitations of this approach to instigating more sustainable ways of living have been discussed in the literature review (chapter 1). Consumers are considered as autonomous individuals who make rational choices, assuming that lifestyles can be changed by raising awareness and making the environmental impact observable. Although steps are being taken to reduce the impact of products during the sourcing, manufacturing and retailing phases, the use of products in customers' homes that has a particularly high impact, such as the carbon footprint of shampoo, is mainly left unchallenged. Therefore, the deficiencies of current sustainable consumption approaches are reflected in Boots' CSR strategy, concentrating on sustainable choices rather than the dynamics of everyday practices.

To develop an understanding of the origin of the sustainable consumer choice approach to sustainable consumption, considering the strategies developed by the CSR team is not sufficient, rather it must take into account how these relate to the wider context of the company. As suggested by the consumer insight manager, when examining the new product development process in more depth, the emphasis on identifying 'unmet needs' and connecting these with 'emotional triggers and rational benefits'⁸¹ in order to encourage customers to buy products. Similarly, Boots' approach to communicating sustainability issues to their consumers relies heavily on consumers' expressing a need for it, as seen above. Boots' product development process and sustainable consumption strategies demonstrate that emotions, needs and products associated with hair care are often explored in isolation from the dynamics of everyday life. Innovations are examined for whether they comply with consumers' articulated needs and are developed into various product ideas that promise to meet those needs, corresponding to the "individualistic concepts of consumer choice" at the point of sale that Shove et al (2007: 151) identify. The product development process is focused on acquisition and diffusion of individual products to increase sales,

⁸¹ The expressions of 'emotional triggers and rational benefits' might sound like a paradox and 'unmet needs' were used by the consumer insight manager at Boots and seemed to be common terms in marketing departments of health and beauty retailers. Products need to have rational benefits but also impact on customers' emotions so that they want to buy them.

rather than on the integration of products into everyday practices in order to influence ways of doing things with hair that impact on the amount and type of resources consumed. The product development process and the associated shortcomings of bringing about sustainable change is the context of the next section of this chapter. An outline of these shortcomings enables a deeper reflection on the advantages of a practice-orientated approach may provide. In the next section such a reflection is supported by summarising some of the activities from the creative workshop that was conducted as part of this research.

The product development process: meeting consumers' 'unmet needs' and identifying 'emotional triggers and rational benefits'

According to the consumer insight manager, the market for hair care products is very "cluttered". There are lots of different brands and product ranges. In contrast to other product categories such as teeth whitening products, there is no dominant brand leader in the hair care market. As a consequence, hair care consists of a vast variety of product ranges and brands that produce countless purchasing choices for the consumer. Competing within a "cluttered" hair care market it is important to create an innovative product development process in order to compete with other personal care manufacturers, as new products ideas are essential.

"Innovation is a big way of bringing in new news." (Consumer insight manager, (21.08.07))

To facilitate increased sales it is therefore vital for Boots to constantly produce new product ideas to differentiate the company's products from their competitors.

Over the last few years, the product development process has become more holistic at Boots. The various teams have started to work more closely with each other. This was particularly indicated by the formulation developer.⁸² The formulation team had to change their view on the formulation process from thinking purely about what goes into the packaging to start considering the whole product. Nowadays, there is an interplay between the teams coming up with design ideas for packaging and developing a formulation for it. The insights team,

⁸² The formulation developer develops a formula for the preparation of hair care products such as shampoos.

formulation team, packaging team, technical support group and category team regularly meet to discuss, compare and brainstorm insights into trends that might represent the ‘unmet needs’ that have been observed in consumer research. The involvement of all teams at each stage of the product development process to instigate a more holistic approach appears to be an interesting step towards the development of novel innovations that consider the sustainability of the whole product lifecycle. Nevertheless, the development of new products still relies on consumers articulating ‘unmet needs’ rather than the development team exploring what people do with their hair in everyday life.

The consumer insight manager, who is responsible for the introduction and development of new products, regards her team as the “mouthpiece of the consumer”, discovering their “unmet needs”.

“I know most about what the consumers really want from our products... A lot of it is ascertaining what their unmet needs are.” (Consumer insight manager, (21.08.07))

The team regularly examines external market review reports, print, broadcast and internet-based material and Boots’ advantage card system to gain insights into consumers’ ‘unmet needs’. They log onto chat rooms and internet forums such as ‘High Village’⁸³, conduct in-house consumer research projects and investigate the different product categories at Boots. The team gathers what they know about each category and what technologies seem to be emerging, whilst comparing them with each other to gain insights and therefore develop new product opportunities. Further, the team ensures that the product ranges are complete, checking the role of each product and brand to avoid low sales. Depending on the insight they gained (i.e. the ‘unmet needs’) a variety of outcomes can be developed such as a new brand, a product range or a missing product in the current range.

The product development process varies depending on the origin of the product idea and the type of consumer insight acquired. Sometimes the research approach is explorative and based on objectives such as examining ‘consumers’ attitudes and behaviours to determine their unmet needs’. The following research questions could be addressed: ‘what are consumers using?’, ‘what are their attitudes?’ and most importantly ‘what are consumers

⁸³ High Village is an online discussion forum where women can hold conversations and exchange tips about health and beauty issues such as hair care in the form of posted messages.

currently not getting from all of the hair care manufacturers?'. Sometimes, the research objectives for the insight team are more clearly defined, particularly if consumers' needs have been identified without the necessity of conducting any explorative research. The research becomes more confirmative (McQuarrie 2005) to make sure the teams have fully understood the 'unmet need'.

New product development ideas do not only occur through identifying consumer insights but also by the invention of new technologies, for example new product formulations for shampoos, conditioners or styling products. New materials offered by a supplier can trigger new formulations. For more far-sighted hair care innovations, the formulation team and scientific advisor for hair care work closely with universities to develop so called 'crazy ideas'. Subsequently, the employees of the formulation team, who work for the 'product bank'⁸⁴, can create the first physical building blocks for these new formulations: how can the particular characteristic of the products such as 'anti-frizz' be worked into the formulation base. Often, new formulations wait in the 'product bank' until the marketing team or insight team 'pick them up'. This usually happens when the new formulation matches an identified consumer need, emphasising the importance of a product idea having to correlate with an 'unmet need' before making it to the market.

These ideas are explored in team 'blue sky thinking' workshops. The aim of these workshops is to identify 'emotional triggers and rational benefits' that promise to match the discovered 'unmet need' to establish the product's selling points. After the brainstorming sessions, product ideas are further built upon. Most importantly, the identified product solutions need to be worked-up in compliance with the 'consumers' language'. Product ideas are developed into product concepts. The involvement of consumers at this stage is crucial for Boots. The insight team presents the product ideas to groups of consumers to discover how they describe them in their own language: what would be the 'emotional triggers and rational benefits' to purchase such a product. The team gathers words and descriptions relating to products and hair to develop about twenty product concepts.

⁸⁴ The 'product bank' is a collection of formulations for products that are on sale at Boots or potentially could be sold if the consumers articulate the 'unmet need' that it tries to address. The team that works for the 'product bank' test the 'manufacturability' of a product idea.

At first, one product idea can result in the development of a number of products that can occupy different positions in relation to consumers' needs. For example, an anti-dandruff shampoo might be positioned more rationally or emotionally. Following the consumer insight manager's interview account, a more rational/scientific approach would be to stress, "we know that you've got the most chronic dandruff and you want to get rid of it forever. That's why we have been developing this scientifically proven formula for the last twenty years which is going to be leading edge of science..." On the other hand, a more emotional approach that might appeal to a different target group would emphasise, "we know that dandruff is a problem and your hot dates are a problem because of it so we're going to make you look gorgeous... we've developed this product which will get rid of your dandruff and will make you look beautiful". Numerous possible positionings are developed to identify the main message and benefits and to determine a product claim.⁸⁵ After developing the final positioning, the teams know how to develop the product. They have worked out the appearance of the formulation and packaging, the product claim, the target group and a launch plan. Boots is keen to develop a 'single-minded' positioning rather than trying to communicate all of the potential 'benefits' of the product.

When considering the first parts of the product development process, the identification of consumer needs turns out to be a significant requirement in the decision-making process of what type of products are sold at the Boots' stores. This approach is further exemplified in Boots' reaction to the popularity of hair straighteners, designed to create straight looking hair. Hair straighteners use heated ceramic plates, and therefore have the side effect of splitting the hair. When this became apparent the main research objective for the Boots' insight team was to determine what consumers' concerns were with regards to their grooming experience, they needed to identify the variety of elements that can cause hair 'damage'. The main objective was to identify consumers' 'unmet needs' by exploring their concerns and attitudes about 'damaged' and 'unhealthy' looking hair. These articulated 'unmet needs' were regarded as 'great opportunities' to develop and offer new products. The existence and development of needs (i.e. where they came from, why they developed, what is consumed and how this affects everyday hair care routine) was often left unquestioned and taken for granted.

⁸⁵ A 'product claim' can be a sentence, a word or an implication of what the manufacturer affirms the product will do to the hair, for example the product 'revitalises' the hair.

The need is satisfied with the new arrival of a product rather than by re-designing or questioning the hair care routine that caused the need in the first instance. Over the recent past numerous heat-protecting products have been developed to prevent and counteract the ‘damage’ hair straighteners can cause, such as the ‘Trevor Sorbie’s’ ‘Straightening Addict’ range that consists of five products, such as shampoos and conditioners that should be used in conjunction with each other. This approach might not be surprising. Boots is a retailer and therefore creates and sells products. Nevertheless, when the aim is to influence what women do with their hair at home to make the practice more sustainable a more holistic approach is needed that considers ‘needs’ as dynamic. During the research in women’s homes, the informants often questioned whether certain products were actually meeting their needs, in particular products that are supposed to ‘protect’ the hair.

Boots’ persistent search for consumer needs and the unquestioning way of meeting them implies that ‘needs’ are regarded as exogenous⁸⁶ from the dynamics of everyday life and the hair care market itself. They need to be met through the development of product solutions. The origins of needs are not questioned, rather they are ‘taken for granted’ and ‘self-evident’ (Slater 1999: 51). As highlighted earlier, when women expressed concerns about ‘damaged’ hair, Boots’ recognised this concern as an ‘unmet need’ that was met by the introduction of ‘protective’ products. The origin of hair ‘damage’ might have been acknowledged by some employees at Boots but is not questioned further. The need to protect the hair from potential ‘damage’ is regarded as a self-evident ‘need’ that has to be met. When visiting a Boots’ store and examining the hair care products on the shelves it seems that ‘unmet needs’ are not only articulated by the consumer but are also indicated to them when buying new products. Lupton (1998) has argued that product advertising and the positioning of products regularly tries to evoke emotions in customers. These emotions build on anxieties, insecurities and feelings of guilt that have sometimes been established by companies, as they promise to provide products that address them.

Needs and emotions are often reflected in the product claim and further developed into marketing messages that influence the appearance of the packaging and formulation. The

⁸⁶ Describing needs as exogenous has arrived out of mainstream economics. Here, needs are regarded as independent from the market instead of being developed as part of it (see Slater 1999 for an in-depth discussion).

hair care products on the shelves of Boots' stores can be clearly divided into those directed at result based needs, such as 'enhanced layers', and those aimed at unacceptable 'states' of hair, such as 'dry coarse and rebellious hair', purely by the descriptions on the front of the packaging. They clearly distinguish for the consumer what is acceptable hair and reveals how hair could potentially look if certain products are used. Emotions are evoked so that the consumer can make an apparently rational decision to buy a product for their hair care routine. Therefore, 'unmet needs' and emotions are not only articulated by the consumer but also developed by manufacturers, as they reflect and create what is culturally acceptable hair and, consequently, influence the amount and type of resources consumed at home.

From a practice-orientated perspective, needs are not regarded as exogenous but emerge through performing everyday practices and being able to demonstrate that one is competent at the practice in question (Warde 2005) - 'doing and wearing' hair in the case of this study. The introduction of hair straighteners into the market influenced the way women could do their hair, the skills needed to accomplish certain results and ideas around what is regarded as 'straight' hair and, later on, as 'damaged' and 'unhealthy' hair. The use of hair straighteners in daily life created the 'need' for various products that would 'protect' the hair from the heat. Even on a brief examination the introduction of hair straighteners and Boots' response, suggest that producers do not 'innocently' meet 'needs' but are involved in configuring them (Shove 2003: 22) through introducing various products and associated standards for how hair should be kept. Nevertheless, what women do with their hair, ideas of what it is to have straight hair, and the use of hair straighteners are also based on a set of actions, ideas and skills reproduced in everyday life. Women do not always passively accept product claims, the constraints and possibilities scripted into products, and the symbolic aspects of their design (Jelsma 1999; Appadurai 1986), as these factors are mediated when engaging in the hair care routine in the everyday (Shove 2003: 191). Production and consumption are interdependent (Entwistle 2000) but are also theoretically treated as autonomous domains (McMeekin and Southerton 1997).

Producers such as Boots often concentrate their new product development process at the point of sale and on consumer needs rather than on examining the consumption stage, as

confirmed by the testimonies of Boots' employees. Therefore, they use a limited approach to understanding the changing dynamics of everyday practices.

“A lot tends to be about what is happening at point of purchase because we are a retailer.” (Consumer insight manager, (21.08.07))

Explorative interviews with consumers might be a starting point to gain insights into the consumption stage but overall the teams are mainly interested in what triggers consumers to buy products. Instead of focusing on the products and its direct effects and examining needs and emotions associated with products in relative isolation away from everyday life, a practice-orientated approach regards production and consumption as linked. In order to acknowledge this interrelationship, the creative workshop that was run as part of this study was designed in such a way that it engaged the participants in the practice of hair care through creative activities. Instead of considering needs and emotions away from 'doing and wearing' hair at home and as given factors for design to respond to, consumer needs were regarded as an outcome of dynamics systems that design regularly influences. The workshop activities, introductory presentation into the PhD study and inspirational films of women doing their hair focused the workshop participants, as advocated by a practice-orientated approach, on the dynamics of consumption and production that impact on the practice of hair care.

The introductory presentation into the PhD study particularly highlighted the performance of hair care that often builds on routinised activities, including ways of doing hair that is considered 'normal' – all of which result in a resource intensive use stage. The inspirational films of women doing their hair built on the presentation and brought together images, quotes and film clips gathered during the data collection of the PhD study. Each film was based on a story and therefore had two main characters: a female character who represented the 24 women in the study and a product character. The films were concerned with various elements of the hair care practice such as the different ways of doing hair, including the use of knowledge and skill, the temporal arrangements of everyday life, the importance of embodied interactions with products and hair, standards women try to achieve whilst caring for their hair and the influence of routines.

Similar to the presentation and inspirational films, the activities were designed to encourage the participants to examine the performance of hair care at home, highlighting the importance of considering the consumption phase as equally significant as the point of sale when trying to change practices. For example, one of the activities pointed to the changing patterns of hair care routines over time. A reconfiguration of the practice elements in everyday life can initiate a practice to change because it is destabilised. Some of the elements can disappear, such as the common use of wigs or interconnections between elements can be broken, such as women's belief that it is dangerous to wash their hair when they are menstruating. To engage the workshop participants in the changing patterns of the hair care practice, four accounts were prepared, describing historical ways about how people dealt with their hair, what type of products they used and past ideas about hair care. The participants were asked to re-invent aspects of those historical accounts for the future: bring them back to life through 're-birth'.⁸⁷ This activity allowed participants to examine novel combinations between new, old and existing elements of the practice of hair care that could potentially lead to less resource intensive ways of dealing with hair.

In contrast to Boots' approach of considering needs and emotions associated with products in relative isolation away from everyday life, through the 're-birth' activity the workshop participants were able to examine how products were integrated into daily hair care routines at home throughout time. This examination allowed the workshop participants, for example, to recognise that the existence of 'good or bad' hair days is often more complex than Boots' interpretation of finding a rational product solution when experiencing emotions that relate to 'bad' hair. During the workshop the causes of a 'good or bad' hair days were considered as part of everyday practice, developed through individuals learning and performing hair care routines, influenced by various actors beyond commercial ones such as Boots. The workshop participants pointed out that as the practice of hair-care plays out through time the relationship between, for instance, tactile and visual interactions with hair may be more complex when experiencing emotions that relate to 'bad' hair'.⁸⁸ Women negotiate various states of their hair such as 'greasy' and 'damaged', which have negative emotional impacts

⁸⁷ This activity has similarities to Shove's et al (2006) 'resurrection' workshop task. As part of the resurrection task workshop participants are provided with various 'dead' objects (objects that were used in the past and had a life but are currently no longer part of a practice). The participants are asked to imagine a future cultural and temporal setting where these objects can become alive again.

⁸⁸ This relationship is discussed in more depth in chapter 4.

that are beyond what products can offer. Therefore, these ‘bad’ hair days often cannot be rectified by single product solutions in everyday life.

The requirement for identifying a consumer need and examining emotions in isolation to hair care routines instead of examining the dynamics of everyday life before developing a product may indicate a certain understandable unwillingness to take risks in the development of product innovations. Currently, there might be products in the Boots’ ‘product bank’ that might influence some of the hair care routines at home and the acceptance of certain ‘states’ of hair, triggering less resource intensive practices. However, they are currently not developed because consumers do not express a ‘need’ for them. These products that wait in the ‘product bank’ could potentially have an impact on women’s hair care routines and on the amount and type of resources consumed but they are not formulated or marketed.

Such an approach to product developments does not only seem to separate products, emotions and needs from the complexities of practices in the home but sometimes accepts well-established links between what consumers express as a need and manufacturers provide as a product solution. As will be discussed below, over the years consumers and companies such as Boots seem to have created feedback loops and benchmarks, regularly emphasising objective measures over subjective experiences of what products do to hair. The concentration of articulated needs and subscribed benchmarks sometimes allows for an existence of hair care ‘myths’, entrenching ‘unsustainable’ products and hair care routines. Needs, emotions and the performance and appearance of products seem established and stable. Still, ways of doing hair and its meanings change over time into practices that are more or less sustainable. The changing nature of practices is explored in more depth in the final part of this chapter. It starts with a detailed description of the product evaluation process, in particular with a delineation of consumer trials and the use of instrumental methods to evaluate products, in order to examine Boots’ interest in the practice of hair care at home.

The performance and appearance of hair care products

After the consumer insight team identifies ‘emotional triggers and rational benefits’ in relation to an ‘unmet need’, some of the product concepts are selected and worked-up in more detail technically, sensually, visually and symbolically before the product finally arrives in the shops. The new product development team, who are part of the formulation team, start the more detailed tests of the formulation work such as micro-testing and safety tests. During the formulation development, the team also evaluates the usage of the product, its performance and appearance in order to explore the consumer’s potential sensual and material experiences. This involves considerations such as how the formulation looks in the bottle, how it comes out of the bottle (i.e. is it watery or creamy) and how it feels in the hand - just to mention a few factors. The product is then developed with the target consumer in mind in order to position it within the market. The teams have to take into account competing products and product claims in addition to its design. The design of the product includes product features and attributes that are translated into the look and feel of the formulation and the development of the packaging and the brand name.

In the past, research into the performance and appearance of hair care products has led to the development of various benchmarks, such as for colour or fragrance. These benchmarks form a product rating system that is used as an indicator to investigate how products compare to previous releases and to their competition. Products such as ‘Head and Shoulders’ anti-dandruff shampoos have their own benchmarks and are regarded as the Boots’ brands’ main competitors. Boots attempt to reach or exceed these benchmarks to obtain a brand match. Further, the rating system can depend on what the formulation is for and to whom it is marketed. During the first formulation tests in the laboratory the developer completes evaluation forms which ask questions like how does the formulation foam, how quickly can you rinse it off and how does the foam feel. After creating a formulation that is based on previously established performance and appearance attributes and the consumer need, the safety advisor confirms the safety and efficacy of the formulation. The scientific advisor for hair care is then consulted to determine whether further consumer trials or product evaluation processes need to be conducted.

In the consumer and technical evaluation facilities, Boots' employees try to understand everything about the product: what the consumer 'gets' from it and the overall sensual experience of the product when using and wearing it on the hair. As argued by Dus et al (1997: 213), "the personal care industry is greatly influenced by sensory qualities" including the performance of products on the hair that can be perceived subjectively and measured objectively as part of the product evaluation process. Product tests can be conducted at different stages of the development process even after it has arrived in the market, particularly to examine why a range has not sold. Tests guide the development of formulations, evaluate their safety, help to make in-market decisions and verify product claims (i.e. suggested consumer benefits). Each part of the process can demand different test methodologies and analyses, ranging from objective instrumental methods and product evaluations that are conducted by the 'sensory group' to more subjective product trials conducted by the 'external customer group'.⁸⁹

The product evaluation building at Boots consists of a variety of rooms either laid out as hairdressing salons for trials or wired for the focus groups and interviews that the insight team conduct or as small laboratories. The instruments set-up in the laboratories measure the performance of products on the hair. These include changes to the strength, shape, density and static charge of the hair. For some of the hair swatches and human head examinations, the consumer and technical evaluation building contains rooms in which physical environments can be augmented. The sheer number of variables controlled in these environments, used to evaluate products, demonstrates the multiple external factors that influence the performance of a product in everyday life. At Boots, these are controlled with the intention to obtain statistically reliable and 'objective' results. Evaluation methods using instruments that, for example, measure the moisture level of hair⁹⁰ are widely regarded to provide an objective assessment method for the substantiation of products claims and its efficacy (Stern et al 1997). The final part of this chapter makes it apparently clear that Boots

⁸⁹ During the product development process, Boots relies on objective instrumental methods to develop and evaluate the performance and appearance of products and to substantiate product claims. In addition, they use the 'sensory group', comprising 65 women who are regularly trained in the sensory evaluation of products. This group guides that formulation process (i.e. comparing benchmarks of one product with another). In addition there is an 'external group' of four thousand customers, used to test a new product at home or check why a product is not selling. This is done via questionnaires about a product's performance and appearance.

⁹⁰ The moisture level of hair relates to its water content. The water content plays an important part in supporting the keratin structure of hair. Some hair care routines impair the keratin structure of hair and therefore inducing a decrease in its water content. The hair can become dry and brittle.

predominantly relies on these objective instrumental measures that focus on the product in relative isolation to determine the performance and appearance of new products. This is done instead of trying to develop a more holistic understanding of the complex subjective experiences at home.

The degree to which objective measures, used to develop new hair care products, do not take into account the subjective experience of using hair care products in combination at home becomes clear through the formulation developer's account of her own product evaluation process. Each product is tested under salon conditions. Following that, the team take the formulation home to examine how the product reacts under customer-experienced conditions. In the salon exactly 10ml of shampoo is used, the number of massages is counted until the shampoo starts foaming, as is the length of time it takes to rinse the shampoo out of hair. Variables are carefully regulated. During our interview, the formulation developer pointed out that although the team is trained to shampoo their hair properly and they have the opportunity to practice that during the salon trials, at home things seem to change.

Even a formulation developer who is aware of the objective properties and efficacy of certain products seems to be influenced by the look and feel rather than their scientific knowledge. Although a 'watery' shampoo might provide the same end results as a 'creamy' one, the formulation manager explained "if a shampoo looks watery I use more than if it is creamy, as I believe it will not work as well". The knowledge that the formulation developers gain from their daily scientific evaluations of hair care products would suggest an informed use of products even in the home. But, what is revealed is that even for a formulation developer, material interactions and what feels, smells and looks 'right' is based not on scientific knowledge but on subjective daily experiences and developed ideas. Despite this, benchmarking processes and objective instrumental measures dominate the new product development process.

The new product development teams regard the evaluation of new products by the external group as extremely subjective in contrast to the instrumental measures. As suggested by the scientific advisor, trials are based on consumers' opinions and preferences when they test products at home. During these trials the product's usage cannot be controlled, including the

hair care routines and physical environment. Although Boots' employees use the quantitative data gathered from the external group to compare the performance and appearance of products and to examine whether changes to the formulation are required, these seem to be considered in isolation from the whole experience, and the performance of hair care routines.

Currently, Boots' employees rely on a panel of three to four thousand external customers, who regularly participate in product trials and tests and join other consumer research studies. Each product developed by Boots is tested on a minimum of sixty-five people before it arrives in the shops. Each person drawn from the external group receives an unbranded bottle (i.e. blank packaging that only has a sticker with the description of the product and instructions on how to use it). This is done to avoid brand perceptions. The products are used up to five times in the home for some trials, after which people rate the product by completing a questionnaire. The consumer is provided with five to six different rating criteria to assess the performance and appearance of a product, such as how shiny the product left the hair: 'very shiny' to 'not shiny'. Such quantitative evaluation provides only a limited understanding of the consumers' subjective experience and it only leads to incremental changes to the design of products, such as changes to the smell of the formulation.

Even though the testimony of the formulation developer demonstrates that the subjective experience of doing things with the hair and using products is important. Boots often verify product claims, assessing performance and appearance benchmarks through objective instrumental methods. Over the past thirty years, efforts have been directed towards understanding the physiology, structure and physical properties of hair. Evaluation instruments of hair and hair care products have become more advanced than ever before (Stern et al 1997). The emphasis has been on improving the measurability of physical, chemical and optical effects of products on the hair rather than examining the subjective experience when performing hair care routines at home. Techniques for gathering consumers' subjective experiences at this stage of the product development process seem to be merely an extension of laboratory-based methods. The emphasis is on translating

interpretations of consumers' subjective experiences into 'scientific' measurable properties in order to formulate 'objective' product claims.

Companies are obliged to make only truthful claims on products that can be substantiated, as competitors and consumers can challenge them at any time. This has initiated an improvement of objective instrumental evaluation methods at Boots, considering various variables that might impact upon subjective experiences instead of working more closely with consumers' hair care routines at home. The hair and various external influences on it, such as the weather, are mainly treated as part of a complex physiological system. Instruments that measure the performance of products in this system are refined to match the complexity of the system, developing statistical benchmarks and measures for formulations.

According to the scientific advisor for hair care, over the years Boots' has conducted numerous consumer studies to develop well-established links between the performance and appearance of products and consumers' expectations of hair care products, creating clear guidelines for the development of formulations. The scientific advisor called these links 'a blessing' but, on the other hand, they generate 'problems' when the aim is to develop innovative products that could change consumers' expectations and perceptions. Bijker's (1997) concept of 'closure' and 'stabilisation' is useful here to explain the well-established links between performance and appearance. He identifies such moments of 'closure' when examining the history of the sociotechnical changes of the bicycle design. They often occur when scientific and everyday actors' disagreements with regard to the performance or appearance of products are concluded, creating a 'scientific fact', to which everybody consents. According to Bijker (1997: 86), "the interpretative flexibility of an artefact diminishes", as meanings become more and more fixed, such as consumers view that shampoo needs to create bubbles to work.

During an interview with the scientific advisor for hair care, he pointed to a moment of 'closure' in relation to the performance and appearance of shampoo and the perceived relationship between the creation of lather and its cleaning power:

"The problem is that people expect shampoo to be bubbly. You see all the adverts with great lather on the hair. It is completely irrelevant. A shampoo does

not need to create bubbles to work. People expect it to create bubbles. In creating bubbles it makes a product harsher than it has to be.” (Scientific advisor for hair care, (26.02.07))

Producers and consumers have come to the agreement that shampoos need to create lather, generating an understanding about shampoo that has become part of the practice of hair care, with which nearly all women agree. When considering the statement above, a linear approach to the development of the performance and appearance of products (illustrated below) transpires: consumer research is conducted on the appearance of shampoo whilst in use, the consumer wants shampoo that ‘bubbles’, therefore Boots creates lathering shampoo that finally gets sold in the shops.

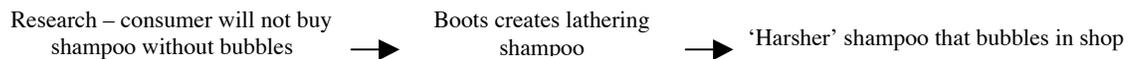


Illustration 1: Linear approach to the development of products, exemplified by shampoo that bubbles

Although Boots could develop shampoos that the scientific advisor for hair care regards as less ‘harsh’, for both hair and the environment, it is not developed, as the consumer articulates the ‘need’ for lathering shampoo.

In accepting the ‘closure’ of shampoo around its bubbling property, Boots fails to consider the potential for any divergence from this. The ‘fact’ that the shampoo has to create bubbles to work has not only been accepted by the consumer but also by the producer, creating a feedback loop (illustrated below). These feedback loops have fixed ‘unsustainable’ products and related hair care routines in place. Consumers’ perceptions linking the performance of products, such as the cleansing of hair to an appearance; the lather of soap leads to the development of lathering shampoo. Shampoos create ‘bubbles’, both in use and as a principle of shampooing; reinforcing the perception that shampoo needs to lather in order to clean the hair.⁹¹ It has become part of women’s knowledge and therefore part of their hair practice. Both consumers and manufacturers reinforce this feedback loop that involves the lathering of shampoo and its relationship with cleaning hair but also the appearance and performance of products. This feedback loop, like others, is so well established in the hair

⁹¹ Roland Barthes’ 1950s essay on the meaning of soap bubbles confirms the ingrained nature of this association (Barthes 1976).

market that manufacturers can develop benchmarks of product's attributes that disregard the complexities of everyday practices and the ways that producers may have an impact on them.

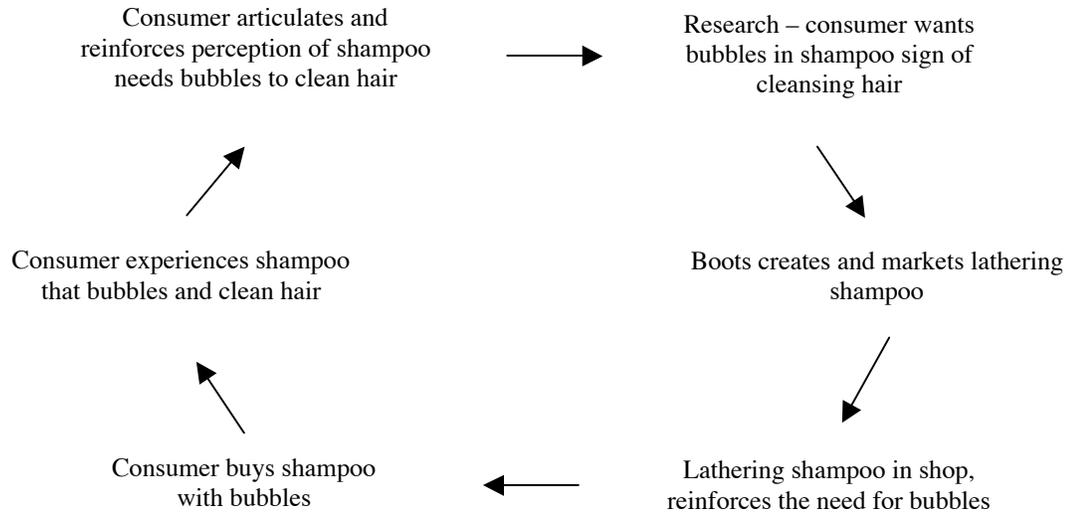


Illustration 2: Feedback loop between consumer and manufacturer, exemplified by shampoo that bubbles

The scientific hair advisor failed to acknowledge that the performance of products and the system of ideas which affect what women do with their hair, such as the ‘bubbles in shampoo’, are interrelated in ways that oppose linear causalities. Each issue in such a system is the cause and effect of another, creating circular feedback loops rather than linear causalities. Benchmarks and feedback loops are not unique to Boots (Shove 2003) in this case, they keep ‘harsher’ products such as lathering shampoos active, lessening the likelihood of change and reinforcing myths about hair care routines and developing ‘closures’ between products and behaviours that are not ideal from the point of view of environmental sustainability.

Although the scientific advisor for hair care explained that Boots is not able to change consumers’ perceptions on the performance and appearance of products and has to comply with consumers’ articulated needs, any change in one part of the feedback loop causes a transformation in another (Larsen et al 2002). This transformation can potentially change the overall loop, including hair care routines at home and the new product development process, as articulated needs transform. Lather is one aspect of the shampoo’s appearance, and shampoo is used in conjunction with a variety of other products whilst doing things to the

hair. Hair care routines consist of complexes of products and their appearance and performance, creating various feedback loops with producers that are integrated and evolve when women deal with their hair at home. Practices are not stable over time, but there are moments when they become destabilised (Shove 2003; Bijker 1992), as highlighted by the workshop activity outlined above. For example, they intersect with other practices, new products are introduced and new ways of doing hair evolve, interrupting the stable feedback loops, and making “new connections between existing or new elements of images, material and skill” (Shove 2006), including moral, symbolic, temporal and scientific discourses.

Shove (2003) uses the movement of a pinwheel (see illustration 3 below) as a model to illustrate changes in bathing and showering practices and a similar analogy can also be applied to the everyday hair care practice. The stability of practices is rooted in the configurations of the multi-relational elements that come together during the performance of hair care routines and their practical integration: why women do their hair, what is there to be done and how is hair to be worn, when is it done and what it involves. These configurations create various feedback loops, benchmarks and rationales for ways of ‘doing and wearing’ hair that can keep the particular patterns in place. The arrows represent the configurations and rationales that stop the wheel from turning (i.e. the practice from changing).

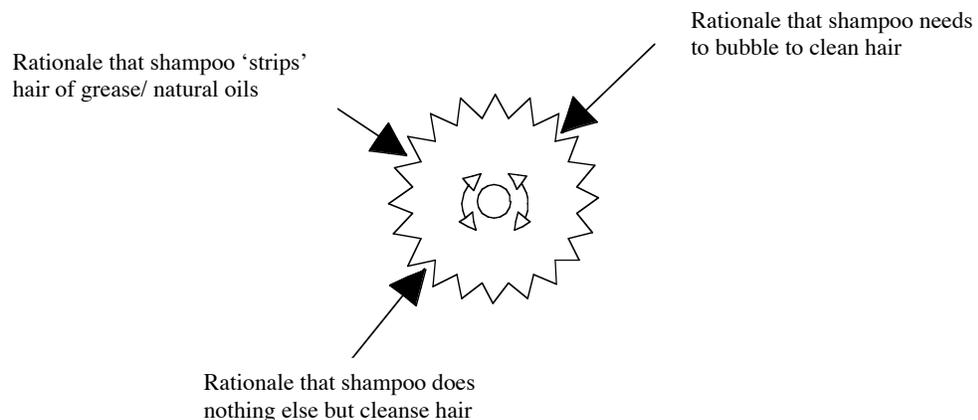


Illustration 3: Pinning shampooing (rationales = pins) and configuration of practice elements associated with shampooing (configuration of practice elements = wheel) into place, as illustrated by Shove’s pinwheel⁹²

⁹² The pinwheel only represents some of the rationales that stabilise current hair care routines in relation to the use of shampoo and therefore considers only a small part of the practice. Nevertheless, it demonstrates how parts of the practice become stable but also through its reproduction in daily life potentially can destabilise.

Each pin has a 'relative weight' that keeps the wheel in place (Shove 2003). Changes to the configuration of practices by releasing some of that weight – by altering the nature of one or the other of the substances involved in hair care for instance - can therefore lead to the loosening of a pinwheel. It can move in either direction, resulting in less or more resource intensive practices. The feedback loop relating to shampoo creates a 'stickiness' (Molotch 2003) between the material properties (i.e. shampoo creates 'bubbles') and existing system of ideas (i.e. 'bubbles' = clean hair and strips the hair of natural oils) that have kept parts of the pinwheel static for quite a while. This stability does not mean that the practice cannot change. Each element in the loop interacts with each other, reinforcing or changing it, including the practice of hair care as a whole. Analysing these features is important if actors want to 'direct' the development of change, something that is not part of the remit of Boots' product development process.

These feedback loops and practices are not only held static or allowed to change because of innovations; they are influenced by various actors in everyday life. Advice from hairdressers, family and friends and the physical parameters set by the design of appliances, domestic environments and built-in equipment impact on women's hair care routines. According to Molotch (2003), neither consumers nor producers are to be held responsible for the direction of change, since the various practice elements and external influences that come together in everyday life. They all "lash-up" with one another, creating and reinforcing needs. Change is not only influenced by advertising, fashion and science (Shove 2003), as the multi-relational elements of practices such as emotions are negotiated in everyday life. Women have to integrate discourses from various sources, as they develop in practices through their performance. Each actor and organisation involved in the practice of hair care, such as the hairdresser, has their own 'problems' that they try to solve when providing women with hair that looks and feels acceptable and find their own approaches of solving them (Shove 2003). Whilst resolving these problems, each actor and organisation becomes a potential 'agent of change', shaping what is done with hair and how it is worn.

During the workshop at Boots the participants acknowledged the role of actors and organisations, whilst engaging in the creative activities. The participants created interventions that highlighted that mere single product-based approaches might be too

limiting to create any significant change to deliver improved sustainability in women's hair care. Most of the interventions therefore created links between the social (i.e. actors and organisations) and the material (i.e. physical design interventions) aspects of hair care. Furthermore, the role of these actors and organisations was not to emphasise the communication of sustainability per se but to facilitate change in everyday hair care routines that could lead to more sustainable ways of doing hair that use up fewer resources. Alongside discussions of hair care activities becoming more 'social', the participants regularly considered today's acceptable norms and how they would need to change, particularly when examining norms around dirty and clean hair. Interventions were often based on embracing less frequently washed hair but on the other hand provided products for women so that they could cover it up or hide it.

This thinking was also reflected in one of the final intervention concepts of a 'Hair Holiday'. On this hair holiday women could re-discover their hair by not washing it and realise that it does not need to be shampooed daily. Women get to know what their hair does 'naturally' by not washing it for a while and giving the hair the chance to 'balance itself out'. The workshop participants pointed out that women have used shampoos and conditioners for such a long time they do not actually know what their hair would do if 'just left'. After the phase of just 'leaving it' and 'balancing itself out' women would know what their hair needs, including how often it would need to be washed. The women would be supported by 'experts' throughout their stay but also create a safe environment amongst each other. As part of the overall holiday pack women could think about issues such as water and electricity usage, in particular emphasising that women can still feel happy and healthy when using less resources.

This concept would link retailers to design interventions that facilitate more sustainable ways of living rather than a short-term quick fix product solution. Although the scientific advisor for hair care at Boots recognised the potential to influence consumers' perceptions, he clearly regards Boots' influence as limited. Interventions that were produced by the workshop participants therefore currently seem to be removed from Boots' product development process. For the scientific advisor, hair care is determined by fashion and new product innovations introduced through designer brands. Such a disavowal of Boots' ability

to change consumers' perceptions indicates the company's inability to take certain risks in the product development process for understandable commercial reasons. The degree of influence of the various actors involved in a practice such as hair care might vary but they all do play a role in the configuration of everyday practices at home.

Conclusion

Boots' reactive and incremental approach to sustainable consumption strategies seems surprising when considering their unique position of developing sixty percent of their own products from idea to finished product. They clearly have a potential advantage in their ability to influence consumers' practices compared to hair and beauty retailers that do not control the whole product lifecycle. Despite this, they do not seem to use this potential advantage. It became apparent, through the analysis of the interviews with Boots' employees that the reactive approach to developing sustainable consumption strategies also is manifest in the current product development processes. Moreover, it is inscribed in the employees' perception that Boots can only react to its consumers' demands. The teams at Boots frequently disregard the fact that products and marketing messages, through their design, intervene with practices in everyday life to reinforce them, and could potentially change them.

From a practice-orientated perspective, Boots does not only passively produce products that consumers desire but also through their products contributes to the configuration of those practices, which could be less resource intensive if configured in different ways. To be able to influence the direction of sustainable change, Boots' product development teams (i.e. the designers of hair care products) could develop an understanding of the potential effects of their designs on daily practices, as highlighted by the workshop outcomes. This research establishes a deeper understanding of the practice of hair care and therefore provides Boots with starting points to develop new research projects, enabling them to come closer to developing design interventions that potentially change practices and impact positively on resource consumption. It is possible that Boots could do this without damaging their commercial interests, given that the innovations involved would emerge directly from the practice into which they sell their products.

An examination of Boots' current approach to sustainable consumption makes it apparent that Boots positions their 'consumers as decision-makers' (Shove 2004). The deficiencies of this approach were discussed in the literature review, and further substantiated in this chapter, such as ignoring the dynamics of everyday practices, examining products in relative isolation and relying on individuals to internalise environmental concerns. In this chapter, the positioning of 'consumers as decision-makers' and its deficiencies are contextualised, as the teams at Boots apply this characterisation to sustainable consumption strategies and, moreover, to their whole product development process. What this highlights is a disengagement from everyday practices, as efforts are concentrated on visualising the environmental impacts for consumers so that they are able to make 'sustainable' choices at the point of sale. Such an approach limits the designer's interventions towards sustainable consumption, as they predominately concentrate on the design of packaging, regarding it as the only physical and visible thing. It not only disregards the potential to design the appearances and performances of the formulation, but, moreover, it does not consider the possible design of an 'ecosystem' of products (IDEO 2009). Hair care products such as shampoos, conditioners and straighteners all come together to create an 'ecosystem' of products whenever women do things to their hair. It is through their interrelationship that the design of hair care products has the potential to question what is considered as 'normal' hair care routines.

To adopt more diverse and assertive approaches to designing for sustainable change, as highlighted by the workshop outcomes, Boots would need to recognise the interrelationships between production and consumption that play a significant role in configuring the practice of hair care. This chapter has explored these relationships through an investigation of the product development process at Boots. It draws on Bijker's (1997) concept of 'closure' and Shove's (2003) pinwheel model to build an understanding of how this interrelationship affects the practice of hair care. This examination not only draws attention to the deficiencies of Boots' current sustainable consumption approaches but also to an acceptance of keeping elements of the currently considered unsustainable practice alive, such as the need for lathering shampoo, creating 'closures' to certain aspects of the practice. This clearly illustrates the effects of Boots' responsive approach. The existence of benchmarks for the performance and appearance of products in Boots' product development process

demonstrates a side to the practice of hair care that is 'taken for granted'. Therefore, it might be difficult to change some aspects of the practice if design does not create 'disagreements' between producers and consumers that lead to a renegotiation of these 'closed' rationales.

Boots' role in configuring the everyday practice of hair care was also exemplified in this chapter through reflecting on the effects of introducing hair straightening and the implication of lathering shampoo. Although the interrelationship between women's hair care routines and the various actors and organisations in hair is significant when exploring changes in practices, the following chapters turn to the activities of women's hair care routines as a starting point to explore some of these relationships. It is argued that women and their hair do not have a passive role when integrating new product innovations and marketing messages into existing practices as they evolve in everyday life. It is therefore useful to examine the practice of hair care, as the ways of doing things to the hair hold together the various practice elements and outputs of actors and organisations during their performance (Shove 2003).

Those hair care routines are examined in the following chapters in order to develop an understanding of their multi-relational elements, whilst sometimes examining the role of the various actors involved in their configuration. The next chapter examines women's embodied interactions with hair, focusing on the complex interaction between feeling and looking at hair. It focuses on how women become aware of themselves and their hair through its presence as a 'non-body', underlining the way women move through the cycles of dealing with their hair and wearing it. These interactions often play a part in determining how often women do things with their hair and the amount and type of resources consumed. The examination draws attention to the material, sensual and emotional dimension of wearing hair.

Chapter 4 Cycles of ‘wearing and doing’: Living with hair

Introduction

The main focus of the next two chapters is on women wearing their hair. Here, the wearing of hair not only relates to how women wear their hair, but particularly to the conscious and unconscious carrying of it, the act of wearing. The act of wearing hair interrelates with the performance of ‘doing’ hair, and is therefore implicated in ‘how often women deal with their hair’ and in the understanding of what is considered ‘acceptable’ hair and hair care routines. In addition to being ‘present’ with individual women wearing and doing things with their hair, hair care routines are also considered as a practice that exists as an identifiable social ‘entity’, which can be recognised (Shove and Pantzar 2007; Schatzki 1996). The multi-relational elements that make-up a practice are shared and maintained among groups of women, for example the idea that women have to wash their hair with shampoo, and are therefore, linked together, to create a pattern of these individual routines, a recognisable ‘entity’. Examining the dual definition of the practice of hair care, chapter 5 explores the various ‘states’ of hair in relation to what women consider as ‘normal’ hair and hair care routines. This chapter explores how, and how often, women deal with their hair through examining the interrelationship between the act of wearing hair and the performance of doing things with hair. These interrelationships have implications for resource use.

The aim here is to understand the factors that affect how often women deal with their hair through investigating the wearing of hair as an embodied practice in order to draw attention to its material, sensual and emotional dimensions. Women experience their hair through visual, tactile and olfactive interactions. Merleau-Ponty’s (1962) notion of embodiment in the ‘Phenomenology of Perception’ and in particular his example of ‘right hand touching the left’, is useful here in understanding the interactions between the visual and tactile. In his investigation, Merleau-Ponty points to lived and embodied experiences unifying the body and the self, as emphasised in a practice-orientated approach and therefore breaking away from Cartesian dualism of immaterial mind and material body. Practices consist of routinised bodily and mental activities (Reckwitz 2002). The body is placed at the centre of exploring the structures of experiences in Merleau-Ponty’s analysis of perception (Entwistle 2000; Gledinning 1999). The mind is situated in the body, as people experience the world

and its objects through moving and positioning themselves in it. The body shapes people's "points of view in the world" rather than "being an object in the world" that is passive (Merleau-Ponty 1976: 5). Women's hair cannot be experienced the same way as external objects that can be seen and touched from all of their sides and totalities, as it is attached to their body and partly out of sight. Tactile and particularly visual interactions are not experienced the same way as external objects, aiding the complexity of sensual interactions with hair that are explored throughout this chapter.

An examination into the sensual interactions with hair provides an understanding of the relationship between the body and the hair. This relationship draws attention to the hair's materiality which impacts on how often women deal with hair. Hair is extremely malleable. It can be shaped using various products and tools that sometimes stay on the hair, but also frequently re-shapes itself through external and internal environmental influences such as its ability to grow or the humidity in the air. Hair that changes its usual shape can potentially create a feeling of embodied disquiet. Instead of experiencing the hair as part of the body it somehow becomes separate from the body, a 'non-body'. The wearer becomes aware of her hair and conscious of the self. Merleau-Ponty's (1976) later work is useful in exploring the boundaries of hair being experienced as part of the body or 'non-body', whereas Miller's (1987) concept of objectification⁹³, drawn from Hegel⁹⁴, aids the understanding of the relationship between the body, the hair and the woman's sense of self. The concept indicates

⁹³ For Hegel, objectification is part of the creative process of the development of self-consciousness and has been widely applied empirically in studies that examine the process of getting dressed (Woodward 2007) and the appropriation of objects in everyday life (Gregson and Crewe 2003). Miller has defined the objectification process as "a dual process by means of which a subject externalises itself in a creative act of differentiation, and in turn re-appropriates this externalisation through an act which Hegel terms 'sublation'" (1987: 28). This externalisation for Hegel can be prompted at a level of ideas and thoughts, yet Miller (1987) has concretised this concept by illustrating how this process of objectification may happen through objects, such as clothing. During the 'objectification process' women become conscious of the self as an 'other' and therefore dissatisfied with this externalised state (externalisation = self-alienation). Only through reintegrating this externalisation of the self can women complete the objectification, developing their sense of self in the process (act of sublation = re-absorption). For example, women see themselves external, looking outwards at the mirror or at the item of clothing whilst at the same time looking inwards to see whether the clothing 'is me' (Woodward 2007). Miller has stressed that Hegel did not make use of the term objectification (*Vergegenständlichung*) but rather used the expression alienation (*Entaeusserung*). Since alienation has attained strong negative association with Marxism, Miller has worked with the process of objectification but still refers to Hegel's interpretation of the process. Although Miller has argued how the process is made possible through objects, this chapter investigates how the externalisation of the self might be initiated by the material propensities of hair.

⁹⁴ Miller (1987) points out that because his reading of Hegel's process is abstracted and selective, it cannot be termed Hegelian. Similarly, this thesis uses Merleau-Ponty's and Miller's work as concepts to explore ways of understanding the relationship between the boundaries between the body and hair and the cycles of women doing things to their hair and 'wearing' it.

how women become aware of themselves through material forms (Woodward 2007) such as hair that prompts women to deal with their hair.

Hair can be experienced as a 'non-body', such as hair that is left untouched in the morning, and in the process leaves women to become aware of their hair and conscious of the self. This experience is comparable to Miller's concept of objectification, as the hair prompts women to feel external from their sense of self. Only by dealing with the hair are women able to reintegrate the self. This is when the objectification process can be completed and the woman's hair and their sense of self become part of the woman again. Hair that is left untouched might be considered as an incomplete process of objectification. This process, as argued by Miller (1987), is largely repetitive, progressive and constitutive of the self and occurs in continuous cycles between the act of wearing hair that has become a 'non-body' and the performance of dealing with it. It is therefore helpful in developing an understanding of the cycles of women doing things with hair and the wearing of it, as these relations regularly determine how often women deal with their hair.

The significance of the relationship between the body and the hair emerged during the empirical work, in particular when the informants were talking about their hair in relationship to washing their body. Practices are often tied up with other practices (Julier 2007; Warde 2005). Hair care routines are often coordinated with practices such as going to the gym, getting ready for work, preparing a meal and, particularly, bathing and showering the body. Therefore, this chapter starts with an investigation into how washing hair and body interrelate; referring to Hand et al's (2005) and Shove's (2003) work. This examination demonstrates how washing hair and body intersect with each other and in the process illustrates how the body and the hair are sometimes experienced as a whole but also as separate. It examines how often women deal with their hair, including the practice's multi-relational elements such as visual and tactile interactions, emotions, the materiality of hair and systems of ideas. The chapter substantiates the claim in chapter 3 that there are deficiencies in Boots' product development process as they emphasise the visual nature of hair. It is not only the visual but also tactile interactions with hair and routinised emotions that re-enforce the practice of hair care, combined with past experiences and systems of ideas, creating repetitive cycles of dealing with hair and wearing it.

The interrelationship between body and hair washing

The increase of washing the body in contemporary Britain has received attention because it has become an ever more resource intensive routine (Shove 2003; Hand et al 2005; Turton 1998). An examination of the potential interrelationship between the practice of body washing and the practice of hair care might therefore be significant in order to explore how the increase of body washing has impacted on how often women deal with their hair. In the UK showering and bathing accounts for 17%-18% of the daily domestic water consumption. On average people spend seven to eight minutes under the shower, whilst power showers pump out between twenty and fifty litres per minute (Shove 2003). Indeed, trends such as daily showering and the use of power showers have displaced traditional British washing habits of having a bath once a week which still left people feeling “physically and socially comfortable” (Hand et al 2005).

The daily use of the shower and sometimes the bath to wash the body also became apparent during this empirical work. Nevertheless, instead of just using the bath or shower, women in this study frequently use both, in combination, to wash their body in the bath and then to rinse their hair in the shower. Almost all of the women who participated in this study differentiate between washing the hair and the body. Less than half of the women regard hair and body washing⁹⁵ as simply related in that they ‘do them both at the same time’, whereas more than half of the women separate the two practices in that they sometimes wash their body separately from their hair (i.e. the body daily but the hair only every two, three or seven days). The boundaries of these groups are blurred. It is difficult to define distinctions within these two groups, as they both regard body and hair washing as separate activities but some women consider them as activities that happen at the same time.⁹⁶

Dory, who washes her hair and body daily in the bath, considers washing the hair and the body as a “whole thing”, for her these activities are “related a lot”. However, before she established the fact that they are related during the interview, she distinguished between the two. Body washing is important because of the body’s capacity to smell and washing the hair is important because of its capability to “look like a right mess”. Dory connects hair

⁹⁵ Body washing relates to having a bath or a shower, not to strip wash in the sink.

⁹⁶ A table outlining the frequency of showering, bathing and shampooing of hair is included in Appendix 5.

washing to her physical appearance and body washing to feeling clean. Ruby, who also washes her body daily but not her hair, similarly expressed this. Additionally, she externalised this by considering other people's ability to make judgments about her body smells that sometimes stay hidden from herself, whereas the appearance of her hair seems more obvious (i.e. visible to herself).

“I just rather smell nicer and make sure that I was clean like on my body... That sort of thing is something that people would notice about you and not necessarily say. I think if your hair is not looking as good as you can kind of tell yourself a lot more.”

She continued by stressing that she spends extra time and care to wash her body but that the washing of her hair is only a very “quick” thing. Odette, who washes her hair once every three days is a daily bather, and similarly washes her body because of its potential to smell. During the interview she explained that she would not wash her body because “it looks better” after bathing, unlike her hair. Odette clearly differentiates between washing her hair and body. Nevertheless, in contrast to Dory and Ruby she regards her hair as looking its best if she does not wash it for a day. For her it is acceptable not to wash her hair daily. The same does not count for her body. Not washing her body leaves Odette to feel “uncomfortable” and “mucky”. Her hair sometimes smells of cooking but it is only if another person comes really close that they are able to smell it, which rarely happens. Body odours are easily to detect by others. Further, Odette explained that certain parts of the body have to be washed every day. The combination of these sensations give her the feeling of “not being able to wait to have a bath” whereas she never feels this way about washing her hair.

Dory's, Ruby's and Odette's examples demonstrate the difference between hair and body washing practices. The body can produce smells noticeable to others and leave women feeling uncomfortable. Hannah, who washes her hair once a week showers daily, described these body sensations in more detail. For her the hair does not get as “dirty” as the rest of the body. Hannah works as a picture framer. Her job involves lifting, sanding and painting heavy frames. It is physical work. By the end of the day she feels ready for a shower. She can smell her body before she is able to smell her hair. The ‘sensation’ of unwashed hair is less potent to her than an unwashed body.

“You haven’t got the sensation that you feel when you need to wash your armpits or your feet or whatever. I don’t have the same feeling whenever my hair needs washing.”

Her hair does not provide her with the same sensation as her body. Body parts can rub against each other creating a “sticky” feel that is accompanied by an ‘unpleasant’ odour, a sensation Hannah can feel and smell, particularly on her hands, feet and armpits. During the summer, she sometimes has a shower in the morning and one when she returns home because, working as a picture framer, she can get ‘hot and sweaty’.

The above descriptions could lead to the assumption that body washing is about cleanliness and hair washing about appearance. It might be questionable to separate the ‘daily washers of hair and body’ from the ‘daily washers of body but not of hair’ in the context of examining the interrelationship between the body and the hair, as they both consider them as different when it comes to washing. Variations between the two groups seem to mainly derive from the differing acceptability of ‘natural oils’⁹⁷ on the hair and the desire to restyle the hair more or less frequently. Nevertheless, there seems to be more to bathing and showering than the aim of having a clean body. Although Hannah, Ruby, Odette and Dory described different tactile and olfactive sensations produced by their bodies to those they get from their hair, Odette’s feelings about getting into the bath are not only based on getting clean. For her bathing is ‘pleasurable’ something that washing hair could never be.

“There is something pleasurable about bathing whereas to me there is no pleasure in washing my hair at all.”

Similarly for Kerry, a shop assistant in her late 50s, who has short hair and washes both hair and body daily, it is not only the cleaning of the body and the possibility to restyling her hair that result in her washing her body and hair, but her need to reach a “refreshed”⁹⁸ state, before going to work. During the interview she explained that she used to wash her hair every other day but since moving to a house with a shower it was as “easy” and “quick” to do both at the same time. So, from then on she has washed her hair every day.

⁹⁷ Most of the women referred to the matter produced by their sebaceous glands in the hair follicle as ‘natural oils’ (i.e. a matter made of debris, wax and fat). Natural oils moisturise and therefore influence its moisture levels that impact on the health of the hair. The women pointed out that these oils make hair appear to be ‘greasy’ and make skin feel ‘sweaty’.

⁹⁸ Reinvigorated or revived

The shift from weekly bathing to daily showers over recent centuries is discussed by Shove (2003) and Hand et al (2005). This has allowed people to wash more frequently and, as especially Kerry's example shows, more frequent hair washes. Kerry explained how she does not need to wash her hair daily because it does not get "dirty" but how it would "make her feel better" if she has a daily hair and body wash. In addition to the hair and the body feeling "better", "nice" and "clean" it would also feel more "refreshed", illustrating the interrelationship between cleanliness and feeling refreshed. As recent research by Shove (2003) and Hand et al (2005) show, body washing is nowadays not only about cleanliness and hygiene but it relates to the re-freshening of the body in the shower or relaxing in the bath. This research confirms this development. Hand's et al (2005) essay on 'explaining showering', begins to sketch out three possible explanations "for the current constitution of showering as a private, increasingly resource-intensive routine" over time, whilst reviewing the changing "material, conventional and temporal" elements of showering (2005: 1). This historical examination demonstrates that each of these elements has impacted on the practice as a whole but it is only through their simultaneous integration that the practice is reproduced and changed in everyday life.

These elements have changed and will change over time, influencing the materialisation of the practice and the amount and type of resources consumed (Hand et al 2005, Shove 2003). Instead of wetting the body in order to 'regenerate' it or prevent it from disease, nowadays the bath often represents a place to relax and for sensual pleasure, as demonstrated by Odette's example, whereas the shower is a place to get refreshed and 'invigorate' the body, feeling the water dropping down on the skin. Although ideas surrounding cleanliness, hygiene and potential improvement of appearance still exist in relation to washing the body, this activity can no longer rely only on products and tools that remove dirt, as they do not match with the sensual experience of water on the skin. The increase of body washing was not only influenced by the development of ideas but also by temporal and material arrangements. Material developments were mainly based on the provision of domestic water gas and electricity, providing easy access to a constant, unlimited supply of hot water, whilst the convenience and perceived efficiency of the shower has allowed women to speed up their morning routines and, like Kerry, to increase the number of showers taken and move

away from bathing. The presence of the three elements do not inevitably explain the increase of showering in themselves, as Hand et al (2005) note; it is their configuration that impacts on the existence and change of practices. The facilities for showering, as well as the value placed on efficiency, were present for a period of time before they resulted in new practices.⁹⁹

This short excursion into the development of showering and bathing practices provides insights into the factors behind the increase in the frequency of body washing but does not indicate how this development may have influenced the washing of hair. This is discussed in the following sections. For Kerry, having a shower in the morning is not only about feeling refreshed. She finished her thought by suggesting that “if you didn’t [wash both at the same time] it wouldn’t feel the same”. Women who sometimes separate washing their body and hair, scrubbing their bodies daily but shampooing their hair less frequently, regularly described this feeling during the interviews and provide more detailed accounts of the sensation of ‘not feeling the same’ that elucidates the interrelationship between hair and body washing. Holly, whose hair sometimes really irritates her, is a full-time student. Some days she has to go to university but on others she can stay at home to revise. Particularly on days where she works from home, she does not wash her hair but has a shower every morning to wash her body. Holly believes it is not good to wash her hair every day, as it loses its natural oils. During the interview she described washing hair as a “nightmare”. It takes a lot of time to style after shampooing it in the shower and this creates a “hassle” for her. Washing her body without washing her hair makes her “feel fresh”, but it does not provide her with the “extra edge of freshness”, that washing her hair and body give her.

“... if you feel a bit sweaty, you can just go and jump in the shower and you know two, three minutes and you are done and that is it and you feel fresher. It does make you feel like an extra edge of freshness when you have also cleaned your hair...”

As seen above, the washing of the body is often related to its cleaning and avoiding smells whereas the washing of hair is related to its appearance. Holly’s example and Shove’s research show that there is more to body washing, linking it to the washing of hair. When

⁹⁹ See Hand et al (2005) and Shove (2003) for a full review of material, temporal and conventional arrangements of showering.

washing the body without washing hair the body feels refreshed but the unwashed hair still does not provide this 'extra edge of freshness'. Here, clean hair is related to feeling refreshed. Similarly, Winona who washes her hair every three days and showers or baths every two days, only feels "totally clean" and "totally relaxed" if she washes her hair and body at the same time. For her, this extra edge is created by "having the water all over you". During the interview she stressed that it is not the feeling of unwashed hair but the submersion of the whole body, including the hair in water, that provides the feeling of total cleanliness. These feelings are not necessarily associated with the submersion of hair in water but, in particular, the scalp, ears and face. Nevertheless, they are so closely connected to the hair that all parts need to be wetted at the same time.

The descriptions of Hannah, Dory and Ruby have shown how women differentiate between body and hair washing. Body washing often relates to the body's potential to produce odours and a 'sticky' feeling whereas hair washing relates more to its appearance. The physical sensations and the potential judgment of other people vary between the numerous 'states' of hair and body. Daily hair and body washers and women who sometimes separated the two share these ideas. Historically, links between the practices of washing the hair and the body did not always exist. For example, during the 1950s the popularity of the perm often went along with women visiting the hairdresser once a week to have their hair washed, whilst washing their body more frequently at home (Cox 1999). Home perms had started to become safer and more accessible but women frequently felt they could not re-create the style at home and therefore visited the hairdresser who had the necessary competences to do so. Therefore, body and hair washing were not temporally and spatially linked. Since new products and tools have been introduced into the market to ease the styling process, it has become possible to visit the hairdresser less often and style the hair at home daily.

Considering the examples described above, it seems that nowadays, the practices of washing the body and the hair are more entangled. This 'extra edge' and the feeling of 'being wet all over' connect body and hair washing, leading to more frequent washes. Holly and Winona, who sometimes wash their bodies separately from hair, revealed how the washing of hair and body at the same time provides them with an extra edge of feeling refreshed and relaxed. It is the submersion of the whole body, including its hair that provides this 'extra

edge'. However, today's 'busy' lifestyles mean women may not be able to wash their hair daily. The introduction of showers has reduced the time needed to get the body wet but hair washing initiates a cycle of drying and styling that can be very time intensive, as pointed out by Holly. While showering may be motivated by refreshed feelings, sometimes, the hair care routine that follows becomes a chore, although, as Kerry's example shows, this is not the case for every woman. She enjoys having her daily showers and does not regard the styling and drying of her hair as time consuming. The above examination demonstrates how the temporal, material and conventional elements of the two practices are entangled but also change and exist separately from each other, increasing and decreasing the number of hair washes.

Visual and tactile interactions: Hair is dead or alive?

The above examination sheds light on how the body is experienced differently to the hair in the context of an overall increase in body and hair washing. Body parts rub onto each other, producing unwanted smells whereas women seem to be mainly concerned about the appearance of their hair. Hair seems to be mainly experienced visually not through touch or smell. Still, the merging of hair and body when considering ideas about refreshing and relaxing the whole of the body brings light to the tactile interactions that are also characteristic of women's relationship with their hair, emphasising the complexities between the visual and tactile¹⁰⁰ nature of hair. In order to reflect in more depth on the boundaries and interactions between the visual and tactile aspects of women's relationship with their hair, this section draws on Merleau-Ponty's (1962) examination of 'right hand touching the left hand' and the difference between experiencing objects and experiencing our own bodies.

According to Merleau-Ponty, the body as a whole cannot be experienced the same way as external, detached, objects. Objects, such as tables and phones, can be viewed in their totality at any given time. They can be picked-up, handled and turned in ways the body cannot. The body can only be seen as a whole in the mirror. However, here it can only be perceived from the viewpoint of an observer. It is merely a representation that refers back to

¹⁰⁰ Although, during the empirical work women also talked about hearing and smelling their hair, this chapter explores the tactile and visual interactions.

the original. The image is always mediated and varies depending on the size and surface of the mirror (Merleau-Ponty 1962; Glendinning 1999; Priest 2000).

“In so far as it sees or touches the world, my body can therefore neither be seen nor touched. What prevents its ever being an object... is that it is that by which there are objects. It is neither tangible nor visible in so far as it is that which sees and touches.” (Merleau-Ponty 1962: 80)

Merleau-Ponty only allows for parts of the body such as the hands to be viewed just like objects (Dant 2005). They can be looked at and turned around just like external objects. Nevertheless, not all of the body is, or can be, viewed in this way and this often includes a good proportion of the hair. The boundaries of the eyes and end of the nose remain in sight whereas the rest of the head occupies an “unobservable phenomenological space” (Priest 2000: 66). Sometimes, the ends of hair can be viewed as an object, depending on its length and shape. It can be handled, turned and modified, but the degree to which these interactions are limited suggests the ambiguous way hair is experienced, as a representation in the mirror and when observing the ends as an ‘object’.

Similarly, tactile interactions with hair are ambivalent. The hair is both dead and alive; herein lies the complexity of the tactile interactions with hair and its “uncanny nature” (Miller 2008: 183). Each hair is connected to the body through a single follicle, an indentation in the skin, and the nerves and muscles of the follicle give the hair tactile properties, making it possible to feel the movement of the hair by the body or by the wind. According to Merleau-Ponty (Reynolds 2004: 11), the body has the ability to be a “perceiving object and subject of perception”, which is particularly apparent if one hand touches the other. Hands can touch but also be touched (Merleau-Ponty 1962). Similarly, the hair follicle in the scalp can be touched by hands but also perceives the environment around it, as the hair grows and changes its shape. Nevertheless, physiologically, hair outside the scalp is regarded as non-living (Kingsley 2003). It has no blood, nerves or muscles. Hair that is cut does not cause pain and therefore seems sensorially distant. This leads Wilson (2003: 2) to stress that the boundaries of the body are unclear, “does the body end with the skin or should we include hair, nails...?” Although hair outside the scalp can be felt and can ‘feel’, it is ‘dead’ and therefore not like the hands, giving it an ambiguous nature when women interact with it. Hair can be considered as belonging to the body but it is also somehow distant from

it: 'non-body'. In particular, when it is cut or falls off the body it becomes all the more "alien" (Miller 2008: 183).

Hair ends that touch the skin were described by a number of women who were interviewed as, "tickling", "niggling", "aggravating" and "annoying". For instance, Holly, who has long brown hair, illustrates how the touch of hair on the skin can affect women.

"Sometimes I find it really, really, really irritates me. Just it being around, you know, all being around my neck and that really irritates me sometimes."

Depending on the shape and length of the hair, its ends sometimes touch different parts of the body such as eyes, ears, neck and shoulders, enhancing its 'non-body' status as it impacts on the body. The hair's ability to act on the body, creating emotions in women such as annoyance, suggests that hair has agency.¹⁰¹ The ability of things in some situations just to act like people has been widely acknowledged in the social sciences (Tilley 2006), as they allow and deny certain actions and impact on people's emotions, just like women's hair.

"We seem to distrust hair and believe it to possess and exercise agency in deceitful ways: it easily becomes other." (Miller 2008: 183)

The complex materiality of hair includes visual experiences as a representation in the mirror and through tactile and visual interactions with the hair-ends as both part of the body and as 'non-body'. The complexity draws attention to the ability of hair to have agency. Although important, this thesis still has to show how the agency of hair and the relationship of these interactions impact on women's cycles of wearing their hair and doing things with it and the hair practice as a whole. These are examined in the sections that follow.

¹⁰¹ To examine the 'agentic' capacity of things this research draws on Gell's (1998) work that tries to address the relationship between people and things. According to Gell, things can be considered as agents because this is how individuals sometimes treat them, such as dolls. He distinguishes between people (i.e. 'primary' agents) who have independent intentions and "'secondary' agents, which are artefacts, dolls, cars, works of art etc. through which primary agents distribute their agency in the causal milieu, and thus render their agency effective" (1998: 20). Things do not have independent intentions of their own but "do have causal efficacy" (Dant 2005: 67), they are the material embodiments of individuals' intentions. Agency emerges through a web of interactions between people and things in which both mutually impact on a desired outcome – they are co-agentic (Woodward 2008). It seems that through its materiality hair, as 'stuff', is 'co-agentic' in the process of women wearing and dealing with it.

Cycles of ‘wearing and doing’ hair: Hair that makes its owner aware of it

Monica, a married personal assistant in her 40s, was searching for a new hairdresser. She had recently moved office, making it impossible for her to go to her trusted hairdresser during her lunch-break. This search, in combination with a lack of time kept her from having her hair trimmed, so it grew and grew. She actually had called her old hairdresser, the morning of our first interview, to make an appointment. The hair was starting to “get on her nerves”. During this first interview Monica pronounced that she would like to have it re-coloured but that it was her fringe that particularly provoked her. It fell onto her face and got into her eyes; as she explained, “it is in my way”. It was touching her body, making itself known. Monica felt that it had affected her concentration at work and her ability to do her work “effectively”. The fringe caused her to feel “untidy” and “uncomfortable”. These feelings were so severe that they affected not only her ability to work but also her overall confidence – “I do not feel happy in myself”.

This short example demonstrates that hair is able to make its owner consciously aware of it whenever it starts touching the body. In Monica’s case, this happened because the hair had grown. The experience of her hair as a ‘non-body’ led Monica to feel somehow disconnected with her sense of herself, as a person who is not ‘effective’ at work. Monica no longer felt confident in doing her job. The externalisation of the self through hair seems to represent an incomplete process of objectification (Miller 1987). Monica’s example demonstrates that hair, which is experienced as a ‘non-body’ similar to clothes, can be perceived as if it is a “prosthesis”, an addition to the body that does not fuse with the wearer (see Woodward 2007). For Pamela, who has shoulder-length, straight hair and Anechka, who has long curly hair, wearing their hair is sometimes just like wearing a scarf, especially if it is unwashed or sweaty on a hot summer’s day. As for Monica, Pamela’s and Anechka’s hair makes itself known through its tactile impact on the body. It becomes somehow external, perceived to be like a piece of clothing that can be worn but not taken off. Hair remains physically attached but, through its material and sensual presence, separates itself from the body.

The physical touch of the fringe on the face gave Monica a feeling of embodied disquiet and was a constant reminder of having uncut, “untidy” and “messy” hair that seemed to be out of shape. She did not need a mirror to actually visualise her hair, as she felt it and therefore seemed to know how it looked. Her hair created a physical feeling that she was able to visualise. Her visual and tactile interactions with her hair are linked to her emotions and part of the material, temporal and conventional elements that make up the wearing of hair. Experiencing hair as a ‘non-body’ can have an emotional effect on women, creating emotions such as annoyance and doubt. The potential of ‘things’ to directly create emotions is further suggested by Gell (Hoskins 2006: 76), “these things have agency because they produce effects, they cause us to feel happy, angry, fearful or lustful.” Alongside bodily activities, emotions are another factor that constitute practices, and the examples discussed here show that these elements are highly interconnected when wearing hair. Considering Monica’s example, the emotional dimensions of day-to-day interactions with hair seem to govern her feelings about her appearance, triggered by sensual and material interactions with hair. The emotional significance of doing things with hair was also examined during the workshop at Boots¹⁰², questioning whether women would feel more liberated about doing things with their hair and wearing it if they could leave some of the emotions behind.

Emotions and sensual interactions can leave women “dissatisfied with the state of separateness” (Miller 1987: 21) between the body, hair and women’s sense of self, often affecting their confidence. Towards the end of the first interview, Monica confessed that she had actually cut her fringe at work because she felt so “untidy”, in an attempt to experience the hair as part of the body and not as a ‘non-body’. Cutting off her fringe had the potential to reintegrate her sense of self, making her hair part of her body and therefore completing the objectification process. In addition to long-term impacts such as the growth of the hair, there are short-term influences that can change the shape of the hair, causing it to move closer to the body and increasing the likelihood of it touching the skin. During short-term cycles of dealing with hair, it is often dealt with at home, as women wash, dry and style it whilst using up various amounts of resources. Through the process of doing things to their hair, women are able to create their sense of self and wear hair that is part their body, as they

¹⁰² An outline of the workshop is included in Appendix 8: workshop report.

complete the process of objectification. Nevertheless, as the next example shows, it is not always possible to go through these cycles in exactly the same way, as their details vary.

Tracy, a single working mother, tries to wash her hair daily. During the interview she described how she sometimes struggles to get out of bed, fancying an extra half an hour in bed. This happens to her about once every two weeks and as a result she misses the opportunity to wash her hair. What is even more important to Tracy than washing her hair is that she misses out on drying and styling it. Consequently, it is not in its usual shape. Tracy dries her hair using a mousse and a brush in order to give it what she called “a bit of oomph” and “a bit of volume”. She explained how, overnight, her hair is ‘moulded’ between her face and the pillow and that by the morning it would be “plastered” to her head, making her “aware” of it. During the interview she demonstrated how she “constantly would try to put it right” particularly if she is not busy in the office. Her computer sits opposite a window where she can see her reflection, therefore providing a reminder of what she thinks is an “awful” look as well as the feeling of it being “plastered” to her head.

Like Monica, Tracy described how she “would be aware of” her hair when leaving it untouched and how this influences her confidence and ability to work, illustrating in both cases an incomplete process of objectification that can only be completed by doing things to the hair. Still, in the short-term cycle described by Tracy, hair has the potential to create awareness every day if left untouched.¹⁰³ This reminds her not only of the look and feel of the hair on such a ‘lie in’ day, but also that she actually has “not taken the time in the morning” to do her hair. Tracy is unable to make herself “look that tiny bit better” and therefore the hair does not become part of her. She does not go through her usual motions of washing and drying the hair. The hair feels different in comparison to how it does on the other six days out of the week and therefore looks “awful” to her. Through long-term practice Tracy knows how her hair normally feels and looks but on those days it looks “awful” to her. It would take several months experiencing this ‘untouched’ hair for it to become ‘normal’ so that she no longer feels awkward and self-conscious. Nowadays, on such ‘lie in’ days, Tracy goes back home after work to wash her hair. This is the only way it starts to become part of herself again.

¹⁰³ Dealing with hair is part of the process of getting ready in the morning. This also includes practices such as putting on make up, getting dressed that are not considered here but are part of the objectification process.

Women not only deal with hair that has changed its state from ‘body’ to ‘non-body’ through washing, drying and styling it. Hair can also be altered through wearing hair clips, bobbles, bands and grips and hair care products such as sprays, mousses and gels that allow even the shortest of hair to be changed and worn differently. Here, the hair that is experienced as a ‘non-body’ can be altered through manipulating the interrelationship between it and the body, breaking those temporary and permanent connections. By altering the hair through these products the objectification process recurs, and is potentially completed even if only for a short amount of time, as Monica’s example demonstrates. During the first interview with Monica she said that her hair was really irritating her, particularly the fringe, as she could not find the time to go to a hairdresser. It was constantly in her eyes reminding her that it needed cutting and she could visualise it without looking into the mirror. During the second, evocative interview, she decided to re-live a recent day when it was particularly rainy and windy. A few weeks had passed and she had still not made it to the hairdresser. She had a cold, no haircut in weeks and knew that she had to battle through Sheffield’s torrential rain on her way to work. Before getting out of bed she could hear the rain and knew it would not be a good day for her hair. Knowing that the day may become a constant struggle with her hair she put a hair bobble around her wrist, a reminder that if it became unbearable she could tie her hair up.

Although a look out of the bedroom window confirmed to her that the weather was not going to be kind to her hair, Monica started the day like any other working day, spending the same time and effort in washing, drying and styling her hair. She decided to wear a hooded all-weather coat to protect her hair from the wind and rain, as a short walk with the dogs prior to setting off for work and a quick look in the mirror confirmed to her that the coat protected the hair from being “damaged”. Her route to work includes a lift in the car to the station, a tram ride and a short walk. At the tram stop, she examined the “weather swept” hair of fellow female passengers in order to prepare herself for what was in store for her when she would get into work and look in the mirror, “to see what the damage was”. At work, her glances in the mirror confirmed that her hair had completely changed from how it was before she set off for work. The hood had rubbed on her hair, giving it a static charge and making it stand up. The wind had blown the rain into the hood. It did not provide the

protection she hoped for and left her hair “sticky”, as the rain had mixed with her hair care products leaving the impression of “flat” and “greasy” rather than lifted hair. “It looked horrible,” she said.

Throughout the day, her hair did not leave her mind, causing her to feel “self-conscious”. She kept touching it and looking at it in the mirror “trying to minimise” the “damage”. Twenty minutes before an afternoon meeting she remembered the bobble around her wrist, a potential saviour. However, when she started scraping her hair back in front of the mirror in the toilets, she realised that by moving her hair off her face and neck her outgrown roots started to show. Her choice became one of showing the roots, or withstanding the feeling of “untidy” hair. She was standing there looking and thinking, “shall I, shall I not”, checking the hair, scraping it back and wondering how it would look. This time she decided to withstand the feeling of “untidy” hair but constantly thought about it, repeatedly touching it during the meeting. It was not until she got picked up from the tram stop on the way back home that she decided to tie her hair up without looking into the mirror. In her husband’s company, the feeling of the “untidy” hair outweighed her desire to cover up the outgrown roots. Monica decided to tie up her hair. Immediately she “felt neater”, as her hair was kept off her face and neck. She felt that “the damage was minimised”. Finally, when she arrived back home, she had a bath and diminished the “damage” completely.

Monica’s example demonstrates that a completed process of objectification, through doing things to her hair in the morning, can become incomplete. She lost the effects of the process of dealing with her hair that she had achieved in the morning, when she walked through the rain on her way to work. Women can become aware of their hair not only because of a missed process, as in Tracy’s case when she had a ‘lie in’ and could not do things to her hair, but also through the effects of a lost process. In the morning, Monica dealt with her hair. She washed, dried and styled it. As part of this process she touched and looked at her hair in the mirror, thereby externalising the self, considering itself as an ‘other’. There was nothing unusual when she did things to her hair and therefore she was able to reintegrate the externalisation within the self, having dealt with her hair. Her hair, body and self were not separated but ‘fused’ into one. But, the weather changed the shape of her hair, demonstrating its malleability and giving it the material agency to impact on the body, and in the process,

making itself known to its wearer. The weather's influence on Monica's hair triggered emotions, leaving her feeling a "mess". The sensual experiences with her hair on that day were unusual because it did not remain in the same style as she had left it in the morning. It became "untidy". As she could not rectify her hair by washing, drying and styling it at work, she resolved to stick it out until she could tie it up in the car. Doing this removed the sensual reminder of hair on the body and provided her a temporal feeling of "neatness". She could 'sweep' the hair out of her consciousness. She could rectify her disembodied hair only by physically 'distancing' herself from it; she tied it up, completing the objectification process temporally. The hair at least physically felt "neater" and again 'part of her'. In Monica's case only her evening bath could completely rectify her hair and her sense of self.

Monica's example demonstrates that the objectification process is not only rooted in visual and tactile interactions with her hair but also her ideas and accompanying emotions of what is to have 'tidy' or 'untidy' hair. Although she could temporarily deal with her hair by tying it up in the car, when she viewed her hair in the office mirror Monica felt that she could not tie up. The potential for integrating the body, hair and her sense of self through tying-up her hair and breaking the tactile interactions between hair and body felt impossible when Monica externalised how she would look. Monica decided to leave her hair untouched, as she realised that although she dealt with the tactile potency of her hair the visual consequences would not provide her with a "tidy" feel and look. Her hair remained a 'non-body', as she knew it would not look "tidy" with the roots being visible.

The example is characteristic of several of the interviewed women. Here, the tactile interactions with hair are in direct conflict with creating a sense of self. This demonstrates that in order to not experience hair as a 'non-body', women sometimes make compromises either with the material agency of their hair or with the immaterial ideas that constitute the wearing of hair. Although sensual and material interactions, emotions and conventions have the potential to conflict with each other, they are all integrated in the wearing of hair. Conflicts between those elements can potentially change women's hair care routines. Nevertheless, 'ruptures' (Miller 1987: 45) in the objectification process, such as missing a process in the morning, as in Tracy's case, more frequently reinforce the ways hair is dealt with and the cycles of dealing with and wearing it. In Monica's case, the potency of the

visual interactions and the gaze of others diminish the conflict between the practice elements¹⁰⁴. Tracy actively attempts to avoid days where she has a 'lie in' before leaving for work. Her usual routine of dealing with her hair on a daily basis is therefore difficult to change, as it has a positive outcome on the process of objectification. Past sensual interactions with hair, including emotions and ideas are sometimes so routinised that they impact on women's visual perception of their hair, reinforcing how often they deal with it. These dynamics are discussed in the final section of this chapter.

Habitual routines¹⁰⁵

During her evocative interview, Simone, a nursery nurse in her 30s who washes her hair every other day, decided to re-live a Sunday. On the Sunday in question, she was meant to visit some friends, so she showered in the morning. Asked how she felt that morning, she replied that

“I just felt like I wanted to get into the shower and get my hair washed and things like that so I did feel a better... I was just aware of it and it felt really greasy and I felt mucky.”

She continued by explaining that she did not feel “attractive, not like a woman”. However, when she looked at herself in the bathroom mirror, she realised that her feelings about her hair when she first got up did not match with what she actually saw, “I expected my hair to look really bad. I don't know why but it did not look too bad”. She couldn't explain to herself why the hair did not look like it usually does if she leaves it for a day. Here, past experiences left her with the impression that her hair is a “complete mess” but this time it wasn't. Her feelings provided her with a mistaken perception of how she actually looked when seeing herself in the mirror. Nevertheless, she still decided to have a shower and wash her hair. The realisation that her hair did not look “really bad” when looking in the mirror did not change her routine of washing her hair every two days.

¹⁰⁴ The practice elements are outlined on page 35, according to Reckwitz's (2002) definition of a practice.

¹⁰⁵ Hair care routines can be considered as habitual as they are “characterised through a distinctive forms of regularity and persistence” (Shove 2009a: 3)

Simone's example demonstrates how powerful women's routinised feelings are in relation to the way their hair looks and feels, including the patterns of how often they deal with it. Past experiences provide memories of how hair can feel if it is left untouched, but can also become a reminder of how hair should look like on a washday. This reminder or tactile feeling not always corresponds with how hair actually looks, when viewed in the mirror, demonstrating the complex relationship between 'how I feel' and 'how I look' that reinforces cycles of women wearing their hair and actions to deal with it. This confirms Merleau-Ponty's (1962) argument¹⁰⁶ that perception depends on prior experiences, which are both cultural and material but also emotional, which come together in the performance of wearing and doing things to hair. They are all embedded in the hair care routines that give them the meanings on which women act. Nevertheless, as Simone's example demonstrates, the 'habit-body' is not only fixed but evolves over time, as it can be altered "by experience of that moment" (Dant 2005: 97). The hair Simone saw in the mirror did not cohere with the tactile feeling or the perceived look.

The practice of hair care is characterised by regularity that relies on routinised ways of feeling, material interactions with hair, and conventions. Still, these elements are open to change. Simone could have potentially not continued with her usual routine and not washed her hair. Due to the practice performance, the integration of elements can be reinforced and "progressively integrated into the habit body" (Dant 2005: 97, Merleau-Ponty 1962), but they can also evolve and change, through their temporal and generative nature (Shove and Pantzar 2005). Such creations sometimes occur in everyday life. Some of the women explained how daily activities such as social events, work and looking after children start to intersect with hair care routines, as will be discussed in chapter 5 and 7. In the context of these intersecting practices women regularly start to plan when they deal with their hair, increasing or decreasing how often they deal with it. Clips, bobbles and grips are often used to shape the hair away from the body to reduce the frequency of washing. Nevertheless, these changes often are only temporary and, as seen above, bring their own concerns when women try to integrate them into existing practices.

¹⁰⁶ Merleau-Ponty's (1962) work on 'perception' and the 'habit body' suggests that "perception depends on prior experience which is both cultural and material to make meaning of what is present" (Dant 2005: 97).

Conclusion

In the Boots' product development process practice elements, such as emotions, are often considered in isolation, as discussed in the previous chapter. Efforts are directed towards product acquisition rather than use. Such approaches "take the individual or the artefact as the unit of analysis" (Ingram et al 2007: 12) instead of practices. This chapter explored the relationship between the 'wearing and doing' of hair that determines the frequency with which women do things with their hair and so influences the amount and type of resources consumed. A practice-orientated approach to this examination focuses upon the performance and co-evolving relationship between women and their hair, including its products and tools that are all equally involved in the process of women doing things with their hair. An examination of the 'wearing and doing' of hair makes apparent the sensual, material, emotional and conventional elements of the practice that determine how often women deal with their hair. Instead of relying on pre-defined socio-demographic factors or strategies that explore the impact of isolated products in order to examine how, and how often, women deal with hair that are commonly used in market research and new product development processes, the approach concentrates on the dynamics of the everyday life and the arrangements of multi-relational elements that make up the practice.

For example, Mintel's (2007) studies, which are consulted by Boots' insight team to investigate commonalities and differences between 'daily washers of hair and body' and 'daily washers of body but not of hair' according to socio-demographic factors. The studies divide women into criteria such as age, hair type, employment status and attitudes towards grooming, suggesting that the 'heaviest users' are between fifteen and thirty-four years of age, whilst the frequency of hair washing decreases with age. Considering the Mintel studies on shampooing hair, variations by age are apparent within a representative sample. Despite the impact of age on hair care, in Mintel studies the relevance of each socio-demographic factor does not emerge through the data but is often pre-defined prior to the research. Monica, Kerry and Tracy vary in age, hair type and employment status but all wash their hair daily. The socio-demographic factors therefore can only partly explain the complexities of how often women deal with their hair (i.e. the temporal dimension of the practice), suggesting that to develop an understanding of these dynamics in more depth demands a

more qualitative approach. In this chapter, an explorative and practice-orientated approach uncovers the habitual nature of women dealing with their hair. How often women do things with their hair relies on routine ways of acting that determine the cycles of women dealing with their hair and wearing it, as demonstrated by the examples in this chapter. These cycles are sometimes interrupted by various occurrences such as a lie in, the weather and the growth of the hair, meaning some elements of the practice of hair care are more habitual whereas some are responses to less frequently occurring situations. Such patterns transcend and build on more established socio-demographic factors (Warde 2005; Woodward 2007) and acknowledge the complex nature and multi-relational elements that come together when women deal with their hair and wear it.

In this chapter, an investigation into the multi-relational elements of body washing draws attention to the possible explanation of the increase of hair washing, as the two practices currently intersect. The washing of hair aids the process of relaxation or refreshing the body. Comparing the two practices allows for an examination into the elements that are integrated into the reproduction of hair care routines and how they might have changed. The importance of the emotional, sensual and material elements of wearing hair to determine how often women deal with their hair is a crucial point to emerge from this chapter, as is their relationship to past experiences and developed ideas about what is acceptable hair. The sensation of embodied disquiet created by hair, experienced as a 'non-body', seems to be deeply rooted within and governed by emotions. Monica and Tracy felt less confident and unable to do their work after their hair had changed its usual shape because of a 'lie in', hair growth or a rainy day, representing an incomplete objectification process. These examples illustrate the routinised bodily and mental activities (Reckwitz 2002) that women rely on when they wear hair, that determine various short and long-term cycles when women deal with their hair. These overlap and influence what women consider normal and acceptable hair.

An examination of the bodily and mental activities involved in women wearing their hair, as a practice-orientated approach indicates, draws attention to the embodied nature of hair and its potential to become a 'non-body'. The significance of the materiality of hair emerged through the data when women associated the points of dealing with it with the hair's

potential for creating an ‘awareness’, as demonstrated by Monica’s and Tracy’s examples. Hair’s symbolic representations have been widely discussed in studies on hair (Biddle-Perry and Cheang 2008) and the history of hairstyles (Cox 1999), often neglecting the embodied nature of having hair. Despite this, hair has material presence that is culturally and emotionally mediated. Instead of separating the material from the cultural, a practice-orientated approach examines material interactions in relation to sensual experiences, understandings and emotions. For example, Monica is able to manipulate the shape of her hair if experiencing a feeling of embodied disquiet. The temporal connection between hair and body is interrupted by women distancing themselves physically from their hair. It loses its potential to impose itself on the wearer. Nevertheless, what became apparent from Monica’s evocative interview is that the physical distancing of hair from the body is usually a short-term solution, as she can only complete the objectification process by shampooing and styling her hair.

What also emerged from Monica’s evocative interview was that the physical relief from the embodied disquiet can conflict with ideas of how to look acceptable at work. She could not tie up her hair until she arrived in the car, safe from onlookers, with only her husband sitting next to her. The example demonstrates how ways of wearing and shaping the hair affect women’s sensual experiences that are influenced by systems of ideas. According to Reckwitz (2002) and Schatzki (1996), the multi-relational elements of practices cannot be reduced to each other, as they all integrated in the performance of the practice of hair care. Even so, as Monica’s example reveals, the elements sometimes conflict with each other. At work, Monica had to negotiate between the material potency of her hair and her idea of acceptable looking hair, potentially challenging her routinised ways of dealing with it. Similarly, sensual interactions can sometimes conflict with each other, as demonstrated by Simone’s example. The tactile feel of her hair does not always match its visual representation in the mirror, highlighting the impact of past experiences that reinforce routinised body and mental activities with hair. The interrelationships between the elements reveal a stability but also potential instability in the performance of the practice of hair care.

The role of the designer might therefore not be to develop individual product solutions that try to impact on single practice elements but “to create a context for experience” (Overbeeke

et al 2002), considering the interrelationship of material and immaterial elements. Designers who want to transform how often women deal with their hair, towards less resource intensive routines, need not only to consider a product and its packaging but also how it impacts on the hair in use, whilst using the products but also when on the hair. The material nature of hair is altered through various products and tools that shape it. The hair and its products and tools turn out to be something that can be altered and shaped through design, and in the process might influence routine emotions and system of ideas. Nonetheless designers also have to consider ‘ruptures’ in the objectification process such as a ‘lie in’ that can sometimes initiate negative emotions (Miller 1987). Such ‘ruptures’ can reinforce the cycles in which women do things with their hair. Design interventions can potentially have the same impact, stabilising current resource intensive practices or aiding the development of change.

This chapter examined detailed accounts of the way women move through the cycles of dealing with their hair, whilst considering its relationship with the wearing of hair. This examination drew attention to the potential of hair to become a ‘non-body’ and therefore acquire agency. The next chapter explores the notion of the co-agency of the wearer and her hair in more depth, particularly concentrating on what women try to achieve whilst doing things with their hair and resulting standards.

Chapter 5 Standards developed in the practice of hair care

Introduction

Continuing the previous chapter's focus on the interrelationship between women's experience of their hair as something they wear and the actions they take with it, this chapter explores the various interconnected 'states' that hair can be in, which result in the standards that women intend their actions with hair to meet. It builds on the previous chapter, which examined how the cycles of 'doing and wearing' hair correlate with its various 'states' such as 'frizzy'. These 'states' are both culturally and biologically constituted as well as physically and discursively experienced (Goffman 1971; Merleau-Ponty 1962), and they create standards that lead women to deal with their hair in accordance to personal feelings that monitor the hair and public perceptions. These standards influence the level of resources that are consumed in hair care routines. While it would be possible to account for resource use in relation to the various standards identified, this would tend to obscure, rather than elucidate, its relationship to the practice of hair care. Focusing only on the amount of resources consumed, the research would potentially neglect the fact that women not only consume gas, electricity or water when doing things with their hair, but participate in the hair care practice, that relies on resources (Wilhite et al 1996). This chapter looks at some of the knowledge and understanding that exists in the practice of hair care regarding what women should do with their hair, how they should wear it and what they consider as having 'normal' and acceptable hair.

Women in the study perceive their hair to be 'tidy', 'neat', 'visual', 'messy', 'natural', 'presentable', 'smart', 'healthy', 'curly', 'straight', 'fine', 'static', 'flyaway', 'frizzy', 'unruly', 'wild', 'shiny', 'glossy', 'soft', 'clean', 'dirty', 'greasy', 'lank', 'flat', 'heavy', 'mucky', 'sleek', 'smooth', 'dry', 'damaged', etc. - the list is long. In this chapter, the most frequently used descriptions were chosen, ones that emerged from the primary research with women. On first sight, the list illustrates the dual nature of these 'states' of hair, as they can be easily divided into what women perceive to be 'good' hair (i.e. it being 'healthy', 'smooth') and 'bad' hair (i.e. 'unruly', 'dirty', 'damaged', 'greasy'). Nevertheless, when inspecting them more closely the complexity of their interconnectedness becomes apparent, including the social, biological, subjective and emotional dimensions of hair that create

various standards. Many different types of ‘unwritten’ standards apply to the practice of hair care in relation to the performance of doing things with hair and the end results. In this chapter four focal types of standards are identified, which together are focused around levels of control over the hair, the amount of work invested, the balancing of substances and the level of hair visibility.

An examination of the standards not only uncovers their interconnectedness with the various ‘states’ but also the co-agency between the wearer and the hair. As the previous chapter made apparent, not only the women but also the hair has ‘agency’. It draws attention to the intersections between doing things with hair and the end result. The co-agency between the wearer and the hair can lead to women losing the effects of the process of dealing with hair or creating ambiguous end results that are reflected in the various ‘states’ of hair. In order to explore the notion of the co-agency of women and their hair, the chapter refers to the work of Gell, who focuses on the agency of objects, including his notion of “distributed personhood” (1998: 21) wherein individuals distribute their intentionality and externalise agency through objects, and in this study through the materiality of hair. Hair is not passive but a key factor to the mediation of agency. In relation to women doing things with their hair, the distribution of the individual’s agency is embodied in the shaping and forming of hair (i.e. changing its material form by achieving certain ‘states’ of hair), suggesting to others “that they are a particular kind of person” (Woodward 2007: 12). The interview material demonstrates the transmission of intentionality, as argued by Woodward (2007: 68), and argues that achieving of certain standards in hair is not “straightforward and uni-directional”. Women who wish to wear and deal with their hair in a certain way are confined by the various standards that exist.

In order to examine the social dimension of wearing hair, the first part of this chapter investigates women’s distinctions between ‘work’, ‘going out’ and ‘being at home’ hair that draw attention to its ‘visuality’. In addition to demonstrating the agency of hair, it becomes apparent that the process of dealing with hair is often as important as the end result. Therefore, the last part of this chapter looks at the interrelationship between the process of dealing with hair and wearing the end result. Firstly, the last part focuses upon the social, biological and subjective dimension of women wearing their hair through examining the

emotional impact of women loosing the effects of the process of dealing with hair or creating end results that do not reflect the time and effort that went into doing things to the hair. Combined, these factors create various ‘constraints’ on how women deal with their hair and how they wear it. These constraints derive from various standards that focus on the levels of control over hair, the visibility of hair and the amount of work women invest into doing things with it. Secondly, it investigates in more detail how the practice elements¹⁰⁷ interact, particularly the ideas, products and tools that come together when women deal with their hair. Considering the dynamics of everyday life, it becomes apparent how the ‘doing and wearing’ of hair is fraught with ambiguities and constraints, causing women to try and control its ‘visibility’ and to balance the amount of substances such as natural oils on the hair. As the chapter demonstrates, how, and how often, women deal with hair does not necessarily derive from women’s individual choices and preferences, as is sometimes assumed in sustainable consumption approaches (Shove 2004). The practice of hair care in its reproduction requires constant diligence that results in the organisation of the practice and not always from individual’s choices.

Framing life situations: End results of dealing with hair

Simone, the nursery nurse, with shoulder-length, naturally curly but straightened hair, clearly separates her hair for ‘work’, ‘home’ and “going out” (i.e. going to the pub and club). She explained how her job involves a lot of physical activity, having to run around with children and preparing activities that often leave her being covered in paint, dirt or sweat. Throughout the week, Simone’s hair is determined by what she called “practicalities”. She often wears her hair up in a ponytail and even her fringe gets pulled up and secured with a clip. Not even a single hair touches her neck and face. The hair “is just out of the way” for the time when she needs to be hands-on which, during the week, is most of the time. How the hair looks is not important on these occasions, as Simone expressed it: “I am not really bothered what my hair looks like”. Nevertheless, on second thought, she explained that it matters “to some extent”. She does not want to look “dreadful”. In addition to working with children, she also has to talk to their parents and be around her colleagues. She wants to look “professional”, giving the impression that she is responsible enough to

¹⁰⁷ The practice elements are outlined on page 35, according to Reckwitz’s (2002) definition of a practice.

look after children. Her hair also has to 'fit' into this role, including her overall appearance, which is combined with using less make-up. "Professional" hair for Simone looks "presentable", "decent" and, overall, "tidy" and "neat".

"I am working with children but I also work with parents and I work with other professionals as well... I have to look decent and I have to look tidy and I have to look presentable. So as I say I don't really worry about my hair to an extent but I have to make it look halfway decent because of that reason."

At work, her hair is 'out' of the way, using grips, clips and bobbles. Simone washes, conditions, blow-dries and straightens her hair to create a "neat and tidy" hair. She follows the same steps as when she wears it down, but she hardly ever has it down during the week. Even at home, when Simone is not required to conform to the social expectations of being a professional nursery nurse, she frequently wears her hair up. At home, Simone is "not particularly bothered about the way she looks". Similarly to her work hair, home hair is taken up during the week, as she is busy doing things about the house. Hair is better out of the way. With work and home hair she is not "worried" about how it looks like, unlike her "going out" hair, which has to look "nice". During the first two interviews with Simone, she was single and "looking for Mr Right". Night outs with her friends presented the perfect opportunity to meet somebody and fall in love. She and her hair did not have to look "neat and tidy" but "attractive". As Simone explained "you want to look nice for the right moment". 'Going out' hair requires Simone to follow the same process of washing, conditioning and straightening her hair. However, the timings, techniques and the amounts of products used differ. Washing and conditioning hair happens the day before the night out. Further, she straightens her hair in smaller sections and uses more products so that it is "how she wants it". Simone can only be "attractive" if she puts a "big effort" into doing her hair and make-up. During the week, Simone sometimes looks in the mirror and has to remind herself that she actually looks 'pretty good', as what she sees, looks "terrible".

This example is characteristic of many of the interviewed women; they differentiate between work, home, going out (i.e. special occasion) hair, creating various standards such as having 'neat and tidy' hair. Similar to Simone, Pamela, an investigator for the local government in her early 50s, who has fine, shoulder-length hair, explained that her work hair has "to be a bit tidied up"; Pamela wants to look "professional", like Simone does. At work she rarely

wears her hair down but ties it back with a clip or bobble, particularly on a washday. It helps her to tidy up the hair and deflects her awareness of her unwashed hair. Occasions when Pamela ties up her hair are when she “feels like being less visual”, for example at work. Although her job involves her working on the computer, it is not as hands-on as Simone’s. Pamela connects the tying up of her hair with being less visual, rather than with practicalities.

Considering the two examples, it becomes apparent that the wearing of their hair reflects how the two women ‘frame’ (Goffman 1974) situations and activities. Frames organise meanings and standards in hair that relate to women’s domains of their life such as work and home hair. They seem to determine how much time is spent on doing things with the hair, including the amount of products and tools used. When Simone gets ready to ‘go out’ at the weekend she uses more products, spends more time in the bath and uses different techniques to do her hair. Overall, she uses more resources. Therefore, an investigation into the various domains of life would provide insights into the connections between women’s lifestyles and their hair care routines, including the amount and type of resources they consume. Still, this examination would not consider why women with varying lifestyles (for example, a woman who goes out to the pub every week and one who does regular exercise) have similar habitual cycles of ‘doing and wearing’ hair, as discussed in the last chapter. Ways of dealing with hair and how often it is done not only depend on women’s individual lifestyles. A woman who goes out regularly does not necessarily use more resources than one who stays at home during her leisure time. As this chapter will demonstrate, how often women deal with their hair may depend on sensual, emotional and material interactions with hair as much as lifestyles.

‘Frames’ do not only account for levels of resources consumed but represent shared understandings of what is going on, defining it either as ‘work’ or ‘going out’, along with expectations of how to behave and of the overall appearance, including how to wear the hair. Hair should be ‘neat and tidy’ at work and is allowed to be more ‘visual’ when going out. Hair ensures that other people will perceive Simone and Pamela as “professional” and as competent in doing not only their hair but also their job. Both women not only look ‘professional’, they also feel it, giving them confidence in their job. As part of this, Simone

is able to contrast what she considers as acceptable hair at work with what she regards as unacceptable hair. For example, unkempt hair for Simone can appear to be full of head lice and is therefore inappropriate when looking after children in a nursery. The wearing of hair relies on cultural competences and knowledge that are developed in the performance of wearing hair that impact on dealing with it at home.

Considering Simone's and Pamela's examples, it is possible to assume that the mediation between cultural competences, knowledge and understanding result in social norms of how to wear hair that is straightforward, coherent and achievable. Similarly, Gell (1998) has suggested that women, as part of their 'distributed personhood', are able to externalise their intentions in the form of cultural competences through different material objects, in the case of this study, through their hair. Through having hair that is considered by others as 'neat and tidy', Pamela and Simone can be perceived as 'professional'. Nevertheless, as a recent situation in Pamela's life demonstrates and as argued in Woodward's (2007: 68) study on dressing, the transmission of intentionality is not as "uni-directional" as Gell's supposes.

In addition to working as an investigator, Pamela is enrolled on an evening course at a university. On this particular occasion, she decided to wear a headband accompanied by a 1960s skirt; on reflection she admitted it might have been a "mistake" to combine the two items. The hair and headband in combination with the skirt is Pamela's way of defying what she calls an "uniform identity kit" for women of her age. Often this 'uniform' for Pamela involves wearing beige clothes and having perms instead of longer hair. On one particular occasion, her intention of defying this stereotype had some unforeseen consequences. Arriving late for the lecture, Pamela tried to sneak into the room. However, before she could sit down, the lecturer spotted her, who announced to the whole lecture theatre "Sandy from Grease has just walked in". This statement was followed by laughter from her fellow students. Although Pamela could "admit there was a funny side" to the situation, she has not worn the headband ever since. Despite this example, the interviewees often identified studying at university as an environment that allows for various ways of wearing hair and clothes.

The hair with the headband was meant to show her defiance of an ‘uniform identity kit’ that, according to Pamela, women of her age comply with as part of her ‘distributed personhood’ (Gell 1998). Potentially her fellow students could have regarded her as young and vibrant for her age, demonstrating the hair’s significant potential to “transform” women (McCracken 1997: 15). Still, Pamela’s example shows that hair in combination with a headband and skirt have the potential to create a visibility that, on this occasion, drew attention to her, highlighting its agency. The mediation of agency between wearer and hair makes the wearer susceptible to the view of others. Although this study mainly concentrates on women’s hair care routines, the role of hair in the totality of appearance creation, including things such as clothes and make-up, becomes apparent. The attention had a mixed impact on Pamela. She could laugh about it at the time, but she has still not been keen to wear the headband again in case it draws unwelcome attention to her, constraining her options over how she deals with her hair and wears it. Ways of wearing hair are not free of social constraints and therefore not necessarily based on women’s individual choices, as is implied by the sustainable consumption approaches that regard ‘consumers as decision-makers’ (Shove 2004).

At times, when Pamela goes out for the evening or to a party, she welcomes the ‘visibility’ of her hair. She “wants to make a statement” and is more willing to take a risk. Although for Simone ‘going out’ hair is about being attractive and not necessarily about making a statement, her ‘going out’ hair is supposed to make her more ‘visible’. She wants to look attractive to be more ‘visible’ to men in the hope of building a relationship. In both cases, this ‘visibility’ is desired, in Simone’s case to attract men and in Pamela’s case to feel like “a million dollars”. During the interviews, women often described ‘going out’ hair as “standing out to look interesting”, “making an impression” or “statement”. It might seem that there is greater variety of choice of ways of wearing hair when ‘going out’. Nevertheless, having hair that creates ‘visibility’ is ambiguous. It carries the potential risk of being ‘too visual’ to the potential gaze of others, as demonstrated by Pamela’s example and will be discussed in more detail below. This ambiguity demonstrates that the achievement of standards in hair is not always straightforward, coherent and free of constraints, as it relies on cultural competences and knowledge that are developed in practices.

Although the examination of social domains such as ‘work’, ‘home’ and ‘going out’ point to the ways in which cultural norms and expectations are often imposed on women and ways of wearing hair (Douglas 1973), women not only impose norms onto passive hair. Women also try to exert their own agency and embodied intentions through manipulating hair with products and tools. Moreover, the above examination partly fails to acknowledge the interrelationship between the ‘wearing and doing’ of hair at home by emphasising mainly the wearing of hair in various social situations. As indicated by Shove (2003: 160) the process (i.e. the performance of practices) is as significant as “the specification and interpretation of the outcome” when exploring the dynamics of everyday practices. Considering the list of ‘states’ of hair that women used to describe ‘neat and tidy’ hair, the importance of purposefully positioning the hair next to ways of wearing the hair becomes apparent. Hair that is ‘neat’ was described by some of the women as being “brushed back”, “all in one place”, “not out of place”, “all hair working together”, “tucked in” and “purposely put in position”. The significance of doing things with hair is further explored in the next section of this chapter, in particular in relation to women losing the effects of the process of dealing with hair or using a process that potentially can create ambiguous end results.

Relationship between process and end result

Levels of control: Loosing the effects of the process

Whilst Pamela’s example demonstrates the co-agentic interrelationship between the wearer and the hair through creating a ‘visuality’ that was scrutinised by the gaze of others, the next examples, starting with Julie, show how this relationship is based on the interrelationship between the process of doing things with hair and the end result. This examination demonstrates that women have to work with certain ‘constraints’ that are not only cultural and social but also biological and material, leading to various levels of controlling hair. Julie, a student nurse in her early 20s, is regularly unable to create ‘neat and tidy’ hair. She regards her hair as “a mess” and not ‘acceptable’ most of the time. Although such strong feelings of having ‘messy’ hair was an exception in the study, the description of her “naturally curly” hair as being neither “curly” nor “straight” and just being “horribly frizzy” was not uncommon for women with ‘curly’ hair. According to Julie her “morning hair”

could scare away burglars, as it would resemble a “werewolf” or “the Lion King”. Nowadays, if Julie is not going out to a pub or club she ties her hair up; she doesn’t “tend to make a lot of an effort”, but at least her hair looks “neater, a little less messy”. Whenever she gets ready for an evening out, Julie likes to make an effort and therefore straightens her hair. During the interview she pulled a photo out of her handbag of her and her friends who were just about to go out for the evening, demonstrating how her hair looks if she has spent time on it but, as she pointed out, the picture was taken before she left the house, “so they [hair strands] were straight but they don’t stay straight”. Her efforts usually last for about five to ten minutes, as she confirmed numerous times during the interview. The moisture in the air combined with her getting hotter in a crowded pub or dancing in a club “start off the frizz” and “it goes right back” to how the hair was before she went through the process of doing things to her hair, as its inherent curl re-asserts itself.

For Julie the appearance of ‘messy’ hair is based on losing the effects of the process of dealing with her hair, as the results could not be maintained, instead of missing the routine through lying in, as discussed in the previous chapter. These processes seem to be monitored by her emotions. The loss of the effects demonstrate the material, malleable and biological nature of hair that constrains her ability to externalise her intentions of being an ‘attractive woman’ even after she has successfully positioned and dealt with her hair. Julie’s ‘curly’ hair texture acts as a particular biological constraint when it comes to purposefully positioning her hair. She straightens her hair, using various hair care products and tools to accomplish ‘straight’ hair instead of ‘frizzy’ and ‘messy’ hair. Still, the altered hair texture does not last for long as external influences caused through the weather and internal influences produced by her body counteract her achievement. By drawing attention to the agentic capacity of objects (and in this study to the agentic capacity of hair), Gell (1998) has criticised the idea that individuals have intentions that are impressed upon passive objects. From this perspective, agency emerges out of the interactions between hair and the person shaping and wearing it, and therefore hair is not simply positioned into place in which it stays but rather women continually try to use their agency to counter that of the hair - they try to control it. This also emerges from the interviews with women.

The hair is not passive in this relationship, it has agency through the malleability of its material propensities and its ability to grow. Although Julie was the only informant who feels so strongly about feeling a ‘mess’ most of the time, numerous women remarked on the possibility of losing control over the process, particularly those with ‘naturally curly’ hair. They portrayed the agency of hair as being ‘animal-like and having a mind of its own’ in relation to the need to control it. Winona, the primary school teacher in her early 30s, contemplated during the interview why she straightens her ‘naturally curly’ hair. Like Julie, Winona considers her hair as “frizzy rather than curly”. On second thought, Winona stated that straightening her hair is not about looking like everyone else; it is her hair, which is so “unruly”, “uncontrollable” and “massive”, that can only be remotely controlled if she straightens it. Her hair has its own agency, as most of the time “it does its own thing” and seems to have “its own life-force”. Winona feels she has to straighten her hair, even if she is “going out”, a context in which women often want to appear more ‘visible’ and create ‘a statement’. Hair should not look like as if it was left ‘untouched’, as Winona’s hair will always be “a work in progress”.¹⁰⁸

Giddens (1991) has argued that the body, including the hair has to be actively constructed and controlled. It cannot be “merely ‘accepted’, fed and adorned according to traditional ritual” (1991: 178); nowadays it is part of a “reflexive project of the self” (1991: 5), as the self is no longer inherent or static. The body has become a project that women need to ‘work on’ (Entwistle 2000) and take responsibility for. This includes disciplining and controlling hair. Julie uses lengthy processes, making use of products and tools to aid the administration of agency and control over her hair, in the hope of getting the hair in position and keeping it there for longer amounts of time. Nevertheless, the agency of the hair regularly constrains some of these intentions as it goes “frizzy”, giving the impression that Julie and Winona did not go through a process of dealing with their hair and therefore do not look after themselves. In particular, Julie associates doing things to her hair with “taking care of” herself and showing self-respect.

¹⁰⁸ Although through Julie’s example, a ‘battle’ between the women’s intentions and the agency of hair is particularly apparent, as she tries to straighten her ‘curly’ hair, the agency of hair seems to create a struggle for all of the women I interviewed with varying hair types and whatever the fashion.

“It really, really irritates me because it always looks a mess as if I have never made an effort... I have not made an effort now but when I do, you can’t tell, like five minutes later it just goes back.”

Nowadays after attempting various processes to control her hair, Julie often cannot be “bothered” to deal with it because of the rapid invisibility of the process that goes into doing her hair. This attitude does not come without a price, as Julie believes that not bothering with your hair is “really bad” and compared it to “when people say that they don’t get washed in the morning”. Her account of not ‘being bothered’ to do her hair demonstrates the high moralistic dimension of dealing with hair, as it can be considered as a transgression and moral failure. To be a self-respecting woman is to shape, work on and control your hair and take responsibility for dealing with it, echoing the writings of Foucault (1979) on the concept of the care of the self. Women who look like they do not look after their hair might be perceived as not ‘taking care’ of themselves. Julie seems to be in a constant moral dilemma of what to do with her hair in order to avoid it from going from ‘curly’ or ‘straight’ to ‘frizzy’. Lengthy processes and efforts diminish in a short amount of time but, on the other hand, Julie does not want to appear that she has done nothing to her hair and therefore ‘not taken care of herself’, affecting not just how she looks but also feels.

The visibility of hair: A social, biological and emotional mix

During the interviews women frequently judged their hair in a ‘direct’ and ‘uncritical’ way according to its texture and type¹⁰⁹, often ignoring both that hair is experienced subjectively and the cultural and social dimension of having hair (Biddle-Perry and Cheang 2008). Biological variations between ‘curly’ and ‘straight’ hair exist and can be scientifically measured. However, in everyday life a woman who might consider her hair as ‘curly’, if scientifically measured might actually have ‘wavy’ hair, as she develops the perception of

¹⁰⁹ Women with Caucasian hair are born with varying hair textures, types and densities. The hair texture relates to the diameter of an individual hair which can be ‘fine’, ‘medium’, ‘coarse’ or ‘wiry’. Within those four textures, the hair type might be ‘curly’, ‘straight’, ‘wavy’ or ‘kinky’. The hair density describes the amount of hair a woman has such as ‘fine’, ‘medium’ or ‘thick’. ‘Curly’ hair has a different biological hair structure than ‘straight’ hair and the oils that are produced by the sebaceous glands can ooze down the shaft of ‘straight’ hair more easily than down ‘curly’ hair. Therefore, women with curls often tend to have drier hair. Moreover, the texture of hair is affected by different external environmental and internal biological factors such as the weather, smells, sweat, water and the production of oils. The age of women also often changes hair structure (Kingsley 2003).

her own hair through the social environment that surrounds her. The material and biological make-up of hair and the body interacts with the social circumstances in which the women live (as advocated by Hinchliffe and Woodward's 2004 study on the 'health' of the body). The acceptability of hair textures is culturally and socially determined. For example, the boundaries between 'neat', 'messy', 'curly' and 'straight' hair constantly shift over time and, through the introduction of tools, new 'states' of hair can be added such as 'poker straight' for straightened hair, a current fashion standard. Multiple 'states' of hair exist but when examining what is considered culturally 'acceptable' they currently appear to be narrowly defined, as the discussion below demonstrates.

Most of the women interviewed who had 'curly' hair straighten it, but they also occasionally wear it 'curly' or tie it back into a ponytail, as a way of asserting 'control' over their hair, making it less noticeable and taming it so that it becomes less visible. During the interview with Winona, she found herself saying that the straightened hair looks more "normal" rather than her 'curly' hair. Anechka, the interpreter in her early 50s, and Dory, the married student in her early 30s, create an exception, as they mainly keep their hair in open curls. Both women recognise the 'visibility' of their curly hair but do not mind it.

"My hair is famous. People recognise me by my hair." (Anechka)

Nevertheless, like the women who straightened their naturally curly hair, Anechka and Dory need to "control" their hair, though, instead of straightening it, both use a form of gel/wax in order not to have the hair straight but "curly". All of the women in the study, whether they straightened their hair or use a form of styling gel/wax to curl it, regard "frizzy" hair as 'too noticeable'. If Anechka does not use her gel the hair "stands up like a wig" but, as she explained, "with the gel it is just normal, just curly". Naturally curly hair was often described as neither curly nor straight but as "frizzy", as the hair seems unkempt and tangled. A curl is more of a "ringlet", as Hailey described, whereas "frizzy" hair is "fussy", individual strands separate from the main body of hair moving it up and sideways making it stand up like a "triangle" and "just like a wig". If the wind blows against such unstraightened hair it does have movement but as the hair strands do not flow with the wind (Biddle-Perry and Cheang 2008), it gets blown as a whole 'mass of hair' from one side to

the other. Anechka explained that the gel does not straighten the hair instead it joins the individual strands of hair. This reduces hair volume and, similar to straightened hair, gives movement. Both women connect 'frizzy' hair with a wig, reinforcing the agency of the hair that is associated with being a 'thing' in its own right, rather than regarded as part of one's body.

'Fine' hair was as commonly described as 'frizzy', and even had similar characteristics. They are both considered as causing hair to be out of control. Lindsay, a pharmacy dispenser in her early 30s, described her hair as fine and "dead" straight, which she "hates". As she explained, her fine hair is prone to becoming "static", "tangled" and "flyaway". Lindsay was not the only woman who described her hair in this way. Even though fine hair is straight and therefore currently more acceptable, it is often regarded as 'flyaway', as in Lindsay's case. Individual hairs separate from the main body, "flying everywhere" and not "settling down" unless dealt with, leaving Lindsay with the feeling of her hair being "out of control". To restrain her hair, Lindsay does not straighten it, although some women do; she uses hairspray and a lot of it, particularly if she goes to the pub or club at the weekend. After washing, conditioning, drying and scrunching her hair, Lindsay stands in front of the mirror, not only to prevent her hair from being 'flyaway' but also "to give her hair a bit of a boost", giving some 'volume' to her otherwise 'flat' hair. Even though both 'frizzy' and 'flyaway' hair has to be controlled, 'fine' in contrast to 'frizzy' hair is regarded as having no 'body', leaving Deborah, who has fine and straight hair, wishing it could be "a little bit more exciting".

The distinctions between various 'states' of hair seem to be complex and blurred, particularly in terms of 'flyaway' and 'frizzy' hair. These blurred distinctions partly derive from discourses associated with what is considered as acceptable hair and the possibility to manipulate hair physically through using hair care products and tools. During the first interview with Simone, she had straightened her hair and had it tied up in a ponytail. If she had not described her hair during the interview Simone could have been 'tricked' anyone into thinking that she has 'straight', not 'curly' hair. The use of hair care products and tools to create various 'states' of hair has also instigated changes to Simone's hair care routines. Since using the hair straighteners, Simone is not only concerned about her unacceptable

'curly' hair, but is also worried that, whenever her hair is straightened, it lacks volume. The lack of volume is usually considered as an undesirable 'state' of hair associated with women who have 'straight' and not 'curly' hair. Nevertheless, since she started to straighten her hair, Simone has to deal with a lack of volume to her hair by using various styling products. Even though women have varying hair textures, types, densities and styles, some of the standards of having flowing hair that has volume are shared. Some women only accomplish these standards through lengthy processes in order to create hair that reflects acceptable textures (i.e. strands and shapes of hair), which seem narrowly defined and sometimes impossible to achieve.

Amount of work invested: An ambiguous result

The material propensities of women's hair and the potential vulnerability to the gaze of others create constraints that impact on women and their ability to exert their own preferences over how they want to wear and do things to their hair. The next section explores not only the propensities of hair but also how the 'readability' of the end result impacts on women's hair and hair care routines. The results of the process need to be traceable so that other people can identify how women have dealt with their hair. The traceability of the process of dealing with hair is not always straightforward and therefore the consequence of a particular 'look' can be ambiguous. This ambiguity is further initiated by the various styles, shapes and lengths of women's hair that currently exist, as indicated by some of the women in the study. Although the acceptability of strands and textures of hair are narrowly defined, the lengths and styles of hair are numerous.

Emily and Holly, who both have long hair, described the ambiguous nature of 'purposefully positioned messy' hair. Holly considers 'messy' hair as a look that appears to have "happened by accident" but is actually rather difficult to achieve. Emily, who uses a variety of hair care products and techniques to do her hair, explained that such hair is not easily accomplished, as the hair appears "ruffled and natural" but "not untidy". She called it the "tousled look". Here, the end result of 'messy' hair and the readability of the process are considered ambiguous and therefore perceived as difficult to achieve. It can easily be 'misread' by others as hair that is not cared for or left untouched. Frequently, the women in

the study therefore avoided those styles, constraining their options of how to wear the hair and ways of doing it.

Shirley creates a clear exception. She is a probation officer in her 50s, who has short, layered hair. Shirley did not describe her hair as 'neat and tidy'. After losing her hair through breast cancer a few years ago she felt brave enough to change her style from having it long to chopped, layered and short. During the interview, she described her new style, in particular the sides, as being "chaotic, messy and ruffled" not too dissimilar from "Laurel and Hardy". Instead of the hair being 'neat and tidy', it has to be 'messy'. On first sight, it seems that Shirley makes use of the hair's agency to change its shape randomly. Nonetheless, this is not the case as for Shirley the 'messy' hair that she creates everyday is not left to its own devices; it needs to be shaped through a process of drying it upside down, particularly directing the heat at the roots and using mousse and gel, as she explained, "you have to work at it". It seems that Shirley has to be extremely competent and persist in working at the hair, exerting agency over it to shape it into 'traceable messy' hair.

"I want the sides to look... a bit more chaotic and messy and ruffled but you have to work at that... If I am going to use gel, I do it after I am dressed and just on my way out really because otherwise if you put clothes against your head again it's gonna get all messed up again."

For Shirley the 'messed-up' hair that she creates still has the potential to be 'messed-up', as she clarified before putting the final touches to her "messy and chaotic" hair she dresses herself, considering that the jumper that she puts over her head could 'mess up' her 'messy' hair. There seems to be a 'neatness' and 'tidiness' to the 'messy' hair that is reflected in the positioning and shaping of hair and includes a process of dealing with it that requires time and effort. Shirley has to go through certain steps and stages and use a variety of techniques and products to achieve this result. Although the result looks very different, in terms of the amount of effort it takes, this is equivalent to having it 'neat and tidy' the hair is 'worked' with and put into position. In the cases of 'neat and tidy' hair and acceptable 'messy' hair it is dealt with and positioned and therefore controlled by the woman, a 'controlled mess' and a 'controlled neatness'.

The distinctions between ways of wearing hair that are considered 'neat', 'tidy' or 'messy' seem to be ambiguous, similar to having it 'curly', 'straight', 'fly-away' or 'frizzy'. Tying hair out of the face and off the neck can be a safe way of demonstrating that women have 'neat and tidy' hair. As we have seen, for some women the impression of having such hair is important, because they relate it to being 'professional' at work, but Shirley, who has opted for 'messy' looking hair, does not regard herself as 'unprofessional'. This suggests that the 'neatness', 'tidiness' and 'messiness' of hair is not only situated in a look but in the process of 'doing', positioning and particularly controlling the hair, creating a 'controlled mess' or 'controlled neatness'. Hair needs to be worked with to be able to control it, which requires a constant diligence and daily repetition in order to create a result from which it is possible to read that women intentionally wanted to achieve a 'messy' look. As these intentions are not always traceable when women try to create 'messy' hair, the potentially ambiguous results are combined with a certain risk of being regarded as not looking after one's hair, a risk some women do not want to take, as such hair often makes for women to feel 'untidy' and 'messy' and consequently less confident.

The possibility of losing the effects of the process and creating end results that are not traceable and therefore ambiguous seem to constraint women's options for wearing their hair and dealing with it. The potential risk of being considered by others as not 'taking care' of oneself can leave women to feel vulnerable to the gaze of others, leading them to follow processes of dealing with hair and wearing it in ways that they know are acceptable in terms of public perceptions. It seems that the multiple 'states' of hair that can be externalised through women wearing their hair reinforce the idea that 'doing and wearing' of hair is not always a straightforward expression of women's intentions and personal preferences.

Balancing and counterbalancing: Using hair care products and tools

The examination above draws attention to the interrelationship between the material propensities of hair such as its ability to grow and women's emotions, knowledge and understanding, in the form of conventions, pointing to the importance of controlling hair and the necessity of investment of time and effort to create hair that is considered acceptable. What it fails to acknowledge is that when women deal with their hair numerous products and

tools are used that often stay on it to shape the hair into a style. Therefore, hair care products and tools also determine whether women are able to exert their agency over their hair. The next section demonstrates that the use of hair care products and tools to create hair that is considered as a ‘controlled mess’ or ‘controlled neatness’ is far from straightforward. Women not only try to create ‘neat’ and ‘tidy’ hair but the current fashion¹¹⁰ is also to have a ‘natural’ appearance to the hair. The scientific hair advisor and some of the women in the study particularly emphasised this trend. During an evocative interview, Emily, who has straight, mid-length, brown hair, re-lived a Saturday evening when she was getting ready for a meal out with her husband and friends. On this particular occasion, she wanted to achieve “soft, light and bouncy” curls with her hair straighteners that did not look “heavily” styled, to create an overall “natural” curl. In order to fix her hair into place Emily does not use mousse, as it leaves her hair “heavy and hard”. She was not the only woman in the study who regards styling products such as mousse and the excessive use of hairspray as leaving hair too “sticky”.

Emily spends considerable efforts to cultivate “natural” curls to achieve a ‘controlled mess’, which suggests to others that time and effort went into doing her hair. What is considered as ‘natural’ hair is culturally constructed, and this includes how ‘natural’ hair is achieved and how it looks, since these meanings and appearances change over time (Cheang and Biddle-Perry 2008). During the interviews, some of the women explained that in order to create ‘natural-looking’ hair, the products that they use should be more or less ‘invisible’ to the senses after they have been applied to the hair. The ‘invisibility’ of hair care products on the hair and the suggestion to other people that time and effort was spend on doing things with hair seem to be in conflict with each other. Women have to create hair that looks like they have dealt with it and using products that aid this process, but remain essentially ‘invisible’, to create more ‘natural’ looking hair, initiating a constant balancing act. This development is particularly reflected in the emergence of new styling products such as serums and sea salt spray that feel and look ‘invisible’, unlike mousses, gels and strong hairsprays. Nevertheless, as argued above, the need to control its malleable illustrates the competence needed to accomplish this balancing act between creating an ‘invisible’ hold, controlling the

¹¹⁰ Although, some of the women mentioned that ‘natural looking and ‘straight’ hair seems to be in favour, they also felt that they could not identify a defined ‘fashion’ style, as women wear short, medium, long, curly and straight hair. The aspiration to look fashionable is only one of many possible interests for women.

end result of the hair and for women to make sense of the multifaceted nature of the various 'states' of hair.

Another level of complexity arises when considering not only the 'states' of hair that mainly relate to its appearance, as delineated above, but also to its maintenance: keeping it 'healthy', 'naturally balanced' and free from 'dirt', as suggested by some of the women in the study. The relationship between maintenance and appearance requires women not only to control its appearance but also to balance various substances. These substances include those produced by the body such as sweat and sebum and those added to the hair in the form of products such as serums and gels. As with bathing, hair requires a "restoration of a 'natural' balance" as well as an "eradication of natural elements" (Shove 2003: 107). Products and tools are able to change the feel and look of hair. Still, the complexity and near to impossible balancing act between the various 'states' of hair became apparent when examining the interviews. The multi-relational elements of practices conflict with each other but also co-exist. They are based on material interactions with hair and immaterial meanings of 'health' and 'naturalness' that change over time.

Balancing substances on the hair – counterbalancing 'states' of hair

The complex interrelationship between 'greasy', 'shiny', 'dry', 'soft' and 'healthy' hair becomes apparent when considering Holly's example. Holly, the student in her late teens who has long, straight brown hair, believes that the daily use of shampoo strips her hair of its "natural oils", taking away substances that impact on the "health" of her hair. The oil originates from her body, moving from it onto the hair and therefore it "can't be bad for the it". This "extra bit of grease" that originates from her own body gives her hair a "soft" and "healthy" feel instead of it feeling "dry". She shares this idea with numerous other women in the study. Although she understands natural oils as providing 'health' to her hair, giving it a 'softer' touch when this is perceptible as an additional "shine", this can turn 'good' grease 'bad'. The only 'shine' of hair that is acceptable for Holly's hair derives from the use of hair care products such as conditioners, rather than from natural oils. Conditioners provide 'good' grease for the hair that gives the hair a 'shine' that is not comparable to the

ambiguous 'grease shine', balancing 'good and bad' grease and 'clean' hair through the use of products.

On first sight, it seems that Holly divides 'states' of hair into a spectrum between 'good' hair that is 'healthy' or 'bad' hair that is 'damaged' and 'dry'. Nevertheless, numerous ambiguous 'states' of hair exist, such as 'shiny' that can turn from 'good' to 'bad' depending on its quantity, extent and its source. Here, products and tools play an important role in balancing the hair from 'bad' to 'good', impacting on the 'natural' balance of substances on the hair that, in Holly's case, to some extent, are regarded as 'good' but easily can turn 'bad'. Similarly, as her example shows, 'clean' and 'soft' are more ambiguous 'states'. 'Clean' hair is not always regarded as 'good', as it might be lacking natural oils and therefore be 'unhealthy' and 'dry', prompting Holly to use conditioners. Although a spectrum between 'good' and 'bad' exists, most 'states' of hair are ambiguous, being able to occupy both ends of the spectrum.

What Holly and most of the women in the study considered as being 'healthy' and 'naturally balanced' hair is frequently cultivated, rather than achieved by leaving the hair 'untouched'. As Cheang and Biddle-Perry put it,

“Head and body hair must be managed as an essential part of human social existence. As a result, hair in its totally natural state is rarely met with in society...” (Cheang and Biddle-Perry 2008: 253)

Considering Holly's example, the connection between leaving the hair untouched or in this case unwashed so that it can 'naturally' balance substances on the hair is regarded as a way of keeping the hair 'healthy'. Shampoos impact on the 'natural balance' of the hair, taking away too many natural oils so that conditioners are needed to add a 'healthy' amount of suppleness to the hair. Ways of dealing with hair become both an act of subtraction (i.e. the removal of grease) and an addition (i.e. restoring 'good' grease). Still, the use of products in everyday practices, as demonstrated by Holly's example, is not always straightforward. Women have to consider various conflicting 'states' when they do things to their hair that potentially conflict each other, such as the 'shine' of hair that has an ambiguous existence. Another layer of complexity is added, in particular, when reflecting on perceptions surrounding the 'health' of hair and its state of 'greasiness', which is discussed in the next

two sections. Some substances on the hair are invisible to the woman's senses but they impact on the 'state' of hair. Therefore, the process of balancing substances on the hair is not only guided through material interactions with hair but through women's knowledge and understandings.

'Healthy' hair

Most of the women in the study were concerned about what they referred to as the 'health' of their hair. They talked about numerous causes of damage, such as the use of heated tools, the sun, hair colouring and even shampoos. When Monica was younger she permed, coloured and lacquered her hair without thinking about the effects, though she said this has changed and not only because she has got older. There is more of an overall awareness.

“People start to listen to what is out there... what companies say about things... So, the perception of 'looking after yourself' has grown in the last few years compared to what was said in the eighties.” (Monica)

Similarly, Simone, who straightens her hair, explained that when she started straightening her hair, about ten years ago, she was unaware of the potential consequences. Nowadays, she is worried that through straightening her hair she might wake up one day with 'ruined hair'. Each time she visits the hairdresser she asks for confirmation that her hair has not split ends caused from straightening it, demonstrating her increased worry. She says that the heat of the straighteners can “burn” her hair, “dry” it out and “damage” it overall, creating “three inch long split ends”. Over the years, Simone has heard stories from friends, read popular books such as Trinny and Susannah's, 'The Survival Guide – A Woman's Secret Weapon for Getting Through the Year' and watched television programmes that informed her of the potential effects of 'heat damage'. She realised that she “had to look after” her hair. At present, hair serums “protect” her hair from the heat and the potential to dry it out and hot oils provide it with “shine”. In addition, she leaves her hair to dry naturally rather than with a hairdryer, which minimises the heat applied to her hair.

Whenever Emily straightens her hair she uses a serum and heat defence spray to compensate for the effects of straightening, which take out “the goodness of the hair”. The serum and

heat defence spray “put this back” to keep hair in a “good condition”, “protecting and repairing” it. Unlike Simone and Emily, Winona is more doubtful about the use of hair care products to prevent ‘hair damage’. She believes that they provide a false sense of having ‘healthy’ hair. As well as trying to minimise the use of straighteners and hairdryers, Winona uses hair serums and treatments to protect her hair during the straightening process. Nevertheless, compared to Simone and Emily, Winona is unsure about the effects of these products on her hair.

“Because I do that [straighten the hair] I need to buy these products [serums, treatments] to counterbalance it. Even if they may damage it further ... or might not help it, they make it temporarily better. They allow you to do what you want to do with your hair.”

Hair serum gives her hair ‘shine’, creating a ‘healthy’ look. The association between ‘shine’ and ‘health’ was often acknowledged during the interviews. Most women interviewed shared the idea that ‘healthy’ and ‘natural’ hair looks ‘shiny’ and ‘smooth’ and can be accomplished through the use of hair care products. Even hair straighteners that are usually regarded as the cause of hair ‘damage’ can make it appear ‘healthy’ and ‘natural’, as they ‘smooth’ and straighten the hair, giving it a ‘shiny’, ‘glossy’ and ‘straight’ look. This seems to create a conflict between hair that looks healthy and one that is regarded as being healthy, initiating Winona’s doubt about the use of certain hair care products. In particular, women with ‘curly’ hair such as Winona and Simone often considered their ‘frizzy’ hair as looking like ‘unhealthy’ hair, because it appears to be ‘dry’ and not ‘shiny’ and ‘smooth’. Therefore, women resort to using products and tools that can potentially ‘damage’ hair in order to create an appearance of ‘healthy’ hair, initiating what Winona refers to as counterbalancing various standards in hair, using various products to create ‘healthy’ looking hair.

For Winona, the ‘shine’ that is created through the hair serum and hair straighteners cannot be compared to “naturally shiny” hair that is “truly healthy”. It is “artificial” and appears to have a “nylon shine” rather than a “natural shine”. She considers the production of natural oils as providing ‘real health’ to the hair. Here, ‘healthy’ hair is based on a feel rather than a look, making it not only appear ‘healthier’ to the eyes but feel ‘healthier’. Nevertheless, the ‘shine’ that is created through natural oils produced by the body is often regarded as being unstable, turning easily into ‘greasy’ looking hair. This examination

demonstrates the conflicting nature of culturally defined 'healthy' hair and ways of achieving it, indicating the various conceptions of health (Smith and Goldblatt 2004). Although the influences on the hair's health, its conceptions and achievements are diverse, it appears that to have 'healthy' hair is defined in relation to the way it should look, such as 'shiny'. It sometimes seems, from what the women in the study disclosed about the practice of hair care, as if they feel it as a moral responsibility to be seen to have looked after their hair or at least make it look 'healthy' (Smith and Goldblatt 2004). These standards are hardly questioned although they frequently conflict with each other and are connected with various 'states' of hair. Instead, women try to reach a balance between these conflicts.

Material and intangible 'dirt'

Balancing the 'states' of hair that influence actions with hair is based on both tangible and intangible interactions. Looking at and feeling hair interacts with knowledge, understandings and ideas. These intangible interactions are not only apparent when examining the 'health' of hair but particularly when exploring the use of shampoo to clean the hair of 'grease' and often invisible 'dirt', as substances on the hair not only arrive through the use of products but are also produced by the body and the natural environment. For Holly, the 'dirt' that is absorbed by the 'grease' that her hair produces is based on "impurities", which could be "pollution", "cigarette smoke" or even "rain water". This 'dirt' is invisible to her; she can only detect it by imagining it on the grease. Holly studies for a science degree and is therefore aware of various particles in hair. The sensation to her of having 'dirty' hair is based on her 'scientific' knowledge, which is intangible (Tomes 1998; Shove 2003). This knowledge creates a physical sensation of not feeling 'clean' that leads to Holly washing her hair, using shampoo to remove the invisible 'dirt'. It may be that shampoos are sometimes divorced from the physicality of sebum, smoke and parasites; they remove intangible dirt and address conditions that are aesthetic rather than physical.

How 'dirt' is detected and what is considered 'dirty' reveals a reconfiguration of social ideals and discourses that are dynamic. What is acceptable or unacceptable dirt in hair partly depends on our ideas of cleanliness, including scientific knowledge in the society we live in (Tomes 1998) in addition to other knowledge sources. Mary Douglas' famous definition of

dirt as “matter out of place” (1984: 36), which she retrieves from a time before our modern knowledge of pathogens, is accompanied by her observation that “where there is dirt there is system” (1984: 36). She suggests that, “as we know it, dirt is essentially disorder. There is no such thing as absolute dirt: it exists in the eye of the beholder” (Douglas 1984: 2). So, when people wash and clean their bodies or their living spaces they are making their bodies and their environment conform to a societal pattern. Douglas illustrates this with the way that in cleaning the house we “create out of a material house” (1984: 69) a home that conforms to acceptable everyday practice. In addition to cultural definitions of what is considered ‘dirty’ hair and scientific knowledge, interactions with hair are involved in routinised sensual experiences of the materiality of our hair and of the objects like hair care products and tools which we encounter that configure the practice.

Women not only cleanse their hair to make themselves socially acceptable and distinguish themselves from others; they also want to wash away substances on the hair, as they can be felt on the skin. Most of the women in the study, described ‘greasy and dirty’ hair as ‘clumped’, ‘shiny’, ‘plastered to the head’, ‘heavy’ and without any ‘volume’. Some women, such as Odette, the recruitment officer in her early 30s, described even earlier signs of ‘greasy’ hair. She would be able to notice the ‘muck’ in the roots and around the crown before the ‘grease’ makes itself evident in her hair. When considering the descriptions of ‘greasy’ hair there is something about the feeling of hair that is unwashed that touches women more fundamentally – women with ‘greasy’ hair don’t feel right in their skin. As Tracy put it:

“It’s not that it [hair] looks greasy or anything. It’s just because I know myself that I’ve not took that time in the morning to wash it... Somebody else might not know that I’ve not washed it that morning. It’s just me. I am aware of it.”

Similarly to Tracy, Odette explained how the feel of greasy hair affects her mood and confidence at work. She is not able to present herself as able to do the job. On these days she tries to wear smart clothes to distract from the hair. Dant (2003) has argued against reducing the appraisal of dirt to its cultural determinants, noting that as well as taking place within a cultural system, our relationship to dirt is pragmatic. When it comes to dirt “if [people] can see it, it is dirt or if they can smell it, it is dirt” (Dant 2004). We use our senses to make

decisions on what has to be done to remove the 'dirt' and Dant (2003: 5) has warned that we should be "cautious of any reduction to culture that overlooks prior bodily and material concerns". Although Dant is correct to warn against such a "reduction to culture", dirt and grease is not limited to things that can be touched and physically sensed. Knowledge about invisible pathogens and potentially harmful 'chemical' substances has generated a class of dirt that is invisible and cannot be directly detected with the senses – a sort of 'immaterial' dirt, creating complex interactions between tangible and intangible factors that impact on the practice of hair care and the amount of resources consumed to deal with hair.

Conclusion

Studies that are concerned with sustainable consumption and sustainable design often try to identify incentives and barriers to changing people's individual behaviour so that they lead a less resource intensive life. As argued by Wilhite et al (1996) and Shove (2003), these studies forget to consider that "...people do not consume electricity. In real life they consume 'cultural energy services', in other words, culturally meaningful services that happen to depend on gas, oil, or electricity" (2003: 9). During the interviews, the women spoke about shampooing, conditioning, drying, brushing and straightening their hair not linking it to the use of water and electricity but to how they wear and deal with their hair, including various justifications for doing their hair and four focal types of standards. Together, they are focused around levels of visibility, levels of control, amount of work invested and balancing of substances. Instead of delineating more or less resource intensive lifestyles, comparing each woman to identify barriers and incentives that might change their behaviours, the focus of this chapter has been on the way women define the standards they conform to in their hair, which influence the ways they deal with it and how often. From a practice-orientated perspective this includes an examination of the organisation of product and tools, conventions, emotions, understandings and knowledge that produce and sustain existing and possible future practices. Levels of resource consumption depend on how women define what they consider being 'normal' hair and their ways of dealing with it.

A crucial point to emerge from an examination of the multiple 'states' of hair through women's descriptions and the elements that make up the practice of caring for hair is that

what women do with their hair and how they wear it is fraught with ambiguities, constraints, and complexities. These aspects of hair care routines, through their daily reproduction, create stability in the practice of hair care, keeping the pinwheel that represents the ways in which a practice can be configured through its multi-relational elements in place (as discussed in chapter 3) but also potentially can create an instability in these configuration. Such instability seems to be possible in particular when considering the complex nature of integrating various understandings and emotions associated with the multiple 'states' that hair can end up in. The expression of women's individual choices, intentions and preferences in how to wear and do their hair is far from straightforward. Therefore, approaches to sustainable consumption and sustainable design need to go beyond the assumption that women will change their behaviours through persuasion and individual choice.

An examination of the 'states' of hair through the performance of hair care routines and not only by reflecting on the end results, as implied by a practice-orientated approach, draws attention to the notion of the co-agency of the wearer and her hair. In addition to encouraging a constant diligence and habitual repetition of actions to deal with hair, what emerges from the research is that the agency of hair seems to constrain women's ways of dealing with hair and how they wear it, restricting their individual preferences. Women are able to exert agency over their hair through the process of dealing with it and the use of products and tools, objectifying their intentions in the end result. However, what becomes apparent through a closer analysis of Julie's, Monica's, Pamela's and Shirley's examples is that the transmission of intentionality is not 'uni-directional'. A social, emotional, material and biological mix of influences emerge when examining the relationship between wearer and hair, as ways of dealing with hair are grounded in the women's cultural knowledge, understandings and competences. Nevertheless, during the interviews women often seem to judge their hair in a 'direct' and 'uncritical' way according to its texture and type, without considering the cultural and social dimension of having hair and questioning what is considered as acceptable hair. It seems that the subjective experience of hair is constitutive of women's daily life and therefore is hardly ever reflected upon.

Julie's perception that 'frizzy', 'curly' and not 'straight' hair gives the impression of her not taking care of her hair seems to be deeply embedded in cultural perceptions of what are acceptable hair textures. It seems particularly from what Julie expressed during the interviews is that she feels that she commits a 'transgression' if she does not deal with her 'frizzy' hair. Some of the acceptable 'states' of hair seem to be narrowly defined, as in daily life women do not think about their hair in terms of the relationship between its material and biological make up that interrelates with their cultural knowledge, understandings, competences and emotions on how it should be dealt with and worn. A practice-orientated approach draws attention to the routinised performance of activities through practices, stressing the multi-relational elements that come together when women do things to their hair and wear it, making it possible to avoid the sterility of such dichotomies between, for instance, the social and the biological. Such an approach allows for an investigation that makes it possible for all the complexities and ambiguities to emerge in relation to women 'wearing and doing' their hair.

The importance of considering the complexities and ambiguities of achieving standards in the everyday practice of hair care becomes apparent when reflecting on one of Boots' recent advertising campaigns, promoting sustainable behaviour. The design of a poster campaign for 'Botanics' shampoo meant to engage the consumer not only with more environmentally friendly products but aid reflection on their own behaviour at home in order to encourage more sustainable hair care practice. The campaign was based on showing consumers the benefit of using colder water during the shampooing process, as it would be 'healthier' for the hair and as well as being environmentally advantageous. Some women in the study used heated hair care tools less often and wash their hair in water at lower temperatures because of an increased awareness to look after the 'health' of their hair. Nevertheless, although the Boots' message might be regarded as meaningful, since it connects to women feeling more responsible to look after their hair, it does not consider how 'healthy' hair is defined in varying conflicting ways, as discussed above on page 164, that lead to the ways it is dealt with in everyday life. Winona's example demonstrated that actions with hair that are connected with what is perceived as hair that looks 'healthy' frequently conflicts with what women regards as 'real' health. The examination of the practice of hair care demonstrates

the conflicting nature of culturally defined ‘healthy’ hair and ways of achieving it, illustrating the various conceptions of ‘health’.

Using the ‘health’ of hair as a starting point for sustainable design might be questionable, as the definition of ‘healthy’ hair in everyday life is ambiguous. The emphasis on the performance of ‘doing and wearing’ hair from a practice-orientated perspective uncovers such complexities. An understanding of the interrelationship between the elements of the hair care practice and multiple ‘states’ of hair potentially aids the designer thinking of engaging in the design contexts in various different lights. Here, the ways of dealing with hair and use of products become a place to balance substances on the hair, to control the hair and to develop an acceptable look. The examination shifts the emphasis on designing less resource intensive products and tools to considering how the network of products and tools that women consider as ‘normal’ that have changed over time. Design interventions might be based on embracing the acceptability of the various ‘states’ of hair, of which some are narrowly defined, and encouraging diversity, as discussed during the workshop at Boots.¹¹¹ In order to question some of the standards that women consider as ‘normal’ in a meaningful way, designers need to have an understanding of the types of standards involved with all its complexities, constraints and ambiguities.

The past two chapters have focused on the interrelationship between what women do with their hair and how they wear it, often representing a transition from the home to the outside world. An examination of the ‘wearing and doing’ of hair drew attention to the knowledge, understandings and competences needed to create ‘acceptable’ hair, including some of the habitual cycles that reproduce the practice of hair care, often governed by women’s emotions. The following two chapters move the examination into the home, delineating the processes through which women deal with their hair. This includes an examination of the competences, knowledge, products and tools used to create hair through investigating the practice’s various activities such as shampooing, conditioning, brushing, combing and drying – ways of dealing with hair. The chapter subsequent chapter looks at the ordering of products and tools in women’s homes. The ordering of products and tools is often a result of what women do with their hair. It creates the practice and re-enforces both hair care routines

¹¹¹ An outline of the workshop is included in Appendix 8: workshop report.

and what it means to deal with one's hair. Moreover, the products and tools that women keep at home represent past, current and possible future practices that are interconnected and implicated in the acquisition, use and divestment of hair care products and tools.

Chapter 6 In the home: The spatial arrangement of products and tools

Introduction

The previous two chapters examined the relationship between the ‘wearing and doing’ of hair in order to reflect on how often women deal with their hair and the various standards involved. The role of products and tools was acknowledged, as they impact on how hair feels on the body and on its appearance. This chapter considers the practice of hair care with products and tools via its trajectories through domestic spaces, whereas the next chapter examines products and tools in use, as it delineates how women deal with their hair. The aim here is to investigate some of the spatial arrangements of everyday hair care items and connected spatial practices, as they illustrate some of the key pivotal themes that emerge from the research. The chapter considers how many and what type of products and tools women own and the manner in which they are spatially ordered around the home: how they are organised and stored in rooms and furniture. What emerges from the interviews is that the ordering of products and tools relates to the places where women use them, their standards of cleanliness and tidiness for the home and the frequency of their use. These spatial arrangements overlap and reveal aspects of women’s hair care routine, as they have implications for women’s ways of doing things with their hair and therefore for the varying amount and types of resources consumed.

In order to examine the spatial practices, this chapter refers to Lefebvre’s (1991) concept of spatialisation, wherein spaces are actively and continually reproduced in everyday life through various spatial relations. For Lefebvre, the production of space is a complex dialectic between the users of space, spatial narrative, in the form of discourses and representations of space, and spatial practices that are lived and perceived. Following Lefebvre, spaces relevant to the standards, actions, emotions, understandings and competences of the practice of hair need to be reproduced in everyday life, through the ordering of hair care products and tools. These factors go together to produce ‘hair spaces’. When examining the active reproduction of hair spaces, the significance of the ordering of products and tools, the discourses surrounding the use of those spaces, and the habitual and private nature of the practice of hair care becomes apparent. Products, tools, routines and spaces are interwoven and therefore together constitute the practice of hair care, reinforcing

how, and how often, women deal with their hair. Further, the investigation reveals various social and spatial constraints to do hair and levels of order and disorder created by hair care items that have implications on women's hair care routines at home.

The final part of this chapter illustrates how an examination of the spatial orderings of hair care products and tools uncovers the interconnectedness between past, current and future hair care practices implicated in the acquisition, use and divestment of hair care products and tools. This examination illustrates some of the factors that lead to the divestment of hair care items, drawing on the work of Shove et al (2007) and Gregson et al (2007a/b). The early disposal of products that are still 'half full' and tools that are still functioning is one of the major concerns of Boots' corporate social responsibility department. However, when examining the everyday practice of hair care and the spatial arrangements, the interrelationship between acquisition, use and disposal are more complex, as products and tools are not only sometimes disposed of early in their lifetime but are also sometimes kept for long periods even if not used. Although, this research has mainly been concerned with the consumption of resources during the use phase of products, the investigation of the spatial arrangements of hair care products and tools in relation to spatial practices reveal implications of hair care for waste production.

Spatialisation: The private nature of dealing with hair at home

The following section identifies some of the spatial arrangements of hair care products and tools in women's homes, focusing upon factors that create these orderings, whilst revealing various aspects of the practice of hair care. During the research it emerged that hair care products and tools are kept on shelves and dressing tables and in boxes, drawers and cupboards. They are arranged all around the house, such as in kitchens and storage rooms, but often remain in bathrooms and bedrooms in particular if currently in use.¹¹² Odette, the recruitment officer, keeps her shampoos and conditioners in the bathroom and the rest of hair care products and tools (such as hair straighteners, hairdryer, brush, dry shampoo, 'beach look' spray and hairspray) in her bedroom, like many other women, as depicted below in photographs 4/5. She clearly divides spatially the wet part of her hair care routine

¹¹² A table outlining the places of keeping hair care products and tools is included in Appendix 6.

in the bathroom from the dry one in the bedroom. Only Rita and Deborah created an exception; both women leave all their products and tools in the bathroom where they also do their hair. In Deborah's case the family has only one bathroom in their home, including an airing cupboard and a socket in order to power her hairdryer. There is enough space to store all her products on shelves and in cupboards and to install a full-size mirror in front of which she can dry and style her hair. Overall, it seems that hair care products and tools are kept in places where women do things to their hair, illustrating the interrelationship between the arrangement of hair care products and tools and women using them.



Photos 4/5: Odette's order of hair care products and tools

Although it might appear that Odette arranges her products according to their place of use, in the bathroom they are also arranged in relation to how they look (own standards of cleanliness and tidiness), as the factors intersect and, in the process, determine a particular spatial arrangement of hair care products and tools. Odette keeps all of her conditioners and shampoos along the edge of the bath. She seems to have a clear system which determines where each product is kept, starting with the highest product on the right and shortest on the very left. They are purposely placed, making the arrangement look tidy. In several other bathrooms, women scattered their products around the edge of the bath, placing them wherever it was convenient at the time and where the product would stand up. The arrangement of hair care products is not consistent. The photographs that were taken during the interviews represent one moment in time. Bathrooms and their contents, including hair care products and tools, get regularly cleaned, and different women place varying importance on the ordering of their hair care products, according to their own sense of tidiness and cleanliness.

For most of the women (such as Odette), the bathroom is a place that has to be kept tidy and clean and this includes the arrangement of hair care products. The bathroom, particularly if it is the only one in the house, is shared with visitors and family members. It is semi-private and therefore, cleanliness and tidiness standards are open to the judgment of others. The home is defined in varying orders of privacy, according to particular cultural knowledge of the spatial arrangements (Cieraad 1999). Some spaces in the home are semi-private such as the bathroom and, in particular, the living room, as they are shared with visitors. These spaces expose private elements of the home and the family members living in it, such as their standards of cleanliness. The bedroom provides the most private space in the home (Munro and Madigan 1999). In Odette's case the arrangement of her hair care products in the bedroom is kept more 'untidy' (see photograph above) than in the bathroom. Here, the products are not purposely placed but left wherever it was convenient at the time and visible for Odette. Larger tools such as straighteners and hairdryer are often hidden near their places of use and, in Odette's case, under her dressing table. They are also left on floors or on cupboards still plugged into sockets where they were last used.

De Certeau (1998: 145) has suggested that the arrangement of spaces in homes and their content create a "life narrative" of the people inhabiting them, even before they say a word. The 'life narrative' potentially becomes apparent through people's sense of "order and disorder" and what they choose to make "visible and invisible" for visitors; what women do to their hair is implied by the presence and placement of products and tools. They sometimes might even suggest to the visitor some of the possible 'states' of hair women try to hide or avoid, such as an anti-dandruff shampoo indicating that one of the occupants of the home suffer from dandruff. Similar to Monica, Anne, a housewife in her early 50s, is keen on keeping her hair and beauty products and tools "tidy", though her hair care products do not need to be similarly sized, as in Monica's case, as her products and tools are 'locked away' from the view and potential judgment of others. When entering her bathroom, its use for daily hair and beauty routines is hardly evident. There is a sink, a cupboard with a mirror above it and a bath, but barely any products and no hair care products, as depicted in photographs 6/7 below. A visitor would not know how Anne does her hair or what she uses. Anne keeps her beauty routines secret by concealing their traces in objects. Following De

Certeau (1998), Anne seems to carefully manage her ‘life narrative’ by keeping aspects of her spatial presentation a secret she is able to control how she presents herself to others in everyday life.¹¹³



Photos 6/7: Anne's bathroom

In contrast to Monica and most of the other women, Anne keeps all of her products and tools in a bedroom cupboard that has two shelves. She calls it “my cupboard”. The top shelf is full of body lotions and powders, body washes, skin creams, foundation and make up. On the bottom shelf are her hair care products and tools. The hair straighteners, hairdryer, brushes and combs are on the left. On the right are products such as shampoos, conditioners and serums. Anne keeps her hair care products and tools highly secret, enclosed in a locked cupboard in the privacy of her bedroom. During our first meeting Anne displayed her shampoo, conditioner, brush, serum, hairdryer and hair straighteners, providing an indication of the various hair activities in which she participates and some of her hair standards. Her shampoo and conditioner is for ‘colour treated’ hair. For Anne, the use of these products counterbalance the potential damage of regular hair dyes at the hairdresser but for visitors this could indicate that she tries to cover up her grey hair, and therefore her age. The products reveal part of Anne's beauty concerns and therefore parts of her that she wants to keep private, away from her public image.

¹¹³ During the 1950s writers on health and beauty advised women to keep their hair care practice away from the watchful eyes of their husbands, as they would only be interested in the end result. By keeping their beauty practices a secret, in particular on how much time and effort they spend on doing their hair, women would be able to keep up ‘the spell’ she has put on her husband (Cox 1999: 178).

The spatial arrangement of Anne's hair care products and tools seem to be an instance of something the workshop participants at Boots the Chemist drew attention to when reflecting on the private and intimate process of doing things with hair and using products. The workshop participants pointed out that 'back-stage' activities of dealing with the hair in the home seem to be at odds with the 'front-stage' appearance (Goffman 1971) (i.e. the 'visibility' of wearing the end result). It seems that social constraints of what is acceptable hair and the risk of receiving unwanted attention through the gaze of others are not only negotiated in public but also are part of the home. The use of hair care products and tools can potentially reveal more about the women's hair care routines than the end result. Emotions such as those that may drive Anne to conceal her hair care products and tools are represented in the ways she spatially arranges them. These emotions and spatial arrangements reinforce her hair care routine, as they highlight unacceptable 'states' of hair that need to be kept secret and private.

The reproduction of spaces to do things with hair, reinforcing private routines

The arrangement of Anne's hair care products and tools not only reveals the intimate and private nature of doing things with hair, but also the need to reproduce hair spaces to deal with her hair daily. Anne has to get her shampoo and conditioner out of her cupboard to carry them to the bathroom in order to wash her hair. Lefebvre's (1991) concept of spatialisation, wherein space is created and reproduced through everyday social practices and discourses about space that inhere to particular spatial forms (such as hair spaces), is useful here. The existence of space is not a given, as it needs to be continuously reproduced through appropriating socio-spatial arrangements (Shields 1991) such as social practices and 'spatial relations' (Molotch 1993), including products, tools and appliances. The production of hair spaces links the keeping of products and tools with the performance of doing things with hair. Anne, unlike most women, not only creates a space to do her hair by getting various products, tools and appliances in one place but also separates out the shampooing of hair from washing her body. She creates a space to do her hair and a separate one to wash her body. This is further reflected in how she orders her body and hair care products.

Anne washes her body daily in the bath but her hair only three days a week. She mostly washes it in the evening or at the weekend when time is not as scarce. Instead of placing all her products so that they are to hand, Anne takes her time to have a bath and wash her hair. She begins by choosing and removing her body wash products from her cupboard and has a bath. Rather than washing her hair whilst in the bath she gets out, dries herself off, gets dressed into her “nighty”, puts her bath products back in the cupboard and chooses her hair care products. Anne washes her hair separately from her body by leaning her head over the bath. She likes it this way. For Anne, the arrangement is so important to them that she accepts the extra time and effort it takes to create places where products, tools and appliances come together to do their hair, as opposed to placing them together in the first place.

The storing places of products and tools do not always equate with the spaces where women choose to do their hair. Eileen and Pamela both own dressing tables with mirrors in their bedrooms where they keep their hair care products in drawers, boxes and on top of the table but both choose to do their hair in other ‘created’ spaces. Most of the women in the study who owned a dressing table, in fact, do not choose to do their hair at the table. Sometimes the table stood right next to the bed on which the women could sit, looking into the dressing table’s mirror. Here, comfort plays a part, as in Pamela’s case. The drying and styling of hair is often associated with a lengthy process in which ‘heavy’ hair care tools need to be held and moved for longer periods of time. Pamela has two artificial hips and therefore tries to find a place where she can sit down comfortably for a while, as her dressing table has no chair. After washing her hair, she collects her portable mirror, hairdryer, brush, curling tong and spray and places them on her bed and bedroom floor to do her hair, making it comfortable for her to sit on the floor.

Nevertheless, women do not need to have two artificial hips to feel the need to be comfortable when they do things to their hair. Chairs and hair care products are regularly moved to create these spaces. Pamela’s, Anne’s and Monica’s examples demonstrate the time, effort and commitment women invest in doing things to their hair, and create spaces where they can deal with it. Here, the search for comfort reflects the sometimes time consuming activities. These particularly relate to the dry part of hair care routines. What

becomes apparent is that the active creation of hair spaces is a product of what women do with their hair and their embodied experiences. Products, practices, spatiality and women create a crucial relationship, as indicated by Simonsen (2007) who draws attention to the spatiality of everyday practices and embodied emotions. These interrelationships impact on the cycles of dealing with hair. Through the lived experience of the daily reproduction of hair spaces, considering levels of comfort and privacy, the practice of hair care is reinforced. These cycles again illustrate that the hair care routine, its products and tools and the ordering of spaces are interwoven and therefore constitutive of the practice.

The spatialisation of the practice of hair care creates routines and, in turn, the meanings of domestic orders. Further, it establishes various possibilities for women to do their hair (de Certeau 1984) but also constraints (Lefebvre 1991; Molotch 1993), as spatial meanings and practices create a particular spatial field within which women act, which impacts on those producing the space and the practices they perform. For example, Anne uses her bath in two different ways, to wash her body where she lays in the bath and to wash her hair, stepping outside the bath to bend over it. This could be regarded as unusual. Through producing the hair space and washing her hair she makes these possibilities emerge (de Certeau 1984). Designers and in particular architects structure domestic spaces that 'afford' (Gibson 1977) certain ways of performing the practice of hair care. It makes certain organisation of hair activities and spaces easier than others. Pamela collects her portable mirror, hairdryer, brush, curling tong and spray and places them on her bed and bedroom floor to do her hair. She uses the area of her bedroom where she has got a socket. She needs it for her hairdryer and curling tong, demonstrating some of the various elements that have to come together in order to create a space of drying and styling the hair in her home. Building regulations can determine places for plugs and divisions and sizes of rooms. Moreover, windows and artificial lighting determine areas where women choose to do their hair, creating several material constraints and possibilities.

The home is not only a space that is physically produced but also a social space that is often shared with family members who have to negotiate everyday life in the home (Giddens 1984). Hair care products and tools have to be arranged and ordered in accordance with interpersonal aspects of family life as well as its spatial and temporal ordering. In Dory's

case, the married student, family life influences her hair care routine and the ordering of her products and tools. Dory's family consist of her husband and three children. Two of her children are autistic and require constant attention. In order to get everyone ready for school and herself ready for university she has placed her hair care products and tools all around her home. This way, Dory can do her hair whilst keeping an eye on her sons and making sure everybody is ready on time.

Dory starts every morning with a bath leaving the door open so that her husband and sons can come in and out of the bathroom, getting themselves ready. Her dog also likes to visit her in there. Shampoos and conditioners are within easy reach and scattered about at the end of the bath. After washing her body, Dory wraps a towel around her head and body. Before doing anything else with her hair she gets dressed and goes into the bedroom. She does this so she can make breakfast for everyone and a cup of tea for herself. Dory starts multitasking: she goes downstairs into the kitchen, takes the towel off her head, turns on the kettle and starts brushing her hair in the dining room. As soon as the water boils and the rest of the breakfast is out, Dory takes the hairdryer out of the kitchen cupboard and rough dries her hair. Unlike a lot of women, Dory has not got a mirror to look into whilst drying her hair. She calls it "fuzzy" drying. Even the rest of the process is efficiently planned and includes various forms of multitasking. Tools are left on the floor so that they are ready at hand and steps and stages of what comes next are clearly mapped out. Hair is done and products are kept wherever Dory needs to be at that moment in time in the morning. Dory enjoys days when she has more time to get ready and her husband looks after the children. When this happens she has a bath and "shut[s] herself off from the world" and has some 'me' time.

Munro and Madigan (1999) have argued that women, in particular, need to negotiate the demands between sustaining family life and finding private time for themselves in the family home. Women in this study often considered the performance of hair care in the bathroom and bedroom as 'me' time, away from the family. Odette, unlike Dory, primarily stores her products and tools according to the places of their use, like most of the other women. Here, keeping one's products and tools not only represents places where women do their hair but also the private nature of these processes, as discussed above. Considering Dory's example it becomes apparent that although the bedroom and bathroom are

considered as one of the most private places in the home, this privacy is not taken for granted, as not only visitors but also family life can disturb those spaces (Munro and Madigan 1999). Women have to negotiate a private space to have some ‘me’ time, either through complex patterns of ‘time zoning’ (Munro and Madigan 1999: 117) (i.e. creating times when the bathroom is not to be entered by the family such as in Dory’s case) or ‘space zoning’ (i.e. creating actively a ‘space of separateness’¹¹⁴ with the aid of hair care products and tools). The practice of hair care can be temporarily performed in private by producing spaces that are considered private, stressing even further the time, effort and commitment that goes into doing things to hair, reinforcing those private routines.

Ordering hair care products and tools according to their frequency of use

In bedrooms, bathrooms and various other places around the home hair care products and tools may be kept on shelves, on top of tables, in boxes, cupboards and draws and on the floor. The systems of ordering products and tools are often varied, overlapping and change over time. The ordering according to the places of use and standards of cleanliness and tidiness seem to correlate with the practice of hair care in everyday life, such as the private aspect of hair care routines. Another factor that determines these orderings is how often products and tools are used.¹¹⁵ The visibility and accessibility of the ordering of products and tools often correlates with the frequency of their use and ways of doing things with hair. The cycles of dealing with hair intersect with their spatial ordering and the process of spatialisation (Lefebvre 1991). Products and tools that are frequently used as part of women’s daily hair practice are made spatially distinct from products and tools that are infrequently used, and both are distinct from ones that are no longer part of dealings with hair. This spatial organisation, in relation to their frequency of use, reflects women’s various domains of life and their response to the need, for instance, to create acceptable hair for work, home and going out. Women temporally and spatially organise their hair practice and partly their lives.

¹¹⁴ A ‘space of separateness’ is a space that is actively created away from family life where women can have some ‘me’ time or not interrupt family routines, as in Kerry’s case. Hair care products and tools aid the process of creating these spaces as they are carried from one place to another.

¹¹⁵ A table outlining the frequency of using hair care products and hair care tools is included in Appendix 7.

Holly orders her products and tools according to places of use, but also in relation to their frequency of use. Holly distinguishes between the wet and dry part of her hair care routine, keeping her shampoo and two conditioners along the edge of the bath and her comb in the bedroom. However, her intensive conditioner that she uses about once a month is not kept next to her other conditioners in the bath but in the bedroom. Holly is a final year student and only has to go to a few lectures each week, and therefore, most days she has the time to naturally dry her hair. Only if she is in a hurry will she use the hairdryer and this is kept in her spare room. Here, she also has a small, see-through box full of hair and beauty products, including a serum, a hair dye and two cans of hairsprays. Like the hairdryer, these products do not belong to her daily process of doing things to her hair and are only used on specific occasions such as going out with friends or for a meal. These situations do not currently occur very often in Holly's life so whenever she gets invited Holly has to go into her spare room and look through her box. Numerous items have to come out of the box before Holly can find the product that she is looking for. Holly's spatial orderings of products and tools demonstrates the interrelationship between temporal dealings with hair, domains of women's lives and ways of dealing with hair which allows women to divide the spatial organisation of products and tools in relation to their frequent and infrequent use.

'Frequently used products and tools' incorporate items that are used each time women do their hair, often relating to a daily or every other day use, such as getting ready for work or, in Holly's case, to go to university. These are often the most accessible and visible items that are left where women do their hair. The products and tools are used habitually, women often no longer reflect on their use and acquisition. The women in the study use, on average, 5.7 products and tools on a frequent basis. Monica draws on products rather than tools to do her hair, like half of the other women. Still, in comparison to these women, Monica relies on the highest amount of products and tools, using nine items daily. Of the rest of the women some use the same amount of tools and products and some more tools rather than products, such as Hannah, who only uses shampoo but draws on various tools such as curling tongs, hairdryers and combs to style her hair. This variation in the amount of products and tools that are frequently used to do hair already demonstrate various ways of doing hair and competences needed, which emphasise either chemical or mechanical processes.

The 'infrequently used' products and tools are often associated with times in which women get ready to go out and like to make 'a special effort' either for a meal, the cinema, pub or club or to meet up with a partner, friends or family. These items are frequently kept more hidden such as in cupboards or, as in Holly's case, in boxes. For some women these occasions occur weekly, even several times a week for some students or women with busy social lives. For some, although these 'special efforts' come about regularly they occur infrequently. In addition, some products and tools are used infrequently because manufacturers suggest applying them not more than once a month, such as intensive conditioners. Some other products are used less regularly because they are kept in high numbers, as women stockpile a variety of different shampoos, for example, in order to be able to have a selection of products to choose from.

Several of the women have a significantly lower level of 'infrequently used' products and tools, or none at all, such as Deborah and Hannah. These women tend to make no clear distinction in what they do with their hair on different occasions. They might take more time over it if they are preparing to go out but do not necessarily do it differently or use more products and tools. Often, these women expressed the attitude that is better to "stick to what you know", as indicated for example by Simone, their hair care routines are therefore extremely habitual. At the opposite end of the spectrum are women who have significantly higher numbers of infrequently used products and tools. These women often clearly distinguish between 'going out' hair and 'everyday' hair, using more and different products and tools when they get ready for a special occasion to achieve a certain look. They often have higher numbers of products and tools to choose from, such as Julie, Anne and Emily. Often, these are styling products, combs and brushes, including a variety of different conditioners and shampoos.

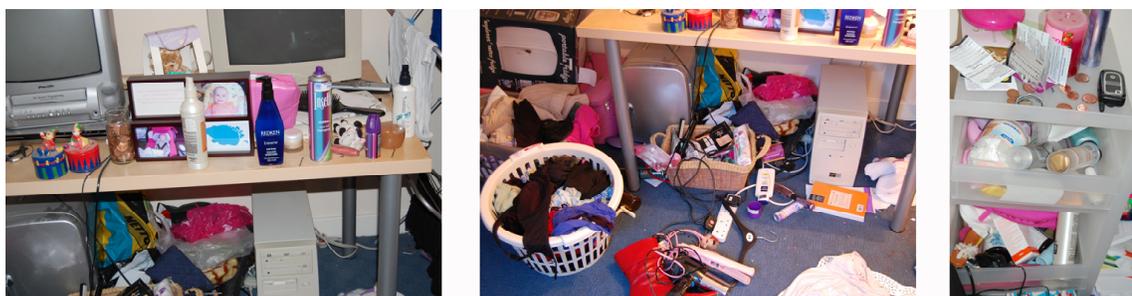
The configurations behind such use patterns are multifaceted and complex. They particularly draw attention to the various ways of dealing with hair when getting ready for work or for a special occasion, and the resulting variations in how often particular products and tools are used (i.e. frequently or infrequently). Ways of dealing with hair vary in the amount and types of work invested, which may not be obvious in the end result, but diverge in the amount and types of resources consumed. 'Going out' and 'socialising' is less routinised, as

it follows less certain patterns and in response it can be thought of as less routinised than the daily practice. The separation of frequent and infrequent use of hair care products and tools were sometimes determined by women's age and lifestyles. Women over the age of sixty usually only owned frequently used items. They seemed to be less willing to try new products and tools and to experiment with their hair care routine. Nevertheless, what seems to be more often the case is that women with 'extreme' habitual routines and only frequently used items have found ways of dealing with hair and have one combination of products and tools that worked for them when they go to work and another when they get ready for a special occasion.

Finding a combination of products and tools is a challenge for some of the women and in particular for Julie, the student nurse with what she described as 'frizzy' hair. Similar to Holly, Julie orders her products in accordance to places and frequency of use. Nevertheless, Julie owns considerably more styling products than Holly and most of the other women. Ordering products and tools according to their frequency of use enables Julie to exert a certain amount of control over the use of her products and tools and her hair care routine. She knows which products and tools are available to her when she gets ready to go to university that are usually ready to hand and the ones she uses when 'going out' that are usually more hidden away. However, despite the order in accordance to the frequency of use, Julie is only able to exert a limited amount of control over which products she uses when she deals with her hair, as the sheer number of possible ways of doing her hair enabled by her products and tools often overwhelm her. Living in a shared student house with two men, Julie is regularly instructed by her flatmates not to leave too many items in the bathroom, as she tends to keep her various shampoos and conditioners along the shelves of the shower bath, leaving no space for others to store their products.

The items that Julie uses to style her hair are kept in various places around her bedroom, as depicted in photographs 8/9/10 below. Her leave-in treatment, heat defence spray and thermal boost spray permanently live on the desk. They are in the front row and can be easily seen and reached, whereas numerous other items are scattered about. Under the desk are her hair straighteners and hairdryer, still plugged into the socket, lying on the floor next to the brush. All of these items are near her mirror that hangs on the wall next to her desk.

These products and tools are part of Julie's process of doing things to her hair if she gets ready to go to university or shopping and she uses them habitually every day. They are visibly displayed and ready to hand whenever she needs them. Julie straightens her fringe at home up to three times a day in order to keep her otherwise 'curly' fringe 'straight'. Whilst walking around her room Julie recognised the mousse and hairspray standing on top of her desk. These usually live in the willow basket underneath her desk, as Julie only uses them on a night out when she curls her hair, which is rather rare and therefore part of Julie's less routinised aspect of her hair care routine. Although these occasions are rare, last night Julie had curled her hair for a night out. Her mousse and hairspray were still standing on her desk next to her more frequently used items, instead of being in the basket. This occurrence demonstrates the unstable nature of places for keeping products and tools and how they are influenced through everyday life events as well as routines.



Photos 8/9/10: Julie's hair care products and tools in her bedroom

Julie's willow basket under her desk is full of beauty and hair care products. Here, she keeps the styling products she uses whenever she gets ready for a night out in the pub or club. She can easily reach them under the desk but because they are placed in a basket they are not all visible to her. As in Holly's case and some of the other women who choose to keep their products stored in places that are enclosed and deep, products somehow become 'disordered', as they 'thrown' into drawers, cupboards and boxes, overlapping and covering each other, potentially falling out of sight and being forgotten. Holly knows how many products are in her box but for Julie this is less feasible as she owns over eleven styling products. Julie needs to regularly dip into her basket, often coming across a choice of various styling products that are for use either before or after drying in order to straighten or curl her hair. The desktop, floor and box under her desk are not the only places where Julie keeps her hair care products. In a cupboard that has open drawers and is positioned on the other side of her room she keeps her 'fourth rated' products (i.e. the ones that she uses least

often), illustrating further her ordering of products by frequency of use. Whenever Julie looks through her cupboard drawers she is surprised, usually finding one or two products she had forgotten that she owns.

Although Julie knows exactly how to use each product and what to use it for, when she gets ready for a night out her choices of what to use, in which combination and what quantity are made at random. Julie might come across one product that she has not used for a while and “fancies” trying it out again or another that she feels might keep her hair in place a bit longer after styling it, suggesting she would sometimes use about “ten” different products on her hair. In the previous chapter, Julie’s example showed how her hair would feel a ‘mess’ most of the time, due to social, material and biological constraints of her ‘curly’ hair. Whenever Julie does her hair, her efforts last only for while and she loses the effect of the process and risks giving the impression to others that she does not care about her hair. The emotions involved in feeling a ‘mess’ are reflected in her hair care routine and the amount of products and tools used, creating a ‘disorder’ in her routines and spatial arrangement of products and tools. Giddens (1991) has suggested that an increased range of possibilities and options on offer is in effect a cause of anxiety, illustrating that what women do with their hair is fraught with concerns and ambiguities. Even though the spatial arrangement of her tools and products reflects to some extent the ‘messy’ disorder of her hair care routine, ordering her products in accordance to their frequency and places of use provides at least some order. The products and tools Julie uses frequently when going to university are more clearly defined and therefore ways of dealing with hair are part of more stable routines than her ‘going out’ hair. This stability is also represented in the way she arranges her most frequently used items spatially, as they are kept along the edge of her desk: at all times visible to her and easy to access.

Spatial orderings are constitutive of women’s hair care routines, often even reinforcing them. They enable women not only to feel able to organise their hair care routine but also their lives in general such as having acceptable hair for work, at home and when going out for a special occasion. In some cases, though, the spatial orderings cannot organise the sheer amount of products and tools and initiate a ‘disorder’ that is reflected in the ways of dealing with hair. For Julie this ‘disorder’ can sometimes be overwhelming but this was not always

the case for all women. In Holly's box of infrequently used products and tools, the spatial 'disorder' is accepted when she gets ready for a 'special occasion'. She can rummage through her box, using products and tools she would not usually use and marking this special occasion also through doing her hair.

In order to balance the amount of products coming into the home with what and goes out, some of the women in the study regularly de-cluttered their storage places, "keeping things under control" by eliminating and ordering them (Shove et al 2007: 33). The physical ordering often has an emotional effect on the hair care practice, as women enable themselves not to be overwhelmed by the potential 'disorder' they might create. The ordering and divestment of hair care products and tools, especially the early disposal of products that are still half full and tools that are still functioning, is one of the major concerns of Boots' corporate social responsibility department. In order to reflect on this issue the next section considers an evocative interview with Anne, during which she tidied and cleaned out 'her cupboard', whilst comparing it with some of the other women's acquisition, keeping and disposal cycles. When examining the everyday practice of hair care, the interrelationship between acquisition, use and disposal are more complex, as products and tools are not only disposed of early in their lifetime but are also sometimes kept unused for long periods of time. This investigation illustrates the relationship between owning products and tools and using them whilst doing things with the hair, revealing the relations between past, current and future practices that disclose the trajectories of women's hair care routines. Although, the research project is mainly concerned with the resource consumption during the use phase of products, here, it further draws attention to some of the implications for waste production through the disposal of hair care products and tools.

Ordering, keeping and divesting

The number of hair care products and tools¹¹⁶ owned is not static and is based on diverse practices reflected in their acquisition, use and divestment. Anne, Pamela, Emily, Julie and

¹¹⁶ The number of products and tools were obtained during the interviews, basing them on women showing me around their home, photographs that were taken, stories that were told and forms that were filled in at the end of the interview by each informant. These products and tools are sometimes shared with other family members but more 'typically' women have their own products separate from the rest of the family. Therefore, the total number of hair care products and tools does not represent all of the items that are kept in the home.

Lindsey had the largest number of hair care products and tools with an average of twenty items. All of these women differentiated between frequently used products and tools and ones used infrequently when they go out for a special occasion. Julie, who is in her early 20s, searches for products' combinations that she feels 'work' for her hair, whereas the other women, who are over 40 years of age, have been able to accumulate various hair care tools over their lifetime or like to try different products for their hair. Lindsey is a notable exception; she owns as many items as the others because she stockpiles, not various different hair care products, but large numbers of the same type. She owns several 'Slivikrin' hairsprays for 'firm hold' and about three 'Pantene' conditioners for 'smooth and sleek' hair. Therefore, Lindsey can be compared to the women who own the fewest number of hair care products and tools, such as Deborah and Hannah (who own an average of five products, buying only the similar items when they are fully used). Their hair care routines are 'extremely' habitual; relying on the same products and tools each time they do their hair.

Although the relations of these categorisations are not constant over time, they already show the interrelationship between acquiring, using and divesting patterns, as emphasised by Gregson et al (2007) and Shove et al (2007). In the process these relations draw attention to the correlation between past, current and possible future practices. Investigating kitchen renewals, Shove et al (2007: 23) have drawn attention to the relationship between "having and doing", owning a variety of products and tools that make numerous activities possible. Here, various states of "restlessness" impact on the divestment and acquisition of kitchen items such as a "missing materials", "unrealised practices" or "having and doing in balance" (Shove et al 2007: 26). For Shove et al, an investigation of these points of restlessness makes apparent the interdependency between products, tools, people and activities in practices and the interrelationship between past, current and future practices. Products are "not only consumed for their own sake but for what they make possible" (Shove et al 2007: 22) and, in the case of hair, ways of dealings with hair that create certain looks and feels.¹¹⁷ Although there are differences between hair care products and tools and, say, kitchen appliances, (as most of them consist of so called 'fast moving consumer goods' that are cheaply bought and used up), similarities between the forms of restlessness exist.

¹¹⁷ People do not only use products because of their symbolic meaning but also for the experiences and activities they make possible (Shove et al 2007).

An important point that marks the divestment of products and tools is the ordering of their places of storage. As Anne, the housewife in her early 50s, likes to neatly store all of the products in her cupboard, her products and tools are regularly tidied. During the evocative interview with Anne, she re-lived a recent experience. On this particular weekday evening Anne's husband was out for the night. This meant she did not have to cook and could just spend the evening concentrating on herself. These moments are rare for Anne, as she regularly looks after her grandchildren and also has a busy social life. On this evening, time was on her side. This gave Anne the opportunity to tidy 'her cupboard' (see photograph 11 below). Knowing that she would have a bath later and wash her hair, Anne got undressed and put on her dressing gown. She opened her cupboard door and started to look through it, checking the content.



Photo 11: Anne's cupboard

On the bottom shelf of Anne's cupboard are her hair care products and tools, containing four bottles of shampoo, two conditioners, a sculpting spray, two hair mousses, two bottles of serums, a hairdryer, straighteners, heated rollers, two combs, four brushes and various clips and bobbles. She owns a variety of different shampoos and conditioners. She is keen on changing the brand of her shampoos and conditioners regularly, as some are for 'coloured' and 'sun damaged' hair and others create 'sleek and smooth' hair. Even so, Anne does not use supermarkets' own brands, as she believes they are not "as good as" what she calls "expensive" brands such as "hairdresser brands". Whenever these are on offer and Anne likes their smell and look, she is unable to walk past them without buying a pair. She has

accumulated numerous shampoos and conditioners. She uses them in rotation, but their arrangement in her cupboard and the accumulation of products over time often results in her not using them any longer and, sometimes, in their early disposal.

Anne orders her products and tools according to their size (i.e. tall ones at the back and shorter ones at the front) because her cupboard is rather deep. Whilst tidying up she re-discovered numerous products that she had forgotten, as she explained, “oh I had forgotten about that I must start using it again”. In order to not overlook them again, Anne started to rotate her products, moving some of them to the front whereas others were placed to the back, clearly ordering them accordance to her preferences of choice at that moment. Often, her products at the back get overlooked, resulting in Anne only using the ones at the front and consequently the “same old things day in and day out”. Nevertheless, Anne not only rotated her products, she also started to clear some of them out in order to create more space and increase the visibility to her remaining products. Like some of the other women, Anne decided to throw things away that still contained some of the product. Through increasing the visibility of some of her hair care items and reducing the amount of products she owned, it seems Anne is able to prevent a potential ‘disorder’ that, in Julie’s case, as discussed earlier on page 186, overwhelmed her.

Anne’s divestment activities that led to the disposal of various hair care products, is based on owning too many products. She needs to make room for not yet acquired products and forgotten ones at the back. These dynamics create a source of ‘restlessness’ that lead to the early disposal and the potential acquisition of new products. Products that are not visible when women come to choose them are often overlooked. Only when Anne starts to order her cupboard does she realise the potential options open to her. The products are either re-integrated into her hair care routine by being moved to the front or discarded to make room for new products and improve the visibility of others. As suggested by Gregson et al (2007b: 190), the acquisition of new products is often combined with the divestment of the existing, “it is not about endless accumulation”. The divestment of products is linked with the reproduction of a consumption practice.

Reflecting on Anne's use of shampoos and conditioner, some of the interrelationships between acquisition and divestment become apparent. Some of the shampoos and conditioners that were at the back of her cupboard can still be re-integrated into her hair care routine, particularly if they are for 'colour treated' hair and she likes their smell. Currently, Anne is particularly worried about damaging her hair; she has it regularly coloured at the hairdresser. Shampoos that provide 'protection' against 'sun damage' are only required if she goes to her holiday home in Spain and are therefore more likely to be discarded, particularly if she needs to get more shampoo to treat her hair against 'dandruff'. In order to be seen as a competent hair practitioner, Anne has to consider the various 'states' of her hair and buys new products and discards old ones accordingly: what is the most pressing hair concern at the time and what she likes in a product, creating forms of 'restlessness'.

Anne is not an exception when it comes to dealing with products that have lost their importance and been discarded early, though she usually carefully considers their disposal. For example, Anechka also has numerous shampoos and conditioners stored in the cupboards of her bathroom that she once bought, tried and did not like. In Anne's case the search and acquisition of items is combined with her liking of hair care products and beauty products in general, trying different things for experimenting with her hair. In Anechka's case, this search can be frustrating at times and seems never ending; a product that works is missing. She usually does not like how her hair looks and feels after using new products. Anechka searches for a shampoo that "simply just washes her grease off" and will not "dry out" her already "dry and curly" hair. Her search for such a product has not been successful. In this process, she has accumulated various hair care products. Currently, she has enough space in her bathroom to keep all the unused shampoos and conditioners in the hope that one day she might use them up or can pass them onto her daughter or husband. Anechka said that she "does not like throwing things away" which are still usable.

Despite the relatively low value of some of these shampoos and conditioners, some of the women did not feel content with just throwing them away. The women considered the personal investment in choosing and buying these items, such as the time and effort spent, and the hope that products will one day have the desired effect on their hair as reasons for not throwing items away. Friends and family members are usually the destination to which

women divest unwanted items. Gregson et al (2007b) have defined the numerous divestment activities that occur in everyday life, critiquing the idea that we currently live in a 'throwaway society'. Not all things that are unwanted become waste or are carelessly thrown away. However, divestment strategies need to succeed socially and culturally (Gregson et al 2007b). Women are unlikely to pass their hair care products and tools to the charity shop, not only because of their low financial value but also because it is not currently regarded as an acceptable practice. Old brushes are not even passed onto family members, as they are considered as unhygienic, even if they have been cleaned.

In addition to shampoos and conditioners, Anne owns a lot of hair care tools, in particular brushes, combs and electrical items, some of which she has not used in years. Anne explained that she still keeps these tools, as she once paid a lot of money for them and one day might use them again. The tools represent past techniques of doing things with hair and what was considered acceptable ways of wearing the hair that currently do not correlate with current standards, Anne therefore no longer uses them. She has accumulated brushes, combs and electrical items over her lifetime, potentially 'cluttering' her cupboard, yet she does not throw them away. In addition to their financial value, the tools remind Anne of old practices, hair lengths and styles. Anne is reluctant to throw these tools away because of their shared biography. She particularly remembers the times when she used her round brushes. The brushes remind her of times when they allowed Anne to blow-dry her then long brown hair in styles that created an important aspect of the persona that she wanted to project to others.

Some of the women kept tools that they no longer use for many years but this does not mean that they did not replace them with new ones. In order to be regarded as a competent practitioner women have to replace tools with newer ones, as they are regarded as more suitable for achieving standards in hair. For example, half of the women who used hair straighteners also owned a second, older pair, as the first one became technically obsolete. In the case of hair straighteners, they not only create 'straight' hair but 'poker straight' hair. Such replacement and divestment practices emerge because hair care items have been superseded technically. This not only occurs with hair care tools but also some styling products. A few years ago, Tracy had used her heat activation cream nearly every day.

Nowadays, it lives on the shelf under her sink and has gathered dust. Tracey admitted that she just does not know why she stopped using it.

Anne and Tracy are similar to some of the other women who own products and tools that are no longer used, often indicating past, current and anticipated future practices. These products and tools are mementos from the past, revealing previous skills, competences, knowledge, commitment of time, effort and money that enable women to deal with hair. Although some might never be used again, they confirm that current hair care routines are not only based on frequently and infrequently used hair care items but also on previous acquired knowledge and skills (Shove et al 2007) through the use of currently unused products and tools. Current hair care routines are based on the interrelationship between past experiences and aspirations towards the future, depending on ways of dealing with hair that are considered acceptable at the time.

Unused hair care products and tools are not only kept because of their financial value or as reminders of past ways of dealing with hair but because they trigger memories of the hair's appearance, feel and smell and the women's sense of self. Shirley, the probation officer, still has got various half-used shampoos and conditioners on the shelves in her wardrobe (as depicted below in photograph 12). Shirley had bought these products at a time when she was diagnosed with breast cancer. The last thing Shirley wanted was to lose her hair when going through chemotherapy. However, after only the first session her hair began to fall out in clumps. Being diagnosed with breast cancer and losing the hair had a devastating effect on Shirley. She "did not feel at all feminine". Once her hair began to grow back, it needed "special" products, so Shirley tried different ones in order to discover what suited her newly growing hair. During the interview Shirley revealed that she will probably never use them up but she struggles to throw them away because they remind her that she was able to 'beat' the illness, something she still needs to be reassured of.



Photo 12: Shirley's half used shampoos and conditioners in her bedroom wardrobe

Objects enable “reflexivity and introspection, a tool of auto-biography, self-discovery, a way of knowing oneself through things” (Hoskins 1998: 198). Although the products remind her of a time of great distress, they also signify a conquest, as she has been clear of the cancer for the last two years. She buried the wig that she wore under the foundation of her conservatory. This event represented a great triumph to her. Still, she has not yet been able to part with some of the hair care products. Shirley does not relinquish the knowledge that this experience used to be part of her life and to, some extent, it is still with her now. She might be regarded as an exception but numerous women keep their hair care tools for longer periods of time even if not used. Pamela, very occasionally even re-integrates them into her practice. In this, these women draw attention to how past routines and selves appear in the present, as their hair care routine evolves and changes over time. Past and current routines are linked to future ones, as the next example demonstrates.

Some unused items in women's homes are not part of the past practices but are rooted in aspirations towards possible future hair care routines. Hailey's heat defence spray was never integrated into her hair practice. She regularly uses hair straighteners and started to get worried about damaging her hair. So, when she noticed a heat defence spray in a shop, she bought it. Hailey wants to start protecting her hair from the heat, but whenever she is doing things to her hair she forgets that she owns it. Although she has been unable to integrate it into her hair practice, Hailey “feels better knowing that I [she] will try.” Hailey owns all the products and tools to do her hair but still keeps some hair care routines unrealised, demonstrating the routinised nature of some of her existing hair care routines. Shove et al (2007) have argued that the continual failure to integrate products and tools into an existing

practice and to realise aspirations to future practices, such as having ‘healthy’ hair, can cause a form of ‘restlessness’. Products alone might not always be capable of changing existing hair care routines. Yet, neither do they have a passive role, as Hailey’s example illustrates. The presence of the heat defence spray in her room is a constant reminder to Hailey that she is not looking after her hair. Failures to integrate products into hair care routines can be interpreted as a lack of determination and of current competences to live up to expectations of how to deal with hair and acceptable ways of wearing it (Shove et al 2007). The examples above demonstrate that acquisition, use and divestment activities are complex and based on varying factors that are part of numerous dynamics of everyday life.

Conclusion

The examples discussed in this chapter show that the ordering of products and tools in women’s homes is determined by diverse and overlapping factors. This ordering depends on the women’s own standards of domestic cleanliness and tidiness, the places where products and tools are used to do hair, and the frequency of their use. These spatial and temporal orderings are relevant to developing an understanding of the hair care practice in order to reflect on a practice-orientated approach, as they impact on the hair care routine and therefore on the amount and type of resources consumed. An examination of the production of hair spaces through Lefebvre’s concept of spatialisation (1991) makes apparent the various features of the practice of hair care. These include numerous social and material constraints, such as women’s efforts to create a private space to do their hair and the high level of commitment required to do hair. Activities that relate to women’s hair care routines do not only need to be integrated into women’s life but around their family life, leaving women to negotiate their time and space to do their hair.

The spatial ordering of products and tools into those frequently used and those infrequently used is another crucial point to emerge from this chapter, as it discusses the varying degrees of routinisation that exist in the practice of hair care, from those that are habitual to those that occur less frequently. One of the key tenets of a practice-orientated approach is that it emphasises the routine nature of practices. Everyday practices are often connected with routine ways of performing activities (Reckwitz 2002). Nevertheless, such an assumption often fails to recognise that “practices are embedded in social lives” (Gregson et al 2007b:

188) and therefore do not necessarily stay constant in women's lives, as they might be short-lived. The varying temporal dimensions of practices also emerge from the work with the women in this research project. The practice of hair care seems to consist of habitual cycles and ways of dealing with hair where products and tools are used in more or less frequently occurring cycles. Cycles that occur less frequently might be considered as less stable, as they are performed less often. The interrelationship between these degrees of routinisation is examined in more detail in the next chapter, particularly in relation to doing things to the hair and using hair care products and tools at home.

This chapter has started to explore in more detail the role of hair care products and tools in relation to women's hair care routines, demonstrating that a practice-orientated approach allows for an examination into hair care products and tools, as an integral part in the everyday practice of hair care. It therefore provides some insights for designers on the role of hair care products and tools in the practice of hair care. In particular, Pamela's, Dory's and Kerry's examples demonstrate that the interweaving of the products and tools that are used and the spaces where hair care is carried out are constitutive of hair care routines. An examination into the hair care products and tools in women's homes draws attention to their past, future and current hair care practice. Hair care products and tools make various activities possible, such as shampoos the washing of hair, creating a clear link between 'having and doing' hair. They play a part in configuring and organising ways of dealing with hair, as women integrate and exclude various products and tools in their hair care routines. Nevertheless, good intentions, aspirations and ownership of products do not necessarily enable them to be integrated into future practices, as Hailey's example shows, illustrating that the integration of new products into the current practice is not always straightforward, as routines are difficult to change.

Reflecting on the last two chapters what emerges is that hair care products and tools generate and define for women various and widespread predicaments. In the previous chapter, the constant balancing of substances on the hair, for example, requires women to constantly eradicating grease from their hair and restoring it with varying hair care products. This chapter examined how products and tools can create numerous predicaments that impact on women's emotions towards themselves and their hair. These predicaments are

grounded in the potential of products to create feelings of guilt if women fail to integrate them into their hair care routine and in their capacity to disorder routines through their sheer quantity. In addition, products visualise to others the nature of women's hair and their routines, and therefore, revealing what women often would like to keep private. Products and tools seem to compose various predicaments that women have to deal with, as they impact on how they feel about their hair and hair care routine. It seems that these predicaments shape and reinforce the practice of hair care.

Further explored in this chapter is the acquiring, keeping, ordering and divesting of products and tools, as activities that all women participate in, though they occur in varying cycles. The examples of Anne, Anechka, Shirley and Audrey show that a variety of factors influence such cycles, which lead to the early disposal of products and tools and sometimes to them being kept for long periods of times. The early disposal of hair care items is deeply integrated into the interrelationship of past, current and future hair care practices, divestment opportunities and the type of products and tools in question. Some of the interviews showed that the disposal of products and tools is often combined with careful consideration and not always done lightly, as women try to find ways of not throwing items away that could still be used. They are kept for months and sometimes years, as they have financial or emotional value to the owner or because of their social and cultural connotations. This did not only count for more expensive tools but for 'fast moving consumer goods' such as shampoos. This is not to say that early disposal does not exist, but to argue that today's society is a 'throwaway society' potentially ignores the complex factors involved in the divestment of products in everyday life. Designers have to draw on a practice-orientated approach that acknowledges these complexities.

An investigation into some of these dynamics raises issues concerning women's hair care routines, the ordering of products and tools in the home and technological advances. The physical order of products and tools is significant because of their potential invisibility in the places they are stored, where they get overlooked and lose their integration in women's hair care routines. Moreover, interrelationships between acquiring, keeping and divesting depend on women's current hair care routines and aspirations towards the future. Some women, such as Julie, search for products and tools that work based on trial and error, whilst others

enjoy experimenting with numerous products and tools. These activities lead to a constant imbalance, between having certain products and tools and doing things to the hair, creating several forms of 'restlessness' (Shove et al 2007). In the process of 'having and doing', external influences, such as technological advances, can impact on the changing standards of hair that often leads to the replacement of existing products and tools in women's homes. To be ahead in the hair care market, manufacturers need to constantly develop innovations. The cycles of acquiring, keeping and divesting of products and tools that sometimes lead to their early disposal created the content of the discussion of one workshop group at Boots the Chemist. After introducing the group to the interrelationship between disposal, acquisition and use through an inspirational film, they developed various design concepts, addressing issues such increased product visibility in storage spaces and the creation of packaging sizes that reflect 'real' usage time.¹¹⁸

In concentrating on the ordering of products and tools and the interrelationship of keeping, using and divesting them this chapter has sought to explain the interrelationship between ordering, acquiring and doing. The next chapter considers more closely the detailed enactment of ways in which women do their hair. Firstly, it examines the interrelationship between interactions with hair care products and actions taken on the hair. Secondly, the chapter looks at the potential 'ruptures' to women's hair care routines through the process of dealing with it. Hair care products and tools when women do things to their hair are implicated in the definition and arrangement of the practice and patterns of resource consumption. They are not analysed in isolation but considered in the re-configuration of ideas, competences, actions and emotions associated with their use and appropriation. The examination of competences, skills, past sensual experiences in the form of know-how and emotions has been implicit throughout the thesis but they are discussed here in more detail. Given the diversity of hair care routines, the performance of two main examples are examined. Emily, who got ready to go out for an evening meal and decided to curl her hair, something that she only does very occasionally and Odette, who was doing her hair on a weekday evening ready to go to work the next day, something that occurs two to three days a week, (whilst considering some of the other women's experiences alongside them).

¹¹⁸ An outline of the workshop is included in Appendix 8: workshop report.

Chapter 7 Hair care routines: Emily and Odette are doing things with their hair

Introduction

The previous chapter considered the practice in relation to women producing spaces to perform their hair care and to keep their products and tools. It developed the idea that hair care items, in addition to other elements of the hair care practice, create various predicaments in women's hair care routines, therefore shaping and reinforcing the practice. The performance of what women do to their hair is considered in greater depth. This examination builds on the role of products and the practice elements involved in reproducing the hair care practice in everyday life. The chapter draws attention to the process and actions (including the various bodily and mental activities) involved when women deal with hair in particular interactions with the material world. Hair care products and tools play a role in configuring everyday activities, as they make the performance of practices possible - objects are "tied to action" (Schatzki 2002: 106). The ways women deal with their hair and the use of hair care products and tools are interdependent, in that they come together to reproduce the practice of hair in daily life. This interrelationship relies on the consumption of water, gas and electricity.

Hair care products (such as liquids, gels, pastes, lotions, tonics, foams and fluids) come in numerous colours, smells and viscosities and often packaged in accordance to their use. They can be squeezed, scooped or squirted out of bottles, containers or aerosol cans onto the hands before they are distributed over the hair, or sprayed straight onto the hair. When women talk about dealing with their hair, in particular during the evocative interviews, these 'material interactions' (Dant 1999; 2005) detected through their senses become apparent. Dant's research into material interactions, emphasising the exploration of products in use, is useful here to examine some of the interrelationship between interactions with hair care products and actions taken on the hair. The investigation points to the various sensual cues that products provide to guide the process of dealing with hair. These cues build on ideas, emotions and knowledge that women have acquired over the years and have sometimes become embodied and routinised.

In order to explore the interrelationship between women and their hair care products and tools during the performance of dealing with the hair in more depth, the chapter draws on the research of Dant (2005) and Watson and Shove's work on the 'distributed competence' (2008: 77). Following Watson and Shove (2008: 78), although competences have frequently been associated with a "human quality", through the development of products some of these competences that used to be "embodied" in people are "redistributed between person and technology". This concept is useful in developing an understanding of the expression some of the women used to judge their products – if they were "doing the job"¹¹⁹, as this expression starts to question who is actually doing the 'work' and has the competences¹²⁰ to achieve various standards in hair. This investigation sheds light on the significance of products, in particular the shampoo and conditioner to provide tangible product cues to women that they are actually 'doing their job'.

The second aim of the chapter is to examine the impact of 'ruptures' on women's hair care routines that particularly arise when investigating the dry part of women doing things to their hair. People integrate multi-relational elements in their performance of practices, reproducing but also changing the practice by breaking and shifting these relationships (Shove et al 2007). Discussing changes in practices, Shove and Pantzar (2005; 2007), Ropke (2009) and Gregson et al (2007b) refer to how they change through external influences such as technological innovations, economic situations and institutional arrangements, but also internally through their performance often instigated by experimentations and improvisations (Warde 2005). This chapter explores the possible internal changes through various 'ruptures' to the performance but also initiated through creative acts by women who experiment with their hair care. The investigation focuses on the elements of practices that come together, including products and tools and the dynamics of change, making the practice more or less resource intensive, as women adapt, resist and welcome these disturbances.

The range of different performances recorded in the study is diverse and this chapter focuses upon two main examples to be able to provide an in-depth understanding of the material

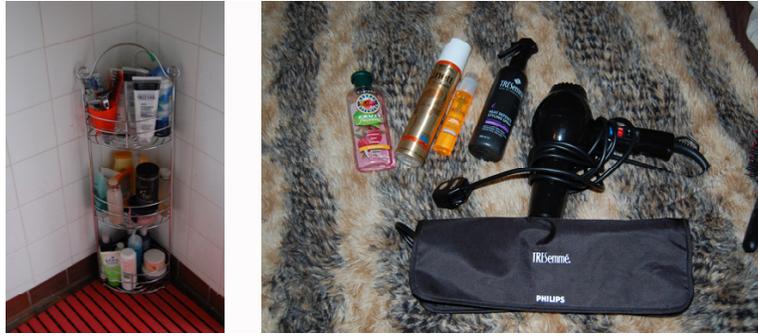
¹¹⁹ The 'job' might refer to making the hair 'clean' or 'shiny'.

¹²⁰ In bringing practice theory (Schatzki 1996; Reckwitz 2002) to bear, Warde (2005) not only highlights the role of products, knowledge and ideas but also touches on the significance of competences in enabling action and reproducing everyday practices.

interactions with hair care products and an outline of the ‘ruptures’ to the performance of dealing with hair. In addition to delineating the process, this chapter considers some of the other women’s descriptions to reflect on the overall experience. Emily is the married campsite manager, in her mid 40s, who has straight, brown and cut to mid-length hair. Odette is the recruitment officer in her early 30s, also married, who has dyed blonde, long and straight hair. This chapter delineates the evocative interviews during which Emily and Odette re-lived a time when they were doing things to their hair. Emily got ready to go out with her husband and friends to have a restaurant meal, an occasion that does not occur very often and involves planning, whereas Odette got ready for work. The ‘doing’ of her hair represents something that Odette does every third day although she had her fringe cut a few days beforehand at the hairdresser.

The wet part: Hair care products ‘do their job’

The day started for Emily just like any other but she knew that this Saturday would be different. Emily and her husband had planned to meet up with friends to have dinner in a restaurant. The Saturday was ‘special’. Working as a campsite manager in the Peak District and dinner lady in the local school, Emily’s hair care routine is about “practicalities”. She shampoos, conditions and brushes her hair daily and frequently leaves her hair to dry on its own tied up in a ponytail (see photographs 13/14 below). The dry part of her hair care routine requires only a little time and effort. What she does to her hair only changes if she ‘goes out’ for an evening. She usually straightens her hair, but on this particular Saturday Emily decided to curl it, “just to do something different for a change”, using products and tools she only infrequently incorporates. Knowing that she would not leave her home until later on, Emily had plenty of time to get ready. She was able to arrange what she wanted to wear on her bed and could assemble all of the hair care products and tools that she needed. The whole process was planned and mapped out by the time she had to get ready.



Photos 13/14: Emily's hair care products and tools in her campsite shower and bedroom

The evening that Odette re-lived was pretty much like any other when she would shampoo, condition, dry and straighten her hair (see photographs 4/5). Unlike Emily, Odette shampoos her hair every two to three days and dries and straightens it at the same time. Although Odette was not at home, staying with her Mum in Doncaster, it was not an unusual evening. She frequently stays with her Mum to cut down on her morning commute from Sheffield to Doncaster. Nevertheless, something had changed at the weekend. Odette had a fringe cut into her hair at the hairdresser. It was not the first time that Odette had decided to have a fringe though each time she wonders whether it was the right choice, as she is unable to do parts of her hair the way she is used to. In contrast to Emily's situation, time was not on Odette's side. Because she wanted to watch two episodes of *Coronation Street* with her Mum that had a thirty minutes interval in between, Odette only had a short break within which to do her hair. "It is all about go in, get done and go out." She quickly made her way to the bathroom, took off her top, leant over the bath and turned on the tap.

Keeping an eye on the time, at half past four Emily went to the shower to get ready for her night out. The walk to the shower requires Emily to go from her studio flat to the shower facilities of the main campsite. Emily quickly locked the door and turned on the shower. The water temperature is set to 40°C. Emily and her husband keep it that way so there is no need for adjustment. Nevertheless, the water has to run for a while in order that it heats to the set temperature, which steams up the room. Emily had enough time to get her shampoo and conditioner out of the shelving rack and to get undressed. In Odette's case, the regulation of the temperature was something that needed to be adjusted constantly. Her Mum did not have a shower but a bath with a shower attachment that had a tap for cold and one for hot water. Letting the hot water run, Odette kept checking the temperature by moving her hand under

the tap. Gradually, she could add the cold water. Adjusting the hot and the cold, it took a while for her to find the “right” temperature.

Under the shower stream Emily was “rubbing” her hair. The water began to cover the whole of her hair and body. Emily reached for the shampoo, squeezed it into the palm of her hand, and started to massaging it into her hair, “making sure it is clean at the roots” and rinsing it with water afterwards. Unlike Emily, Odette pulled her hair over her head so that it fell in front of her face, holding the spray in the right hand, whilst hanging over the bath. Odette admitted it was a rather uncomfortable position. She began to wet her hair by taking the spray to the back of her head under the premise that it would drip down to the bottom of her hair. During the whole process, Odette started to lift up her midsections with her left hand to ensure that her long hair was getting wet all over. Her hair became “heavy and dense” and more and more saturated with water. After resting the spray in the bath, Odette was able to pump the shampoo into her hands, catching about three or four pumps. Her shampoo has a thicker consistency than a lot of other “cheaper” products. “It smells fantastic”, Odette confirmed. Rubbing the shampoo into her hands from the left to the right, without trying to drop any between her fingers, she massaged the shampoo into the base of her scalp at the back of her head. Soon after, Odette realised that the shampoo was not creating enough lather. Odette had to go for a fourth pump of shampoo, massaging it into the front and back of her scalp to then slowly work it down to the mid-length of her hair.

After massaging her hair for a while and creating sufficient bubbles, Odette reached for the showerhead that was resting in the bath. She needed to check the water temperature, as she knew it could vary. The rinsing process began with the scalp at the back of her head but instead of massaging the hair Odette used the flat palm of her hand to push and smooth the soapsuds out of her hair. For her midsection she spread four of her fingers out to loosen the “dense mass” of hair and with a “sideways come-hither motion”, allowing the water to go through the strands of her hair to release the bubbles that got carried away from the water off her hair and into the bath drain. In the midsections Odette was able to observe with her eyes whether she had washed out all of the shampoo. She was not able to check the back but was confident enough that the water had removed the shampoo, as Odette explained she has been washing her hair since she was a child, rinsing her hair occurs instinctively.

Emily drained off the excess water out of her hair and squeezed the conditioner onto the palm of her hand. Unlike her shampoo, the conditioner is only massaged into the hair ends, as Emily explained, “the oldest part of the hair”. Similarly, Odette began to rub the conditioner into the ends of her hair, whilst slowly working herself up the hair, “climbing the robes”, as she put it. Emily and Odette recognise a “slimy” feel to their hair “a coating of conditioner”. The hair becomes solid. Odette is only able to separate the hair strands by pulling what she called the “human rack” (i.e. her spread out fingers) through the hair, rubbing the conditioner into the ends of her hair. She hoped that the conditioner “put back” what the bleaching process at the hairdresser had taken out of her hair, “nourishing” it. For Odette, it was enough to believe that the conditioner ‘nourished’ her hair “psychologically in [her] head” even if she could not feel or see the difference. The scalp got a few, quick and “jagged” strokes. Odette knows that too much conditioner can weigh down her hair, creating a “flat and lifeless” look when trying to dry and style it.

For Emily, the conditioner smoothes her hair and removes all her knots and tangles. The conditioner keeps her hair “soft and shiny”. Emily began to wash the rest of her body, waiting for the conditioner to work on her hair before rinsing it out. During this process Emily ensured that all of the “sliminess” left her hair and was replaced with a “squeaky feeling”. Emily compares this feeling to touching rubber. The hair starts to stick to your fingers. Holding the spray in her right hand, Odette washed her conditioner off without waiting long. She particularly concentrated on the scalp, smoothing the conditioner off whilst using her “sideways come-hither motion”. Some residue can remain on the ends of her hair for extra protection. The conditioner was “doing its job”. Finally, both women would wrap their hair in a towel, creating a turban to enable the excess water to soak into it. Emily made her way back to the flat, whilst Odette urgently tried to finish doing things to her hair, as she did not want to miss the beginning of Coronation Street.

The various processes that Odette and Emily go through to shampoo and condition their hair make apparent the numerous material interactions (Dant 2005) between the water, hair, body and hair care products. Some of the interactions with bathroom appliances configure women’s hair care practice in a practical and physical way through their design. None of the

women in the study could turn on the shower or bath and just direct the water stream onto their head and body straight away. They all had to either wait for the water to heat up or adjust it by turning the water temperature up and down, as in Emily's and Odette's case. Odette had a particular timescale in which she was able to wash her hair in order to be able to watch Coronation Street. The 'waiting time' to heat up and adjust the water is not only accepted by women but considered part of the process. The appliances used to heat up the water 'script' (Akrich 1992) the length of this waiting time to which the women have to comply. Often, women fill this time up with other activities such as going to the toilet, scheduling the heating up time to the length of activity that fills up this otherwise 'wasted' time. During this time the water runs down the drain without being 'used'.

Unlike bathroom appliances, material interactions with hair care products such as shampoo are based on the design of their packaging and the substances inside them that change their viscosity in use. Both women interact with hair care products and their hair through their eyes, fingers, ears and nose: seeing, feeling, hearing and smelling them. Whilst using the shampoo and the conditioner on the hands and hair, they provide various physical and tangible cues to the women about what chemical reactions are occurring on the hair, prompting the change from one action to another and the techniques used such as the 'come-hither motion'. For example, Emily can feel the 'sliminess' of the conditioner on her hair being replaced by a 'rubbery' feel after rinsing it off with water. She recognises that she has washed the conditioner out when her hair makes a 'squeak' sound whilst touching it. Odette has to go for a fourth pump of shampoo, after she realised it was not creating enough lather to clean all of her hair. The creation of lather and the sound of a squeak are common cues for women to identify if they have used enough shampoo, put enough effort into massaging their hair and rinsed all the conditioner and shampoo out. Dant (2005) has suggested that know-how about ways of conducting everyday activities is based on learnt skills but also on material interactions. These material interactions can prompt action sequences through product cues, such as the lather of the shampoo, that therefore determine ways of dealing with hair. As discussed in chapter 3, producers and consumers have developed well-established links between the performance and appearance of a product and women's expectations of hair care products. In hair care, these links have been developed into various signs on the packaging of products and provided benchmarks for the consistency, colour and

smell of the substances that afford tangible cues during their use, rubbing the product between the hands or on the hair.

The impact of these links on women's everyday hair care routines emerges when considering Holly's interpretation of her three conditioners, their packaging and the design of the substance inside. The packaging of each product consists of two different cream colours, as depicted on photographs 15/16 below. The label is dark purple and the writing has a light pastel colour. Holly described the packaging as "simple" with "not too much jazz" about it. Overall, for Holly it has a "wholesome" look that suggests that it is a more "natural" product than some of the other ones she can buy and use. After examining the packaging of one of her conditioners more closely, Holly was able to read of the ingredients and instructions for its use – "a unique formula with Australian Queensland Macadamia nuts". The use of macadamia nuts "makes sense" to Holly. She is final a year science student and gets annoyed when she watches conditioner adverts on television promise to "fill in" gaps in the hair structure or "do anything else amazing". Her conditioner does not make this promise but tries to draw attention to the use of "natural" ingredients. Holly knows that nuts contain "fat" and therefore must moisturise her hair. She is able to make the connection.



Photos 15/16: Holly's conditioners

Holly uses the information on the packaging to develop ideas about her conditioner that add to the material interactions and overall meanings she creates about the experience of using it. Unlike most of the women in the study, Holly uses not one but three conditioners in rotation, depending on the feel and look of her hair. Whenever her hair feels particularly "greasy"

Holly uses the “lightest” conditioner. Its viscosity is the thinnest of all them. Holly believes that it has been diluted with water. The “very, very thick” one she only uses about once a month to keep her hair in a “healthy” condition. Whenever her hair feels dry, Holly does not use the ‘lightest’ or ‘thickest’ one but her third conditioner, the viscosity of which is exactly between the other two. Whereas the ‘thinnest’ one only replaces the natural oils that were taken out through the shampoo, for Holly the others add additional moisture.¹²¹

Holly makes a clear connection between the viscosity of conditioners and their ability to leave different amount of moisture on her hair, counterbalancing the effects of the shampoo with the conditioner, as examined in chapter 5. Moreover, what emerges from Holly’s description is some of the well-established links between consumers and producers surrounding these material interactions. The “thicker” the conditioner and, as stated by Boots’ formulation developer, the more it “creates a peak” demonstrates to Holly and other consumers that such a conditioner leaves a large amount of moisture on the hair. Although these cues shape some of her understanding of how Holly uses the conditioner, Holly does not use only two conditioners (i.e. one for daily use and the other monthly) as recommended by the producer but uses three conditioners in combination. She continues the relationship between the viscosity and the conditioners’ ability to moisturise her hair beyond its recommended use, as she differentiates between even subtler tangible distinctions. The conditioner’s consistencies afford various meanings that Holly interprets in everyday life and therefore she uses not one or two, but three.

Investigating the work of car mechanics, Dant (2005: 108) has suggested that material interactions depend on the way products are “intentionally designed for use”, the “embedded knowledge” but also in the embodied practice that people bring to the interaction through knowledge, know-how and competences. Although Holly expressed that she “is already hooked” on the conditioner, it does not stop her from questioning some of her ideas. Holly is aware that she is buying into a certain ‘image’. She has recently discovered that the producer is one of the major hair and beauty manufacturers and therefore her belief that the conditioner is made of ‘natural’ ingredients and is locally produced in a small-scale business

¹²¹ Natural oils, produced by sebaceous glands, and shampoos influence the moisture levels of the hair. They impact on the health of the hair but also on its appearance, as they can make the hair appear to be ‘greasy’. Moisture is added either through the production of natural oils and conditioners and eradicated through shampoos.

has been demolished. Knowledge and understanding are not only based on gaining information from the packaging of the products but are also acquired in use, through past experience: Odette's 'folk knowledge' tells her that if she does not rinse out all of her conditioner it might weigh her hair down during the styling process. Emily knows that the ends of her hair are the oldest and therefore need to be conditioned regularly, as they are more likely to be 'dry'.

Considering the above discussion, it seems that designing products which 're-configure' the practice of hair care seems challenging on two levels. Products are not always used as the producer or designer intends. They afford a variety of meanings and practices (Ingram et al 2007) in everyday life, as Holly's example illustrated. But, on the other hand, as discussed in chapter 3, some of the links between material interactions and the performance of a product are so well-established in the current practice of hair care that producers seem to struggle to develop innovations that are taken-up in everyday life. It appears that producers, consumers and products all configure each other in the hair care practice. Currently, manufacturers find it difficult to position shampoos and conditioners not only as products that cleanse and moisturise the hair but also add shine, for example, developing them from mere toiletries, improving the personal hygiene, to beauty products that also enhance the hair's appearance. This study also shows this predicament. Women frequently judge these products on a functional basis - whether they "do their job", as in Odette's case - and this 'job' is narrowly defined towards cleansing and moisturising.

The assumption that shampoos and conditioner 'do a job' points to the significance of tangible product cues when using hair care products to illustrate to women that they are actually 'working'. Hailey, the student in her late teens, explained how, for her, the shampoo is just like a "magician". It can react with water and hair and meanwhile changes its viscosity but the process remains mysterious to her. It turns from a liquid into bubbles. Some of the women in the study also made that connection, as their hair care products played "tricks" and were able to create "miracles", as suggested for example by Lindsey. Women are often unable to comprehend whether a product actually reacts with their hair or if the effect is only occurring "psychologically", as indicated by Odette. As indicated by Dant (2005), products are perceived through people's senses and in the light of how they

understand them and what they know about them. In order to convince women at a private view¹²² that shampoos can do more than cleanse the hair, Unilever's scientific advisor for hair care tried to demonstrate that not every shampoo is the same as each lathers in a distinctive way (see photograph 17 below). She was trying to create a visible link between the performance of the products and the amount and type of lather it produced, making the potential effects visible and convincing women that shampoo does more than cleanse the hair. The significance of lather as a cue for 'doing a job' has been described by Barthes,

“To begin with, it appears to lack any usefulness; then, its abundant, easy, almost infinite proliferation allows one to suppose there is in the substance from which it issues a vigorous germ, a healthy and powerful essence, a great wealth of active elements in small original volume.” (Barthes 1972: 37)

The scientific hair advisor at Boots questioned during the interview the need for shampoos to lather. However, whatever the chemical function of lather, the need to create a link between what happens on the hair (i.e. intangible chemical processes) and a tangible cue (i.e. lather) seems necessary in order to convince women of the performance of a product. Whilst conducting this research it has emerged more and more that it is difficult to make sense of some of the information on hair and whether it is based on myths or scientific facts, as even the scientists seem to disagree.

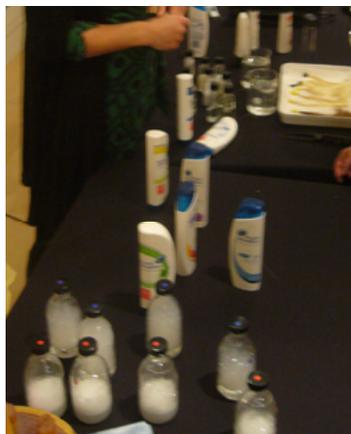


Photo 17: Bottles containing shampoo and water to create lather – Unilever stand at 'Wellcome Trust' event

¹²² The scientific advisor for hair care demonstrated the lathering properties of shampoo at 'Material Library' event titled 'Hair' at the 'Wellcome Trust' in London on the 14th of November 2008.

The significance of cues to demonstrate that the 'job is being done' also raises the question of who is actually doing the cleansing; the women massaging the shampoo into the hair or the chemical reactions initiated by the shampoo and conditioner, as competences seem to be 'distributed' (Watson and Shove 2008: 77) between the two. The examination of the processes of use, including competences and ideas, is essential when applying a practice-orientated approach to hair care. Investigating the work of car mechanics and the doing of DIY at home, Dant (2005) and Watson and Shove (2008: 77) suggest that knowledge and competences are 'distributed' between people and products. As pointed out by Watson and Shove (2008: 78), competences have frequently been considered a "human quality". However, after studying the development of some DIY tools over time (Watson and Shove 2008: 78), it became apparent that competences previously "embodied" in the person such as the ability to paint a door without drips and drags have been "redistributed between person and technology" through the development of new products such as "fast-drying non-drip water-based paint". These product developments have made numerous DIY processes accessible to amateurs, instead of only professionals. The relationship between competence, labour and product innovations and the move from the professional to the amateur is also evident in the development of synthetic substances and their use in treating the hair during the 20th Century. This has made the shampooing of hair with water accessible to anyone with a consequence and impact on how often women have washed their hair and on the amount and type of resources consumed.

Treating hair has been done for centuries, as concluded by Cox (1999) and Sherrow (2006). Women have used ashes, eggs, soaps and numerous other substances to treat their hair. However, these treatments were variously successful in the removal of oils and dirt. The brushing of hair to cleanse it was particularly popular with the Victorians and the practice of brushing it a hundred times to move the oils from the roots to the ends was done on a daily basis. Some of the processes were very time consuming and required a lot of labour, as the substances needed to be meticulously combed out of the hair. Women were removing the dirt and oil with the aid of a comb and, sometimes, a substance. Synthetic substances such as carbon tetrachloride and petrol were used on hair from 1890. They were very effective in removing oils but brought with them life-threatening dangers when used on the hair. The removal of oils became a matter of life and death, as these substances were highly

flammable and in some cases resulted in women burning to death. Because of these dangers, women had to leave the shampooing of their hair to an expert, the hairdresser. Only a skilled and trained hairdresser who had sufficient knowledge about these substances and the competences and techniques to apply them was able to use them to cleanse women's hair. Women who could afford it had their hair shampooed about once a month. It took until the Second World War for synthetic substances to be developed to the point where the side effects were no longer life-threatening. The innovation of surfactants¹²³ in shampoo has made it possible to safely and 'effectively' remove oils and dirt from hair, allowing women to wash their hair by themselves in the home (Cox 1999).

Watson and Shove (2008: 78) have argued that some paints have been able to "absorb the capacities previously embodied in the individual wielding the brush" to give the painted area a finish without drags and drips. Similarly, the synthetic substances that make-up shampoo have taken on the capacity of the hairdresser to safely and effectively remove dirt and oil from the hair. It seems that competences and the 'job' of cleansing the hair have been 'distributed' between the shampoo and the woman. Nowadays, various techniques such as come-hither motions, embodied knowledge such as cues and embedded capacities in the shampoo come together when women shampoo their hair, making the process more accessible, effective and affordable, and therefore impacting on the increase in a number of hair washes. This is not to say that only the introduction of synthetic shampoo has allowed women to wash their hair more often; what is of real importance is how the practice elements come to fit together, as the practice needs to be reproduced and performed in daily life (Reckwitz 2002; Shove et al 2007). Several existing practice elements (i.e. know-how, competences, knowledge and understandings) had to come together in new configurations for this increase to occur, such as the availability of unlimited hot water and overcoming ideas that stopped women washing their hair more frequently, such as the belief that shampoo does 'damage' the hair.

Although ways of cleansing the hair and how often women wash it has changed over the last two centuries, it may be that the wet part of hair care routines seems to be in a period of

¹²³ Surfactants are wetting agents that lower the 'attraction' of two surfaces to one another such as between hair and oil. They have a molecular structure that at one end is soluble in water and at the other in oils and are therefore able to remove oils from the hair through the shampooing process.

'closure' (Bijker 1997: 84). 'Closure' is where producers and consumers partly agree about the performance and appearance of shampoos and conditioners. This seems to be particularly the case for the use of shampoo, as the shampooing of the hair has become 'normal'. This is not to say that a variety of ideas exist about shampoos and conditioners, such as how 'damaging' they can be for hair, but when considering the wet part of hair care routines, ways of washing hair and some of the ideas associated with seem currently rather fixed. This does not mean that they have to stay stable in the future, particularly if women start to consider shampoo as a beauty, rather than toiletry, product. Additionally, the wet part of women's hair care routines is followed by the dry part, discussed in the next section. They can potentially impact on each other and change the hair care practice as a whole. The connections have already been made in chapter 4; during the 1950s women were unable to redo their hair at home after having it permed and set at the hairdresser. They only washed their hair at the hairdresser where the professional could restyle their hair. At the beginning of the 20th century women were unable to dry their hair after wetting it. Cox (1999) has suggested that whenever women wetted their hair, the likelihood of catching a cold was increased, an illness that sometimes had fatal outcomes. Therefore, women avoided washing their hair too often until the development of hairdryers (Cox 1999).

The dry part: Degrees of routinisation

All of Emily's hair care products and tools were already laid out and ready to be used. After taking off the towel that soaked up most of the moisture from her hair, she walked up to the mirror and started combing. Before she could do anything else, her parting needed to be straight and all the knots had to be removed, to keep it flat. She combed her hair into position so that she was ready to dry it. Odette also brushed her hair before drying it. She had to be careful not to leave her hair in a towel for too long. The fringe might dry in a position where it would start sticking out everywhere. This would be "dangerous". In the mirror she was able to see "big clumps of hair". Whilst slowly brushing through the tangled hair she observed her accomplishments in the mirror, not looking at her whole face but concentrating on each tangle. During this process her fringe became entangled with the rest of her hair. In order to separate it from the long strands, Odette tried to brush the fringe out and downwards. This was easier said than done, as longer bits of hair got caught in the

brush, being pulled to the front and into the fringe. In the end Odette used her hands to pick out each long strand and reposition it to the back and sides. Although Odette was keen to change her appearance through a newly cut fringe, she began to wonder why she had it cut in the first place, “it is just a pain”.

During the drying process Emily used her fingers instead of a brush to lift her hair up and out, moving the hairdryer up and down. Emily realised that if she dried it with her hand and a brush, she could “smooth” her hair down, instead it stuck out, creating a “fluffy look”. She called it “rough drying”. Nevertheless, it did not matter to her, as she knew that she would use the curling tongs afterwards. In the past Emily has tried to blow-dry her hair in conjunction with a brush, drying it and at the same time brushing it into a shape. It always took her a long time to achieve her desired look. The left side of her hair always turned out straight, as she could hold the brush in her right hand and the hairdryer in the left. However, whenever she swapped over, holding the brush in her left hand, she could not create a ‘straight’ look on the right side. She was unable to control the brush. Emily regularly lost her patience and gave up attempting to shape her hair into position. She admitted, she is “not a patient person.” On Saturday, half way through the drying process she turned off her hairdryer to spray her hair with heat defence spray, as it was still slightly damp. She wanted to use her curling tongs, another of her heated appliances. Emily felt that she needed to protect her hair. Afterwards, she picked up her hairdryer and continued drying it.

Coronation Street was over and her fringe was nearly dry, Odette had to hurry and style her hair so that it was able to cool down before she settled into her bed. The cooling period is important to Odette, as otherwise her hair changes its shape overnight. Odette had clear instructions from her hairdresser about how to dry her hair, and in particular the fringe. Starting at the scalp, Odette lifted up the midsections of her hair whilst constantly moving her hairdryer in her right hand. The hairdryer pointed downwards at all times to smoothen the hair. After drying most of her hair, the fringe needed her full attention again. The hairdresser told her to hold the hairdryer up and above to the right and dry the fringe to the right, and then the same for the other side. Then she was meant to finish by blowing the heat between the two sides and then a full blast from the top so that the fringe was straight when falling down on her face. For Odette, at the end of the drying process the fringe still looked

“funny”. There were strands of hair that are not ‘straight’. The fringe did not look the same as when the hairdresser had finished with it. According to Odette, her hair looked “pretty awful”. It had to be straightened.

Whilst plugging in her heating tongs and waiting for them to get hot, Emily went back to the mirror to comb her hair once again, making sure her parting was straight. Although Emily does not curl her hair regularly, she knew exactly what to do. Using a couple of hairclips, she rounded up the top layer of her hair at both sides and the back. Then she clipped them away from the rest of the hair. Emily always starts from the back so that she can work slowly towards the front. After arriving at the front, she removed one of her hairclips to do the top layer. Emily ensured that each section of hair that she curled around the tong was less than an inch thick. She held it for a few seconds around the tong and then slowly let the curl drop off. Emily made sure that she did not touch it in the process. The curl was still hot. She had to wait until it had cooled down otherwise the curl would fall out and she would need to re-do it. Throughout the curling process Emily kept checking her hair in the mirror at different stages, for example, to ensure the tong had formed a “neat and thin” curl a bit like a “spiral” and not “just a couple of kinks”. The bottom half of each strand had to create a “loose” curl.

In contrast to Emily, Odette wanted to get ready for bed. However, this included straightening her hair. Whilst waiting for her hair straighteners to heat up Odette, like Emily, ensured that her hair was still in its usual position, checking that the parting was where it should be and combing once more over the fringe. Odette straightens her hair daily. She usually grabs a strand of her hair, clamps it between the two plates and slowly begins to pull the hair straighteners down. The left hand follows the straighteners to ensure the hair is smooth. On this particular evening her fringe took as long as the rest of her hair. Odette lifted each section up, ensuring that she did not style the fringe straight down but carefully rotated the straighteners inwards to create a bend. Odette still was not happy, and to her the hair only “looked adequate.” She just was not able to get used to the fringe. Yet her hair never looks “great” just before she goes to bed, particularly if she is not wearing make up. Odette knew she would restyle her hair in the morning just before leaving for work.

Emily began with the final touches to her hair. All of her curls were cooled and set in place. She was able to touch the curls without them falling out. Emily rubbed some serum onto both of her hands. It felt “oily” and she needed to take care that she did not apply too much to her hair as it might have begun to look “greasy”. Emily gently pulled the serum through the hair, using her fingers, which defined and loosened the curls. The oily substance fixed the hair together and put it into place, creating a “gentle curl”. They still looked “soft, light and bouncy” and not “heavy and styled”. A quick spray with hairspray and Emily was finished. She liked the final look. The fringe was straight and flicked back, the top third half of her hair was straight and the bottom half went over into gentle curls. Overall, she just looked that little “bit different”. After straightening her hair, Odette finished for the evening. She went to bed. When she woke up the next morning her hair did not look too “crazy”. Still, it was slightly positioned to the right, so she began to brush and straighten her hair once more. Finally, she applied some hairspray. Odette was ready to go to work.

An examination of Emily’s and Odette’s ‘dry’ part of their hair care routines draws attention to routinised actions and material interactions but also to some of the ‘ruptures’ of these routines: having a fringe cut into the hair at the hairdresser, employing more infrequently used products and tools in the process and experimenting with numerous techniques, products and tools. In particular, when exploring the use of the mirror, the various bodily and mental activities emerge that are employed in a range from “fully habitual action to fully intentional action” (Dant 2005: 125), depending on the women’s past experience, competences and the development of styling and shaping of the hair. The mirror provides visual feedback of the process and therefore women can monitor it not only through touch but also through a visual representation in the mirror. It is used to check whether the hair is taking shape, but also to guide the process, especially if women are more unfamiliar with using certain tools and products. The feedback can potentially impact on the current practice, as women change their hair half way through the process, and therefore on the possible future hair care routines, depending on whether the experience was positive or negative (Shove et al 2007).

Whenever Emily uses her hairdryer and straighteners she only needs the mirror to comb her hair into position. She creates a pattern that she can work along when drying and

straightening it, without any visual references. The straightening of her hair has become “second nature” to her, although she only straightens it about once a week when she goes to the pub. Her hands have become her eyes, checking the process of styling. Over the last year, she has developed her technique and sense of touch to such an extent that she does not need the mirror to guide the straightening process. Although hair straighteners are extremely hot, the embodied interactions with them have become so routinised that she is in no danger of burning herself. The final look in the mirror mainly verifies that her hands did not defy her. Observing the work of car mechanics, Dant (2005) draws attention to habitual interactions between objects and people, as some sequences of everyday actions seem to be done without much reflection. The body has learnt over the years to respond to and deal with the various tools involved. Conscious thoughts and reflections have become part of the past. Still, before straightening her hair had become ‘second nature’, Emily had to learn how to “master the art”. This involved longer sessions in front of the mirror.

Similar to Emily, Pamela and most of the other women emphasised how the shampooing, conditioning, drying and straightening of hair has become ‘second nature’. Pamela compared drying and styling to driving a car. Both activities occur automatically, without much reflection. Although Pamela always dries her hair in front of a mirror, using a hairdryer and a brush, for most of the process she is only “subconsciously” looking at her hair “without even registering” it. Nevertheless, sometimes her flow of actions is interrupted, as the hair does not shape itself in a way she wants it. Pamela likes to curl the ends of her hair under instead of having them lie straight on her face. She achieves the curl through the heat of the hairdryer whilst shaping the fringe in a curl with the brush. Some days the curl does not form itself even if Pamela tries to put all her effort and skill into creating it. If something out of ordinary happens her “subconscious” checking is interrupted. Dant draws on Merleau-Ponty (1962) to explain such occurrences:

“Things do not always go according to plan... It is at these points that a shift between what he [Merleau-Ponty] calls ‘operative intentionality’ and ‘intentionality of act’ becomes apparent; this is where the intentionality in the object does not match the intentionality that forms the routine sequence of actions.” (Dant 2005: 122)

In Pamela's case it is not necessarily a failing of her hairdryer and brush that disrupts her usual flow of actions, creating a shift between 'operative intentionality' and 'intentionality of act', but the material agency of her hair and her overall feelings about the way she looks, as she is unable to style it into its usual shape. Shirley, just like Pamela, has days where she gets up in the morning and it does not matter what she does to her hair, "it just does not look right'. Shirley is unsure if these 'ruptures' to her routine occur because of the way she feels about herself "psychologically" or if the inability to shape her hair makes her feel like "rubbish" because it does not look how she wants it. Whatever the potential cause, Pamela and Shirley have to stop their flow of action and make sense of what is happening between the interaction of her hairdryer, brush, hands and her hair. According to Dant (2005), the material cues are not always understandable and, in the case of women 'doing' their hair, these situations can sometimes lead to frustration. There is no reason for Pamela to panic, as instead of using the brush and the hairdryer to form the curl she uses her curling tongs to aid the process.

Emily could curl her hair without any major setbacks but in the past, similar to Pamela, she has experienced days when shaping and styling did not always work out without problems and difficulties. The curls did not create spirals and therefore would not "sit properly". Sometimes one side would look "fine" but the other would not spiral. In particular, the back of her hair was difficult to do. Emily cannot see what she is doing and she needs the aid of the mirror to use the curling tongs. There have been occasions where Emily got her straighteners and straightened each curl out of her hair. She had lost patience with her hair. For Emily, it is just like "cheating" to use straighteners. Over many years, Emily has built up a repertoire of numerous ways of doing her hair. Although it does not occur very often, she knows exactly what she has to do when she curls her hair and how to use the products and tools. During the interview she explained, "I was curling it how I always curl it."

Emily is not unlike other women who, for special events, prefer to go for a 'tried and tested' process, as they want to be sure that they can create an achievable look and feel to the hair in the time provided. Even if something during the process does not go to plan, women often seem prepared for these unwanted interruptions by having a back-up plan, a process that never really fails (such as, in Emily's case, the use of straighteners). 'Ruptures' to women's

hair routines seem to be part of the practice of hair care, considering the agency of hair, as discussed in chapter 5, and the end result of women dealing with their hair (i.e. a particular 'hair do' being extremely liable to change). It seems that women have learnt to live with these 'ruptures' and created various strategies to deal with them. This is not to say that they lose their frustration about not achieving certain end results. But for Pamela and Emily, there is no reason to panic if things do not go to plan, as they have become resilient to the 'ruptures', falling back onto more tried and tested hair care tools and techniques.

Pamela and Emily have not only mastered the use of hair care tools and rely on 'tried and tested' processes and techniques to do their hair, the invention of some hair care tools also make it easier for them to achieve certain desired end results than with tools and techniques previously available to them. For example, Emily regards the use of her straighteners, instead of a hairdryer and brush, to style her hair as "cheating", as straighteners have 'taken on the capacity' of creating 'straight' hair that Emily could only previously produce with various successes through using a brush and a hairdryer. She can still remember the times when she had to blow-dry her hair with a brush and hairdryer to shape it into place. She often lost her patience because she had to use two tools simultaneously, instead of one. Her left hand is just not as able as her right for coordinating the tools at the same angle required to create 'straight' or 'curled under' hair. Emily was unable to observe her actions at the back of her head, and even at the front, where she had the mirror to guide her with the process, she had to work mirror-inverted. She feels that with her straighteners this process has become "easier", as she has only one tool that she can use with her right hand all the ways around her head. Nowadays, drying hair seems to be, for some women, mainly based on getting it dry, rather than on shaping it. Women frequently use their hands to 'rough dry'. Most of the women in the study, who straighten or curl their hair after the drying process, often regarded the drying process as one step on the way. It does not matter how their hair looks like after drying, as it would still be shaped and altered.

It seems that the development of hair care tools that incorporate an electrical heat source with the means to shape hair has allowed women to accomplish their desired style even more easily. This is not to say that the popularity of straighteners is only based on the fact that they ease the process of creating desired styles. According to a practice-orientated

approach, various other elements had to come together to increase the uptake of straightening. For example, the interrelationship between ‘straight’ hair and ideas of hair having a ‘natural’ appearance encourages women to use hair straighteners (as discussed in chapter 5). Nevertheless, it is possible to assume that straighteners, curling tongs and heated brushes have ‘taken on’ the abilities that previously women had to master, often with varying success. Competences are ‘distributed’ (Watson and Shove 2008) between the tool and the woman, making skills and techniques accessible to women, who beforehand unable or unwilling to learn them. The straighteners brand ‘ghd’ actually refers to ‘good hair day’; promising women the ability to shape their hair however they like – ‘misbehaving hair’ and ‘bad hair days’ become a thing of the past. In everyday life, this is not the case, as Julie’s example demonstrated in chapter 4. Although for some women straighteners have become a tool with which they can more easily style their hair, for others the achievement of ‘straight’ hair has resulted an increase of time and effort invested into doing things with their hair. In order to create the desired appearance some women have to incorporate numerous processes and products. Even after lengthy procedures the success of achieving ‘straight’ hair is not always predetermined. Julie, who described her hair as ‘frizzy’, uses her straighteners up to four times a day, which indicates the limitations of distributing skills into products. One of these limits may well be based on the women’s capacity to coordinate and do their own hair but also on unachievable standards of ways of wearing hair.

Schwartz-Cowan (1983) has concluded that studies on domestic labour saving devices have shown that the introduction of new products does not necessarily instigate a decrease in the amount of housework women conduct around the home. An increase of women’s domestic productivity often coheres with the development of new domestic standards and therefore with an increase of housework time. Higher domestic cleaning standards, for example, created more work and led to a greater use of the products involved. Similarly, when women do their hair they not only make use of various products and tools but also actively reproduce (Reckwitz 2002) the practice of hair care as a whole, creating new standards, techniques and skills. Odette’s and Emily’s technique of straightening has been used by all of the women who straightened their hair. Nevertheless, some women tried to refine their technique in order to be able to create “even straighter”, “poker straight” or longer lasting ‘straight’ hair. For example, Simone begins the straightening process by sectioning off her

hair. She clips up the top layers of her hair so that she can firstly straighten the bottom half. This way, Simone ensures that she can work on the bottom and top layers of her hair. The thinner the strands are that she places between the plates, the easier it is too heat up each hair, creating 'straighter' hair that lasts even longer. Simone aids the process even further simply by not holding the hair strand in her hand when placing them between the plates; rather, she separates the strands out evenly with the help of a comb. She uses the straighteners in one hand, and the comb in the other, all working together to create the desired hair effect.

Simone actively integrates her straighteners into her hair care routines and relies on old and new competences, knowledge and understanding of what it is to have 'straight' hair when straightening her hair and in the process develops new standards and skills. Examining amateur photographers, Shove et al (2007) have argued how the invention of digital photography has intervened in the practice of photography, impacting on the way people are able to take, view and manage photographs. Nevertheless, the introduction of a new technology did not change the practice as a whole, because digital cameras were 'domesticated' into existing skills, meanings and expectations and therefore were also shaped by existing conventions and expectations. People negotiate future practices through building on past practices whilst integrating new elements such as products. Women have not only integrated hair straighteners into their practice but also improved their 'effectiveness', through combining existing blow-drying techniques with the use of straighteners, as Simone's example demonstrated. In the process, women not only advance their skills but also create new expectations and standards about what is considered as 'straight' hair. The interrelationship between techniques, competences, things and ideas becomes particularly apparent when applying a practice-orientated approach.

In addition to advances in skills and changing expectations through the introduction of hair straighteners, manufacturers were able to develop new products, such as heat defence spray, as women became more aware of their responsibility for taking greater care, and the potential 'damage' through applying heat to their hair. Some of the women in the study therefore reduced the frequency they used their hair straighteners. Overall, it may be that the arrival and 'domestication' of hair straighteners seems to have had a manifold impact on

women's hair care routines, as the outcomes of this new arrival on the practice is based on existing expectations and techniques but also the development of new ones.

The introduction of hair straighteners into existing hair care routines had a variety of impacts on resource consumption. On the one hand, it replaced lengthy blow-drying sessions where women used to try to dry their hair into shape with a brush and hairdryer, as in Emily's case, on the other hand, for some women, such as Simone, straighteners have led to an increase in the frequency with which they straighten their hair because they desire to create not 'straight', but 'poker straight' hair. A link between the decrease in how often women deal with their hair and the introduction of hair straighteners does not clearly emerge from the research, suggesting that single product interventions might not be an effective starting point when thinking about changing everyday practices to reduce the amount of resources consumed in hair care routines. 'Ruptures' to women's hair routines do not only occur through the arrival of new hair care products and tools but are also sometimes initiated through women wanting to look and feel different, as they felt like having a change to their hair and hair care routines. These welcomed changes are examined in the next section.

Out of the usual routine

'Ruptures' to women's daily routines can sometimes be based on hair care products and tools, 'misbehaving' hair or the use of more infrequently used techniques. Although the end results of women dealing with their hair (i.e. a particular hair do) are liable to change and infrequently used hair care processes can sometimes create various 'disasters', women seem to learn to live with these 'ruptures' in order to minimise their overall impact. 'Ruptures', and the ways women learn to live with them, seem to be part of the practice. Some of these interferences in women's daily hair care routines are sometimes welcomed, as they can change the look and feel of the hair and, more so, how women feel about themselves. Women get 'bored' with the way they look and therefore want to 'break out' of their usual routine. The last time when Odette went to the hairdresser she fancied "something different". Odette feels that her hair is "quite boring". She has kept it in a long style for years. Every now and then she dares to have a fringe cut, "the most exciting thing that I do". Such an expression of boredom with the appearance of her hair was not uncommon; as

Holly described it, “I am sick of looking in the mirror everyday and seeing the same thing”. As a result, women often tried a different hair care products or changed their haircut at the hairdresser, even if it was only a slight alteration.

Similarly to Odette, Emily fancied a change to her hair, which was instigated by a specific event. Instead of just tying up or straightening her hair Emily wanted to curl it. Although the curling of Emily’s hair was not a step into the unknown, as she has curled her hair in the past numerous times, it still altered part of the process from her daily routine and above all her hair’s overall appearance and feel. During this particular evening the material propensities of the curls influenced how Emily experienced her hair. The curls started to pull the hair up, creating a dense feeling around her neck. It felt different to her, as she became conscious of it. The ways in which hair may have agentic properties has been raised throughout this thesis, because of the material propensities hair possesses. Nevertheless, in this case the material awareness of Emily’s hair is welcomed, as it enables a physical, emotional and mental transformation. It is not only her hair that looks and feels different but Emily also considers herself to be more feminine.

The potential for hair to “transform” women’s sense of self “through style” has been examined by McCracken (1997: 28), referring to the visual impact on women’s hair that has the possibility to transform a woman “who is defined by her children to someone who is defined by her work” (1997: 15). However, it is not always the visual, or in Emily’s case the material impact of the hair which transform the women, but also the activities of doing things to the hair play a role in the transformation process. The transformation needs to be seen in context of both the wearing of the end result and ways of doing the hair. For some of the women in the study, including Monica, the change between ‘going out’ and ‘everyday’ hair might not be noticeable to an onlooker but is still of significance. For Monica, it is not essentially the material propensities of her hair that creates the ‘going out’ hair but the process of ‘doing’ it. She still uses the same products, tools and techniques to do her hair but spends more time on it and uses more products than usual to fix the end result in place. The extended process transforms Monica’s ‘everyday’ hair to ‘going out’ hair. In daily life such a process that demands an extended amount of time and effort from the women, or hair that creates a material awareness, potentially irritates and overwhelms women, as it would take

long periods for the hair to no longer feel awkward and the process to be less time consuming. Such hair and processes are utilised to mark such special occasions. Emily is aware of the potential physical and visual impacts of her hair and uses it to transform herself, which is something she does not do on a daily basis.

Unlike Emily and Monica, Odette's desire for a change is not based on getting ready for a special event or on an altered process that only lasts one day, but on an attempt to modify her hair by having a fringe cut. Women's hair and ways of dealing with it is not constant and unchanging, as women are keen to change and creative about the way they look. Arriving back home, Odette was unsure if she had made the right decision. The new fringe required more attention and for her to alter her process of doing things to her hair, disrupting her usual routine. It was not the first time Odette had decided to have her fringe cut but each time she tries to deal with it at home it becomes an obstacle of positioning her hair in its usual way. Although she had used the same techniques as her hairdresser to dry her hair, at the end of the drying process she felt that it looked "funny". Instead of just blow-drying the hair in position, as suggested by the hairdresser, Odette also used straighteners. By having the fringe cut Odette had to wash her hair more frequently in order to restyle it. Though it did not change her hair practice completely, as she was trying to negotiate its impact with her usual routine. Odette tried to find a way to style her fringe so it would stay in place for longer, enabling her to not wash it daily. To achieve this longer lasting hold she used her straighteners instead of, as suggested by the hairdresser, the hairdryer to shape the fringe. The change to her hair practice only lasted for a few days as she adjusted her usual routine to 'tame' the 'ruptures' of the new cut fringe.

Similar to Odette, Ann-Marie started to adjust to the changes from her hair care routine by negotiating it with older ways of dealing with her hair, as her experience of not washing her hair for five months felt like too much of an ambitious step away from her usual routine. The first few days of Ann-Marie's "full-on grease out" experience passed without any major challenges, surprisingly to her. After about a week of not shampooing, her hair had started to "clump" together, giving the impression that she had "spent no time" on it. Her hair that usually had so much "energy" no longer appeared "lively". It was getting increasingly "greasy". During this time Ann-Marie only wore her hair up, pinning it in position with clips

and grips. The hair was restrained into “chic and compact styles”. On day five, Ann-Marie was invited to a job interview. Although it was informal she was worried about appearing “too grubby” for this particular position. During the interview Ann-Marie struggled to think about the questions that were directed at her, as she kept thinking about her hair. In order to distract from her hair, she decided to wear lots of make-up and a bright orange jumper. These tactics had become common to her, as she was trying to adjust to the impact of her unwashed hair.

A formal dinner on day seven presented to her an even bigger challenge. This is when she decided to use “organic conditioner”. After using the conditioner about twice a week, Ann-Marie, even without blow-drying her hair and pinning it up, considered herself as not looking “too bad”. Ann-Marie’s and Odette’s examples demonstrate that the boundaries between usual routines and steps out of this routine are often not absolute, as they both try to negotiate their current practice with a potential future one. Ann-Marie’s attempt to change her hair care routine entirely, only relying on clips and bubbles to tie up her hair, worked for a few days until she had to adjust to the change of her hair and finally re-introduce some of her past routine into her new hair care routine. The decision to not wash her hair was a step too far from her usual routine and she had to reclaim some her old ways of dealing with her hair, balancing the new and old routines.

Nowadays, Ann-Marie feels that she can more freely choose when she wants to shampoo her hair, instead of just having to do it. In addition to questioning her routines Ann-Marie turned the ‘shine’ of ‘grease’ what, for most of the other interviewed women, was considered a sign of ‘bad grease’ into something positive, shifting the acceptability towards certain standards and therefore developing new ways of experiencing hair sensually and emotionally. Although Ann-Marie’s example might be considered ‘extreme’, changes to women’s hair care routines often seem to be based on the balancing of old and new routines in combination with the development of the multi-relational elements that make up the practice. Women not only change how they do their hair but also standards they want to achieve, skills and techniques they develop, hair care products and tools they use and how they experience their hair sensually and emotionally.

Conclusion

A practice-orientated approach focuses upon the numerous multi-relational elements that come together whenever the practice of hair care is reproduced in everyday life. The relationships between those elements can separate over time and reform in different ways, making the practice more or less resource intensive. What emerges from a review of the literature that concerns the history of hair care routines is that the cleansing of hair has been shaped by changes in the configuration of various elements. The practice of hair care has been affected by safety issues, fashions in ways of wearing hair, the accessibility, affordability and availability of various substances and services (e.g. hairdressers) the advancements in science and technology, myths and ideas about hair, and changes in women's role in society and daily life. Most of these concerns, such as innovations in science and technology, still prevail but they have been reconfigured to make various aspects of hair care more accessible to the individual. For instance, products have been developed that can be used more safely and frequently in the home, as they no longer need an expert to apply them. Competences and the 'job' of cleansing the hair have been 'distributed' between the shampoo and the woman.

Examining changes in the practice of hair care through time exposes its grounding in socially shared states of emotions, understandings, a network of things, norms and embodied know-how. It can be recognised as a practice, a coordinated entity (Schatzki 1996; Warde 2005) that has changed externally through technological innovations such as the invention of detergents, and stabilised through institutional arrangements, like the development of well-established links between the performance and appearance of a product through market research. Practices also change due to internal forces. Shove and Pantzar (2007) and Gregson et al (2007b) have suggested that a practice also changes from within. This chapter has explored the possibility that the numerous 'ruptures' evident in women's hair care routines might have an impact on the practice of hair care, both destabilising it and creating new stability. An examination of Emily's and Odette's performance of dealing with their hair makes apparent that 'ruptures' can be based on the re-discovery of infrequently used hair care products and tools and the incorporation of unfamiliar items when getting ready for a special event. In addition 'ruptures' can be grounded in a new cut, 'misbehaving' hair and the development of women's competences through experimentation. The progression of

each hair care routine is potentially significant for the development of the practice of hair care and on the amount and type of resources consumed.

The examples of Emily and Odette show that the elements of the practice, in particular in the wet part of hair care, often come together in routinised ways. In chapter 4, the influence of a missed, lost or ambiguous process were considered that may destabilise women's routines but, more frequently, reinforce routines in order to avoid such situations in the future. Similarly, it becomes apparent in this chapter that women have adapted to and negotiate various 'ruptures' to their practice of hair care. Particular end results of women dealing with their hair are extremely liable to change and its agency is also apparent whilst women do things to their hair through the material propensities hair possesses. Therefore, when inspecting Pamela's and Emily's experience with their hair in more depth, it emerges that women have learnt to live with numerous 'ruptures'. Ruptures to routines through, for example, 'misbehaving' hair seem to be part of the practice. They are dealt with through various back up plans, which can incorporate the use of products and tools women feel more competent in using that aid the resistance to potential changes such as (in the case of Emily) the use of hair straighteners to style her hair. Interventions in the form of ruptures are potentially important opportunities to change the practice into a less resource intensive one (Southerton et al 2007). What emerges from an examination of the examples above is that women have found ways to resist ruptures and avoid them from reoccurring. Ruptures can potentially reinforce the current practice instead of transforming it.

Other interferences in women's daily hair care routines are welcomed in order to break out of their usual routine, as changes in ways of dealing with hair can alter its appearance and feel and therefore how women feel about themselves, as demonstrated by Odette's example. These ruptures are therefore more likely to create change. A crucial part of this interference is the creative interplay between what women do routinely and out of the routine. Odette tried to 'tame' the newly cut fringe with a well-known and accomplished process of using hair straighteners. Women may be both creative in the way they do and wear their hair, but also may be regressive, as they adjust between old and new ways. Ann-Marie's example highlighted how some forays beyond the routine might be one step too far. Her attempts to stop washing her hair with any type of product only worked for about a week, until she

decided to start using her conditioner again. Changes to routines seem to be based on a negotiation between old routines and potential new ones.

Further research would need to examine the impact of potential ‘ruptures’ through design interventions on the overall hair care practice and the direction of change they might instigate. An examination of current material interactions involved in the practice of hair care makes apparent that sensual cues that determine the flow of actions and support ways of dealing with hair. The fact that hair care products influence the activities involved in doing things with hair suggests that designers have a role to play in the configuration of the practice of hair care. The introduction of hair straighteners has changed the way women dry their hair with hairdryers and allowed women, even with less developed competences, to have ‘straight’ or ‘curly’ hair. In Simone’s case the development of her straightening technique has initiated not only a new way of dealing with her hair but also new expectations about how she can wear it, as hair cannot only be ‘straight’ but be ‘poker straight’. Although it seems that the introduction of hair straighteners had an impact on the ways women wear and do their hair and therefore the dry part, it had less of an impact on the wet part that heavily relies on the use of water, gas and electricity. Material interventions therefore might not be enough to have an impact on the overall practice of hair care and on the amount and type of resources consumed.

During the creative workshop at Boots, one of the groups considered the activities of hair care with its complexes of products and tools, rather than concentrating on the re-design of individual products, tools and techniques. This re-design of individual products was perceived as less creative and potentially could only have minor effects on the overall hair care routine. This thinking was also reflected in the group’s final invention concept of ‘Tupper-hair parties’. The approach would be based on washing hair only once a week, including a seven day plan. Throughout the week women would receive advice on ways of wearing hair depending on its state of greasiness (i.e. tying it up, swept back, etc.) In addition to advice, ‘Tupper-hair’ would also offer new inventions such as ‘paper soap’, ‘cold heat straighteners’, ‘time-release conditioners’ and ‘reusable water techniques’. All of the groups at the workshop created design interventions that combined material aspects (for example products) with social ones (such as the creation of social networks). These

interventions did not prioritise the communication of sustainability per se but emphasised the facilitation of change in everyday hair care routines that could lead to more sustainable ways of dealing with hair. Alongside discussions of hair care activities becoming more 'social', the groups considered today's acceptable norms and how they would need to change. It is these social relations that are part of the practice of hair care, which will form the focus of the next chapter. Currently, these relations are grounded in relationships with hairdressers, family members and friends. The chapter examines visits to the hairdresser and social relations through the women's life courses more closely, in order to reflect on their influence on the overall hair care practice.

Chapter 8 Social relations and the practice of hair care

Introduction

Whereas the emphasis of the previous chapter was on the performance of women dealing with their hair, including the various material interactions and product related concerns. The aim here is to understand the practice in terms of social relations, such as interactions with the hairdresser, familial and friendship relationships. Following Halkier (2006) and Christensen and Ropke (2005), a practice-orientated approach seems to deny social interactions, as practice theory mainly considers individuals as “carriers of practices” (Reckwitz 2002: 250) and not groups of people. Reckwitz has emphasised that the social is placed in practices and not in social interactions, “the smallest unit and final aim of social analysis” (2002: 247). He associates social interactions with the cultural theory of intersubjectivism that favours communication, as opposed to practice theory that addresses routinised bodily and mental activities. However, considering the discussions at the creative workshop at Boots the Chemist, interventions into the practice of hair care indicated the potential for a combination between social interactions and material developments to bring about change. Christensen and Ropke (2005) and Halkier (2006) also appeal to researchers to emphasise social interactions in practice-orientated studies. Therefore, the main aim of this chapter is to examine the relationships between women and other social relations in order to develop an understanding of how women experience these relationships and what part they play in the practice of hair care.

The main relationships that are constitutive of the practice of hair care are with hairdressers, sexual partners, friends and between mothers and daughters. The first sections of this chapter examine women’s relationship with their hairdresser, drawing on the informants’ accounts and McCracken’s (1997) study on women’s hairdressers. Although women at first sight seem to be able to watch, listen and be taught by a trained person about the numerous possibilities of ways of wearing and dealing with hair, this chapter identifies tensions in the relationship that mean it is often ambivalent. This consideration initiates a closer examination into who might be regarded as the ‘expert’ of the woman’s hair, the woman herself or the hairdresser. Giddens’ (1991), Beck’s (1992), Seligman’s (1997) and

Luhmann's (1979) works on the role of the 'expert' in late modernity are helpful here, to locate the hairdresser's potential agency over women's hair and hair care routines at home. The authors' writings on the role of the 'expert' are related to notions of 'trust' and 'risk' in order to outline their concept of a 'risk society'¹²⁴ (Giddens 1991; Beck 1992). Although this concept is not directly applicable to women visiting the hairdresser, as it regularly discusses risks with potential global impacts such as nuclear power, the notion of 'trust' and 'risk' also resonates in the relationship between women and their hairdresser and are applicable in the dynamics of everyday life (Giddens 1991). A haircut cannot only transform the woman visually, but can also influence her sense of self, implying a certain amount of trust in the hairdresser and a level of risk taking to engage in these interactions.

Whilst considering the relationship between women and their mothers, friends and sexual partners through their hair and hair care routines, the second part of the chapter is able to consider some aspects of the woman's "career" (Shove and Pantzar 2007: 154) in the practice of hair care. The question asked here is how the development of these relationships has a bearing on the woman's hair care routine. Throughout adulthood, women seem to move the performance of dealing with their hair into private spaces, away from the sight of others, exchanging experimentation with hair for reliable and tested ways of dealing with it. The progression from the public to the private is also evident in the relationships between women and their family relationships that are partly shaped through negotiations of women's ways of wearing and dealing with their hair, as they are related to their relative autonomy and independence. Women sometimes go along with other people's preferences about how they should wear and deal with their hair, but also sometimes resist those suggestions.

Women's ambivalent relationship with hairdressers

The following section examines the relationship between the female client and the hairdresser, negotiating over ways of dealing with the woman's hair and the choice of cut. Often, the hairdresser is regarded as the 'expert' in the relationship, creating effects with the hair that cannot be reproduced at home. Considered in this way, the hairdresser 'knows best'

¹²⁴ "Risk society: An account of modern society emphasising shifts in the ways in which risk awareness, uncertainty, dependency and trust developed in twentieth Century." (Hinchliffe and Woodward 2004: 117)

if the hair is in a good condition, what cut suits their client and what hair type they have. Although advice from the hairdresser is sometimes considered as guidance on how to look after hair, women regularly get the impression that they just want to sell them their services and products. The perceived dubious intentions of the hairdresser taint the relationship, so friends and family are usually considered as a more believable source for recommendations. This duality between 'genuine' and 'fake' guidance often makes women feel ambivalent about their relationship with their hairdresser. This section examines this relationship to explore how it may affect the practice of 'wearing and doing' hair at home by influencing competences, ideas and product use.

Anne, the housewife in her mid 50s, "loves" going to her hairdresser 'Marion'. Anne has her hair highlighted, coloured and cut in a 'Bob' style about every three weeks. Despite this, Anne has deliberated about finding a more local hairdresser and has received numerous recommendations from friends over recent years. Even so she has not been able to go somewhere else. Anne feels she has built up a 'good' relationship with her hairdresser and is therefore willing to travel the long distance. They talk a lot about their families and at Christmas they buy each other presents and cards. Anne regards Marion as more than her hairdresser; she feels she has found a friend. Anne has not only built a friendship but has found somebody who can wash, condition, cut and dry her hair in ways that she cannot achieve at home. Marion is the 'hair expert' in the relationship. Whenever Marion cuts Anne's hair it is not only the new cut but also her ways of drying and styling it that makes it feel "lighter". According to Anne, it "falls better" and has "more movement". The overall appearance of her hair is "totally different" when Marion does her hair.

In McCracken's (1997: 232) study on women's hairdressers, he has recognised the "dependency" of women on their hairdressers, not only to regularly trim it but also "to sculpt the hair into its correct shape". Over the years, Anne has watched Marion endless times but when she returns home she is unable to reproduce how the hairdresser styles her hair. At home, Anne follows the same patterns and techniques that Marion uses. She has even bought the same hairdryer that Marion uses in the salon, regards her brushes as "okay" and, yet, her hair never feels and looks the same when she does it. Anne relies on her hairdresser to create such "light" hair and therefore returns to have it cut, coloured or styled

every three weeks. Numerous women in the study pointed out the non-reproducibility of the hairdresser's results when drying and styling their hair at home. It did not matter how hard they tried. Although the women felt they could not copy what the hairdresser was doing to their hair, it did not stop most of them, including Anne, from trying. Women observe ways of doing the hair and final results, considering techniques, tools and products used to achieve salon hair at home.¹²⁵

Marion is not only the 'expert' in the relationship when it comes to styling Anne's hair but also when washing and conditioning it, in particular when detecting material differences on her hair. During the interview, Anne pointed out how confidently Marion can identify leftover conditioner on her hair if a trainee rinses it, which can cause potential styling issues when drying the hair. According to Anne, Marion has undergone formal training and has been a hairdresser for numerous years. She has come across the feeling of leftover conditioner and its effects on women's hair several times. This experience, her teaching and scientific knowledge of hair care products guide her dealings with Anne's hair, an expertise that Anne is only able to acquire through years of similar practice. Marion uses this expertise to provide Anne not only with a material reference (Dant 2005) of too much conditioner on her hair, but also with an explanation of what it might do to her hair (i.e. creating a 'heaviness' that impacts on the way she can style it). During conversations with her hairdresser, ideas about what the conditioner and shampoo do to Anne's hair are explained to her and therefore develop. As suggested in chapter 7, women often judge shampoos and conditioners if they are 'doing their job', it seems that the hairdresser sometimes provides women with material cues and information to define what these jobs might be, even though some of the processes of what the products do to the hair are undetectable to Anne. Marion does not give Anne brand recommendations for shampoos and conditioners when advising her on product choices but informs her if she is not using the 'right' product for her particular type of hair.

Anne undoubtedly regards Marion as an 'expert' on the use of techniques, products and tools to do her hair, creating a 'dependency' that compels Anne to travel numerous miles to visit her hairdresser. McCracken (1997) has suggested that the only way to break such

¹²⁵ Some of the women I interviewed who used straighteners first watched their hairdresser a few times before deciding to buy one themselves to use at home in order to achieve 'straight' or even 'poker straight' hair.

reliance would be to stop visiting a hairdresser altogether. His suggestion might be accurate, as women who visit the hairdresser always depend to some degree on their service, but this does not imply that women do not challenge the relationship. Anne even acknowledges that her hairdresser has some advantages when it comes to blow-drying, curling, straightening and styling her hair. Marion is able to work on Anne's hair standing above it, observing what her hands are trying to create. At home, Anne's view of her hair and her movements to deal with it are more restricted. She must coordinate hand movements that she can only see inverted in the mirror. Marion can create angles with tools and products that Anne is not able to re-create at home. She is not only a trained hairdresser but also has a logistical advantage over Anne because she is dealing with someone else's hair, not her own.

While Anne welcomes some of the product suggestions from Marion, she sometimes ignores them. Whenever Anne does her shopping she still likes to look for the various hair care products on offer, swapping and changing them, trying out different smells and testing product claims. Although Anne sometimes considers Marion's product recommendations, for example, to use products for 'colour treated' hair, most of the time Anne deliberates how these suggestions fit with her existing hair care routine and ignores Marion's advice. Giddens (1990) has suggested that the availability of knowledge in today's society has led to people contesting the concept of the 'expert'. Informed lay people are able to gain similar knowledge to alleged 'experts'. Such knowledge has the potential to diminish some of the dependency of the female client on the hairdresser. All of the women in the study have various other sources of information to draw from, such as friends and family members, who sometimes provide different or conflicting recommendations to that of the hairdresser.¹²⁶ Some of the women suggested that the 'expert's' knowledge could be incorrect or tainted by their need to sell them salon products. Women said that they happily receive recommendations from their hairdresser on various techniques to look after and style the hair but are suspicious of any product recommendations.

¹²⁶ The scientific advisor at Boots suggested during the interview that women would regard magazines as more credible sources than health and beauty retailers when it comes to product recommendations. This research is unable to confirm this statement, as only two informants regularly read hair and fashion magazines. They did not go actively out of their way to buy the products and tools suggested to them. A few women used magazines to get inspirations for new cuts and possible photographs to show to the hairdresser. According to Mintel (2005), "just one in ten choose products depending on what is in fashion, and a similar percentage matching their hairstyle to their clothes and style in general".

While some women speak of their hairdressers as experts and characterise their own ability to achieve certain effects as inadequate in comparison, others take a more assertive role. These women not only question the hairdresser's product recommendations but also their ways of styling hair. Instead of trying to reproduce what the hairdresser has created in the salon, these women restyle their hair at home after each salon visit. For example, Odette, the recruitment officer, considers her hairdresser's way of styling her hair as 'nice' but felt that it is never "right". She needs to get her "own hands on it", using her products, in particular her own technique of applying styling products first on her hands before rubbing them into the hair. Odette styles her hair daily and therefore knows how to manage and look after it. She is the 'expert' when it comes to her hair. Although her hairdresser has a better vantage point and training, as discussed in chapter 7, product innovations have provided Odette and other women with the possibility of doing their own hair without the aid of the 'expert'. Competences are distributed between the woman who deals with her hair and the hair care products that ease certain processes, such as straightening.

Similar to Odette, Emily, the married campsite manager, (discussed in chapter 7) restyles her hair each time she returns from the hairdresser, as she not only feels that she needs to use her own technique and products but also to create her sense of self. The hairdresser-styled hair just does not feel like part of herself; the hairdresser "bouffants it up" and therefore she has to restyle it at home: "it is just not me and I don't like it" - she cannot identify herself with the person that she can see in the mirror. Emily's example demonstrates how a visit to the hairdresser can potentially not only change the way a woman looks but also affect her sense of self. The body in late modernity, including the hair, has to be actively constructed and controlled by the individual. The self has to be 'reflexively' made. It cannot be "merely 'accepted', fed and adorned according to traditional ritual" (Giddens 1991: 178). Considering Emily's example, this might also be the case when developing a sense of self in relation to the practice of hair care. As a result, women need to increase their knowledge and skill in order to make appropriate choices (Giddens 1991), even if the expert does not agree with them. The development of women's competences, knowledge and the daily routine can potentially initiate a practice where women create a sense of 'me-ness', which over a period of time, can be in conflict with the one created by the hairdresser.

The above examples show some of the factors that impact on the relationship between the hairdresser and their female clients. This relationship is ambivalent as it is based on numerous tensions between the woman's routine at home and the knowledge of the trained experts. The tensions are based on the woman's daily dealings with her own hair and the hairdresser's trained skill to deal with any hair type, and also on the development of products that have aided women's competences at home and the hairdresser's physical advantages of doing things to the hair. In addition, the hairdressers desire to sell women products that do not fit with the women's view of how they should look and finally the woman's 'reflexive project of the self' (Giddens 1991) and the expert view of how women should wear their hair can generate disagreements. These tensions create conflicts about who is actually the 'expert' in respect of the woman's hair. Some women try to reproduce the expert's results at home whereas others restyle it as soon as they leave the hairdresser in accordance to their own personal standards. Despite the fact that some women seem to contest the hairdresser's 'expert' role, within the confines of the salon the hairdresser seems to be in charge of the women's hair, as the following section demonstrates.

Reinventions and disasters orchestrated by the hairdresser

“Choosing a stylist isn't quite like choosing a spouse, but it's still up there on the stress charts... we cross the fingers and hope for the best.” (Weitz 2004: 166)

Salon visits are not only opportunities for women to watch, copy and listen to the hairdresser but also, of course, their main purpose is to have a haircut. A cut can be changed radically, slightly modified, or maintained over longer periods of time. Any of these can impact on ways of dealing with hair at home. At the salon the choice of cut is often a negotiation around the question 'what are you having done to your hair today' during a consultation with the hairdresser. This negotiation is unlikely to be based on equal grounds, suggested by the fact that some women leave the hairdresser to restyle their hair instead of negotiating with the hairdresser how they want to wear it. These negotiations are often combined with high expectations of the hairdresser and emotions of women feeling powerless in the relationship, emphasising the ambivalent relationship between hairdresser and female client. Women can re-do the styling of their hair at home whereas with a cut, the impacts are more

long term. Hairdressers have the power to create 'disasters', cuts that do not correlate with the woman's sense of self or are impossible to restyle at home. On the other hand, they are considered as 'magicians', helping women to deal with their hair and re-invent themselves. What becomes apparent is that women have to invest trust in the relationship, as the outcome of their cut is in the hands of the hairdresser and therefore cannot always be anticipated - it involves a certain level of risk.

One woman in the study, Hailey the first year student, frequently puts herself into a high-risk situation when visiting the hairdresser, which she does about three times a year. Each time she visits the hairdresser she has "quite a drastic haircut" done. Hailey had recently moved to Sheffield and therefore had to find a new hairdresser. It did not take her long to make her choice - the salon opposite the student halls seemed cheap and was local. The first time Hailey visited them, her hair was in a "really bad condition". Over the previous year she had not had a cut and therefore the ends of her hair had started to split. According to Hailey, "it wasn't nice". Her basic instructions to the hairdresser were that she wanted to have it shorter and "just different". The hairdresser tried to make suggestions to Hailey on how she could cut it in order to get an idea of what she might like, but Hailey just wanted to leave the decision up to her. Her reply was only "yeah, yeah, yeah", leaving the hairdresser unsure what she actually wanted to have done. Finally, Hailey assured her that any of the suggested cuts were fine with her. She affirmed to the hairdresser "I trust you".

The negotiation over the choice of cut between Hailey and the hairdresser was brief. Hailey wanted to have her hair shorter and an overall change. Not having cut Hailey's hair before and therefore not knowing how she likes to wear it, the hairdresser tried to engage Hailey into a negotiation. However, Hailey ignored her attempts and left the decision-making process up to the hairdresser by announcing that she trusted her to make the 'right' choice. McCracken (1997) has argued that, historically, the option of choosing a cut from various options to transform the self through the hair was not always as available as it is now.¹²⁷ Similarly, Giddens (1991) has suggested that in late modernity people are able to choose more freely who they want to be. Nevertheless, the 'possibility of freedom' can, in effect, cause anxiety (Kirkegaard, 1944, cited in Giddens, 1991), as it provides people with various

¹²⁷ He exemplifies his suggestion on the "beehive" style in the 1950s that was according to McCracken (1997: 46) "highly conventionalised, unchanging selves, of women frozen into place".

possibilities and the potential of getting it ‘wrong’. In Hailey’s case, the hairdresser was able to suggest numerous possible choices but instead of aiding the process for Hailey to make a choice, she might have felt confused with all of the options on offer. The hairdresser had no option but to cut her hair, speculating on what she might like and what she could recognise herself in, but risking failure. Trusting the presumed ‘expert’ of hair to make the decision may have been a mechanism for Hailey to reduce the complexities (Luhmann 1979) of possible choices in the decision-making process, as the responsibility was transferred to her hairdresser.

After the hairdresser was finished, Hailey’s hair had six inches cut off the ends, layers cut into it and a side fringe. Hailey was happy with the way she looked. Although on this particular occasion, content with the hairdresser’s choice, from past experience she knows that trusting the hairdresser, putting the reliance and competences into their hands, sometimes is combined with a certain risk. A few years back, when Hailey was still at school, she decided to have her hair coloured and cut like Carrie Grant, a judge on the television show ‘Fame Academy’, who had bright red hair with black streaks. Her hairdresser at the time was unsure if the thin black streaks would suit Hailey and suggested that she should have five thick black streaks instead. Not feeling able to disagree with the hairdresser, Hailey just said “okay”. When she came out of the hairdresser, Hailey was left with what she felt was the “most hideous hairstyle I [she] ever had”. The next day at school, her friends were astonished about how she had changed her hair. Hailey could only reply,

“Just pretend it didn’t happen. I am normal. I am still the same.”

For months, Hailey wore her hair up in a ponytail until the colour faded and her hair started to grow back. On this particular occasion the change to her hair was so ‘drastic’ that Hailey felt that she had to reassure her friends that she was still the same person and not ‘abnormal’, as if the change to her hair (i.e. the visual change to her appearance) could potentially be viewed by others as a change in her. The Carrie Grant cut, that looked so good on the celebrity, did not fit her sense of self. This is the risk that Hailey takes when deciding to have her ‘drastic’ haircuts. The effects of the hairdresser drying and styling the hair in ways that women regard as not ‘right’ has been outlined above. Here, the feeling of not

being 'me' only lasts until the woman gets back home and has the opportunity to restyle her hair. However, if the negotiation of the cut is 'unsuccessful', the consequences of not feeling 'like myself' can be long-term.

Hailey is aware of the potential risk she is taking if she leaves the decision-making process of the choice of cut to the hairdresser or tries to negotiate 'drastic' haircuts with the hairdressers, as her "actions may prove costly" (Hinchliffe and Woodward 2004: 117). Potentially, the hairdresser can make her look like "an idiot", but this is not always the case. If a haircut turns out "right", there are possible rewards. Hailey does not go to the hairdresser very often, but whenever she goes she tries to change her hair in a way that is visible to others. Such a visible change, according to Hailey, is a reassurance for herself and others that she actually does sometimes go to the hairdresser. Usually, she gets encouraging comments from her friends about the new cut. It seems that, for Hailey, the positive experience of taking these risks compensates for the occasional costly consequences. A haircut has the potential for Hailey to make herself feel less "rubbish". Over the years, Hailey has put in place measures to reduce the potential risks of her 'drastic' haircuts. Each time she goes to the hairdresser she ensures that they do not cut her hair too short so that she can still put it up into a ponytail. "Cut it as short as possible but so that it still fits into a hair band." Even when she had to walk around with the 'Carrie' haircut, she could fall back on her ponytail, as she knew that made her feel and appear 'normal'.

Hailey's willingness to take such huge risks at the hairdresser was an exception among the women in the study. Such risk taking might partly be due to Hailey's age - she is the youngest woman in the study and still quite experimental with her hair. The majority of the other women were over 20 and could remember their experimental teenage years but had left those times behind. 'Drastic' haircuts and radical changes to the cut of the hair occurred less regularly, if at all. For some of these women a visit to the hairdresser represented a loss of control of the hair and their sense of themselves. As suggested by McCracken (1997: 231),

"These clients fear more than incompetence [such as badly trained hairdresser]. They also fear the transformations the hairdressers will inflict upon them. They

do not wish to relinquish control of their appearance to someone they see as meddling and troublesome.”

As chapter 5 showed, women deal with their hair daily, transmitting their intentions through the hair by exerting agency and control over it. At the hairdresser, the locus of agency moves between hairdresser and female client, whilst negotiating the choice of cut. The women do not very often experience this relationship as equal, as they sit with their wet hair in the hairdresser’s chair, watching them cut their hair. The handling of the scissors and the intimate contact gives the hairdresser agency over the women’s hair, “we literally put ourselves into their hands” (Weitz 2004: 174). In turn, women become vulnerable, as they must depend on the goodwill of the hairdresser.

Olivia described the experience of going to the hairdresser and handing over control to somebody else to shape her hair as “incredibly disempowering”. She has to watch how her hair drops to the floor and finally is confronted with the result in the mirror. During the interview, Olivia expressed the feeling of sometimes not being able to stop what is happening to her hair whilst only being able to think “shit, shit, shit”. In these situations when the hairdresser shows Olivia the end result, all what she can say is “it’s lovely”. She hands over the fifty pounds, walks out of the door and bursts into tears. Olivia’s example draws attention to the agency of the hairdresser over the women’s hair and her deference towards them, even though she experiences great emotional distress. Similarly, Hailey was unable to disagree with the ‘expert’s’ suggestions, as she ended up with a colour and cut that was, in her eyes, ‘hideous’. Haircuts are negotiated, but opinions can vary as Emily pointed out “you have your idea of what you want your hair to look like and often a hairdresser will have their idea”. Women frequently get the impression that the hairdresser makes the final decision, as they have the agency over the women’s hair. Such perceived and experienced loss of control can increase the ambivalence of the relationship between hairdresser and female client, and decrease the hairdresser’s potential to provide advice, and influence women’s ways of dealing with hair at home.

McCracken has described the relationship between hairdresser and female client as challenging and fragile. The findings from this research support this. For McCracken (1997: 210), the salon represents a “battlefield” where the female client and the hairdresser try to

exert their own intentions. Some of the interviewed women concealed their intentions from the hairdresser, as they felt unable to assert themselves. Some of the hairdressers might not have been aware of the potential 'battlefield' they were creating. According to McCracken, relationships fail to establish whenever the hairdresser might not succeed in listening carefully to the woman's descriptions or women might not provide enough information or fail to trust the hairdresser. The trust by the woman in the hairdresser seems to be a major necessity in order for the negotiation to work. The variety of choices of haircuts, impacting on the sense of self and ambivalence about the hairdresser's intentions, as outlined above, might intensify the many roles of the hairdresser. Seligman's (1997) work on issues of trust suggests that the more potential outcomes there are to negotiate between the person trusting and the person they trust and the more uncertainties there are about the 'expert's' role expectation, the greater the need for trust. Nevertheless, to trust the hairdresser is often combined with taking a risk, something some women are anxious about.

Monica, the married personal assistant, nowadays trusts her hairdresser and has been able to build up the confidence to negotiate the choice of cut. She has visited her hairdresser for the last nine years and therefore developed a long-term relationship. There was a time when she used to be too frightened to question the hairdresser's way of cutting her hair. She can still remember the times when she stepped out of the salon and could not stop crying. Nowadays, the hairdresser has lost her "scariness". After all these years, Monica feels that she can speak up if the hair is not cut how she likes to wear it. Monica is able to negotiate the cut, as she "wants to make sure that her hair is right." The trustful relationship has given Monica the confidence to speak up in front of the hairdresser. In contrast with Seligman (1997), for Giddens (1991: 96), trust "has to be worked at" in a relationship and is grounded in continuity and commitment. Seligman (1997) differentiates between trust and familiarity by arguing that to trust someone is to be uncertain about his or her intentions. Seligman would assume that Monica and her hairdresser have created a familiarity over nine years that no longer requires any trust. Over the years, the hairdresser has had the chance to get to know Monica and her hair whilst, Monica has been able to negotiate how she wants to wear her hair and also changes to the cut.

For many interviewed women, like Monica, the change of cut is a gradual one. For these women, changes to their hair build on long-term relationships, where the hairdresser and female client slowly introduce and negotiate alterations to the hair. During the first interview with Monica, she talked about the moment when she first asked her hairdresser to cut her hair a bit shorter than usual, she could sense a look of relief on her face, as if to say “I told you so for ages”. Since then, Monica has had it cut gradually shorter. If her hairdresser would have proposed nine years ago to cut her hair to such a short length Monica would have felt uncomfortable. McCracken (1997) has recognised the long-term preparation between hairdresser and female client to develop transformative haircuts that impact on the women’s sense of self. They are often grounded in a familiar and trustworthy relationship between hairdresser and female client that has been built over years. In Monica’s case the relationship with her hairdresser has allowed her to take “ownership” (McCracken 1997: 235) over her hair at the salon. Although Monica is aware of her vulnerable position when visiting the hairdresser, she has learnt to distribute the agency over her hair between herself and the hairdresser in such a way that she can direct the cut but also allow changes to be made to her hair. She has regained the power over her hair at the hairdresser, allowing the hairdresser to transform her sense of self through a gradual change to her hair.

Several women mentioned the potential for women to reinvent themselves through a gradual but also sometimes radical change to their cut. Visual transformations that can accompany changes to the self may be based on a long-term relationship with the hairdresser but are sometimes more sudden, often coinciding with changes to women’s lives, such as overcoming an illness. They may be key transformations to mark, initiate and overcome changes in life situations. In these circumstances women are able to use the ability of the hairdresser to transform themselves to their advantage, as change is welcomed. Hairdressers become ‘magicians’. For example, Tracy, the single working mum in her early 30s, split up with the father of her four year old daughter about seven months ago. During the relationship, Tracy kept gradually changing her hair from short to long, using more blonde or brown colours to dye her hair. At the time of the break up, Tracy had long below-shoulder length hair. During the interview, she pointed to a photograph of herself on the fridge. At first sight the person in the picture looked nothing like the woman that was being interviewed.

This transformation was not unwanted. After deciding to split up from her partner, Tracy intended “to have something completely different” done to her hair. Determined to come out with a new cut, she told her hairdresser to chop off all of her hair: “get it all off” was her instruction. Tracy wanted to leave the salon with a blonde, ‘Posh Spice’ Bob. Tracy did not dare to look into the mirror until it was all over. “Oh my God, what have I done”, was her first reaction, but when people gradually started to make positive comments on her transformation, she felt a lot better. It made her feel confident. According to the people around her, Tracy had “knocked years” off her age through one visit to her hairdresser, but more than that, the new haircut was the first step in a new chapter of her life. Giddens (1991) has suggested that the active taking of risk is one of the key elements for innovations and change. In order to signal to others and herself that her new life has begun, Tracy acted creatively by taking “a leap into the unknown” (Giddens 1991: 41). She wanted to create visible changes to her appearance, reinventing who she is and what she looks like. This provided her with a newfound confidence and according to the people around her, a youthful look.

The relationship between the hairdresser and the female client seems to be affected by the hairdresser’s ability to potentially change the woman’s sense of self. The hairdresser often seems to have a great amount of control over the woman’s hair, as they have the scissors in their hands and are regarded as the ‘expert’ in cutting hair. Such loss of control leaves women powerless and increases the ambivalence in their relationship to the hairdresser. The dependent relationship on the hairdresser demands that women take certain risks and, in the process, trust the hairdresser with their hair and sense of self. Sometimes, women are willing to take a high risk, as they have the desire to transform their hair, since they are able to mark a change to their life. Nevertheless, such situations are rare and more often women seem to accept feelings of being ‘powerless’ and in the hairdresser’s control. Long-term relationships seem to provide the only way to allow for an equal amount of involvement from the hairdresser and the woman to develop, improving the relationship and initiating gradual changes to the hair and, potentially, to hair care routine at home.

Nowadays, seven months after the break up, Tracy considers having her hair longer again because it was easier to look after and took less time. This reinvention of a sense of self,

supported by having a ‘drastic’ cut, impacts on ways of doing things with her hair in everyday life at home. The shorter hair with its newly cut fringe is very malleable. Her hair keeps changing its position and losing its volume, in particular whenever Tracy sleeps on it. Although her short hair does not get particularly “greasy”, she needs to do it daily in order to restyle it, which includes washing, brushing and blow-drying. When her hair was longer, she could “get away” with not washing it for a week because its weight kept it in the desired position. Although Tracy’s example might suggest that shorter hair is more resource intensive and time consuming, this was not the experience for all of the women in the study. Even though longer hair stays in position more easily, because of its weight, the recent popularity of heated appliances and the accompanied use of protective products can sometimes make hair appear more ‘greasy’ because of product ‘build up’, potentially increasing the frequency of washes. Frequently, the amount of time taken to style the hair also increases, as it takes longer for women to dry and straighten their hair.¹²⁸

At the end of the first interview, Tracy acknowledged that she would probably stick to her daily routine of washing her hair, even when having it longer. As she put it, “it makes you feel better knowing that I’ve got up and I’ve washed it”. On the other hand longer hair would give her the option to leave it unwashed for a while longer if she had not got the time to deal with it. Clearly, there is no simple relationship between the amount of resources consumed in hair care and the cut and length of the hair, as this is also influenced by women’s individual daily routines (as suggested throughout this thesis). Nevertheless, Tracy’s example shows that ‘drastic’ changes to the haircut as well as gradual long-term changes can cause women to re-experience both their hair and ways of dealing with it, including their use of products and tools. Tracy’s change from long hair has altered both the ‘wet’ and ‘dry’ parts of her hair care routine. Such transformations are sometimes welcomed in a similar way to changes to the styling of hair when getting ready for a special occasion, discussed in chapter 7. However, they are more long-term because of the physical change to the cut and the more extreme events that initiate such cuts, such as the spilt from a partner in Tracy’s case. Thinking again about resources, a change to the hair care practice does not especially imply a reduction of resources consumed. In Tracy’s case, it seems to have

¹²⁸ Although it would be possible to measure quantitatively, which haircut, length and texture results in the least amount of resources consumption, the nature of the sample and resource implications meant it was inappropriate to attempt this in this research.

caused her to wash, dry and style her hair more frequently. What also needs to be considered is that women frequently visit the hairdresser to maintain the cut, rather than to change it. Visits to and negotiations with the hairdresser are not the only relationships that affect women's hair care routines. Relationships with their partners, family members and friends are also important. These relationships are the subject of the next section.

Negotiating women's hair care routines in familial and friendship relationships

The final part of this chapter considers women's ways of wearing their hair and dealing with it as constituted through their relationships with their family members, sexual partners and friends at various stages of their life. The formation of these relationships creates one aspect of how women's hair and hair care routine is managed and negotiated in everyday life. Women are "recruited" (Shove and Pantzar 2007: 154) to the activities of hair care through the hairdresser but also via their mothers and friends, keeping the practice alive and shaping it in the process. During the interviews, women often expressed that from these familial and friendship relationships they are able to gain honest recommendations, rather than through supposed 'experts' of hair such as hairdressers, corporate industries, advertising or the media. Nevertheless, relationships with family members, partners and friends shift over time. They are not free from conflicts, in particular if women try to exercise their own uncompromised routine, whilst failing to negotiate or adjust it in relation to other people's preferences.

During childhood, the manner in which women deal with their hair depends on encouragement and teaching from family members, particularly the mother who manages, washes and dries it. This intimate relationship is slowly substituted with playful and more serious experimentations with friends and siblings. During this time, the practice of hair care may be particularly public and dominated by negotiations with the mother, connected to the girl's wish to be independent and lose the dependence on family ties. These negotiations represent a shift in the relationship that is further redefined in adulthood. During adulthood, the performance of hair care predominantly moves into the private space, particularly the wet part of hair care routines. Frequently, only the end results are publicly revealed and are open for comment. Sometimes negotiations with sexual partners start to play a more important role than friends and family. This part of the chapter does not delineate each stage

of a woman's life. Rather, an overview is provided, concentrating on the women's relationship to their mother, friends and sexual partners through the development of the hair care practice. It particularly focuses on the formations of these relationships and the shift from the public to the private practice of doing things with hair.

Like mother, like daughter?

Whilst conducting the interviews it became apparent that the relationship between mothers and daughters is most significant when it comes to the practice of hair care at home. The women regularly recollected childhood memories of their mothers doing things to their hair, as the primary caregiver and provider of hair care products and tools. In many instances product recommendations, exchanges and gifts are still part of the relationships with mothers and friends throughout adulthood, and they keep hair related interactions active. The role of siblings and fathers are not negated, but throughout the interviews the importance of the mother emerged to such an extent that it deserves to be the focus of this section. The first example, Hailey, who moved three hundred miles from her family home to start her degree course, feels that, for the first time in her life, her hair has become her own, instead of having to negotiate it with her mother. Although Hailey only feels comfortable around other people if she wears her curly hair in a ponytail or if it is straightened, demonstrating various social standards, she believes she has found a greater freedom to have her hair however she likes it.

When Hailey was younger her mother used to deal with every aspect of her hair. She washed, dried and plaited it, and decided when it needed doing and what hair care products and tools were bought for her hair. Hailey can still remember the French plait her mother used to braid into her hair. It often felt tight and uncomfortable. Hailey had to bear it, as her mother thought it would make her look "neat and cute". Coming from a single parent family, the 'neat' hair was a sign to the outside world that her mother was able to take care of her family emotionally and economically without the support of her husband and that they "were a nice family". Hailey's mother continued braiding her hair until she found full-time work and was unable to spend the same amount of time on it. Although nowadays she would not mind having a French plait again, the experience of having to wear it nearly every day

when young “scarred her for life”, as Hailey jokingly admitted. A strong dependency on the mother for hair care during childhood was not uncommon between the interviewed women. It seems that these are the first building blocks of developing a hair care practice when women watch and were introduced by their mothers to ways of dealing with their hair, until they started to try it themselves and develop their own abilities.

When Hailey was a toddler, her mother controlled the ways of dealing with her hair as well as the end result. Miller (2004) has suggested, whilst studying the lives of middle-class mothers in the UK, that mothers often conceptualised their toddlers as an extension of themselves. Hailey’s mother’s ambition to continue family life how it used to be before the divorce, in order to give the impression that they are still a ‘nice family’, was projected onto her daughter’s hair through braiding it into a French plait. Her ways of dealing with hair developed through her mother’s influence and encouragement to look ‘neat and tidy’. For Hailey, some of these standards of having ‘neat and tidy’ hair still seem to exist today. Chodorow (1978) has indicated how an infant’s relationship to the mother is the initial source of their identification but that predominantly daughters keep this connection to their mothers throughout their life. Hailey explained numerous times that her hair does not need to be “immaculate” all of the time, as she feels that she is sometimes a bit “lazy” when it comes to doing things to her hair but that it should be at least “neat and tidy”. Nowadays, she does not plait or braid it but ties it up into a tight ponytail whilst applying mousse onto the stray hair to keep it close to the scalp.

Not only are some of the standards shaped in earlier years, but so too are material interactions with products and hair, sometimes creating close sensual relationships between mother and daughter. Hailey can still remember the times when her mother used to wash her hair in the bath. Together with her two younger siblings, they played games with the shampoo bubbles, creating beehives on their heads or a Santa Claus beards on the chin. Numerous other women talked about playful games with their mothers and siblings involving the lather of shampoo, and even about their aversions, as bubbles could potentially sting their eyes. There seems to be an overall fascination with bubbles during early childhood, forming women’s understanding of the need for and acceptance of lathering shampoos from a very young age. These early interaction seem to create sensual

understandings of ‘what feels right’, and in particular how hair care products should feel and look like at different stages of their use, on the hands and on hair. According to Warde (2005), the development of an individual’s routine depends on “past experiences, technical knowledge, learning, opportunities, available resources, and previous encouragement by others.” Infants are introduced to the different activities of hair care routines in order to develop their competences to ‘control’ hair and understanding of what is ‘appropriate’ hair in accordance to their gender and age.

Although interactions with hair reinforce the relationship between family members, in particular mothers and daughters, they can also lead to conflicts and negotiations that are apparent even in the daughter’s adulthood. There came a time in Hailey’s life when she told her mother not to French plait her hair any longer, moving her ways of dealing with her hair from the public eyes of her mother into a private space of her own. Wollett and Marshall (1997) have suggested the refusal of the mother’s management over the daughter’s body is consistent with her wish to be independent and able to make her own decisions. Similarly, Miller (2004: 42) has observed that daughters from an early age recognise “key normative possibilities open to them through which they can most effectively assert their autonomy”. In Hailey’s case, it was the negotiation over a French plait that initiated her opposition to her mother’s decision-making over her hair. Nowadays, her mother has only a minor influence on her hair care routine and only one of the products in her student hall room suggests the past dependent relationship: the shampoo. It is the same brand of anti-dandruff shampoo that her mother chose for her years ago when she was younger. At the time, Hailey constantly scratched her scalp and her mother got so concerned and annoyed about it that she went out and bought a shampoo especially for her to use. Hailey has been using it ever since.

The daughter’s shift from complete dependency on the mother to starting to negotiate the boundaries of her own hair care routine is further revealed in the relationship between Tracy and her four year old daughter, Grace. Tracy regularly washes, dries and braids Grace’s hair. Tracy often gets annoyed with her daughter’s fringe, as it tends to stick out from the rest of the hair if she does not get her hands to it quickly enough to dry it. Although she realises that her daughter often dislikes the procedure of her trying to position her fringe and dry the hair, Tracy feels she has no option - she just does not like it if it is “flicked back”.

Sometimes, if Grace sleeps on her fringe during the night, it re-shapes itself even after the evening's drying procedure, so Tracy wets Grace's hair again to re-do it in the morning. Although Grace is only four and still relies heavily on her mum to do her hair, she sometimes puts up a fight and leaves Tracy no option but to dry the rest of her hair half-heartedly. Currently, Grace has negotiated with her mother how she wears her hair and deals with it to the extent that she can choose if her mother washes her hair in the bath or shower, the type of braiding she can wear and which bobbles will go into her hair, either from the box kept for school nights or for weekends.

If Tracy and Grace are like other mothers and daughters, the negotiation between mother and daughter about what mother does to daughter's hair, what she uses and how daughter will wear it will continue far into her teenage years. Tracy assumes this because of her own relationship to her mother. She can still remember the point at which she locked the bathroom door and asked her mother not to do her hair anymore: "I don't want you coming with me no more." Her mother was losing more and more control over her hair whilst Tracy started to look after it in private, away from the watchful eyes of her family. When interviewing some of the women, it seemed that whilst the mother was the provider of hair care products and had a final say in some more permanent chemical processes to hair, such as colouring, the everyday hair care routine was one of the first ways for daughters to assert their own hair care routine. During the interviews, some of the women described the cuts and colours of hair that they experimented with during the teenage years to the dislike of their parents. They could often only hope that their daughters 'grow out of' the hair. A lot of the informants were disinclined as adults to take any advice on their hair from their mothers, which was often presented in the different cuts of their hair. Although women felt that their mothers often acknowledge their independence, they still often disagree with how the women wear their hair and how much money they should spend on hair care products and tools and visits to the hairdresser.

The distancing from the mother as primary decision maker and negotiator of women's hair during adulthood when other relationships, such as the sexual partners, take on a more significant role is further demonstrated by the next example. Audrey, the retired education officer in her early 60s, has a close relationship to her two daughters. Both are in their 30s,

married and have children of their own. Audrey plays an active part in her daughter's family lives, as they live near to her. Not so long ago, Audrey's daughter told her on the phone that she intended to try a home kit to streak her hair. Having had some experience with home kits when she was younger, Audrey knew what damage they can do to hair, so she offered her daughter to do it for her, but her daughter declined, as her husband had already suggested to help her. A few days later Audrey received another phone call from her daughter who was devastated about what had happened to her hair. Her husband had pulled out too many hair strands through the film, bleaching not strands but chunks of hair. Her daughter's usually dark hair was crowned with a yellow top. Not wanting to leave the house looking like a "Romanian asylum seeker", her daughter's husband had to go to the shop to buy another colour to cover it all up. Audrey regards situations like this as a challenge for a mother - she wanted to help her daughter with dyeing her hair or at least give her some advice but, from the beginning, she did not quite know how to approach the subject. She explained that, as a parent, you have to find the right balance of not saying too much but, on the other hand, enough to prevent a disasters from happening. Her daughter was an "independent" woman and Audrey feels she cannot "speak as freely" to her as when she was younger, when her ways of dealing with her hair was more public and open for discussion in the family. Even if she had warned her, her daughter probably would not have listened.

Although it might seem that mothers lose control over their daughter's hair care routine over the years, the relationship between mother and daughter through the hair does not cease. Even though Audrey's daughter rejected her attempts to help, her daughter still looked for reassurance from her mother. She telephones to receive encouragement even if it is only verbal. The changing relationship between mother and daughter through negotiations and conflicts is further reflected in their interactions with products. Miller (2004) has suggested that during times of conflicts over their daughter's autonomy parents seem to develop various strategies to deal with these situations. They either create an opposition or attempt to rebuild the relationship through being the main provider who makes certain purchases for the daughter. Even throughout adulthood for some women (and in the case of Audrey and her daughters) the practice is often grounded in contact points that are created through hair care products and tools. These interactions confirm their love and commitment to one another. Mothers and daughters either pass products to one another, sharing the product

brands they regard as ‘trustworthy’ recommendations, or buying each other hair care products and tools. Even if they are left unused, the exchange and provisioning of products and tools re-establishes the relationship between mother and daughter, after times of negotiation about the daughter’s hair.

The rebuilding of these relationships through hair care products and tools was not the case for all of the women in the study. Sometimes, women’s hair care routines developed independently of their mothers, demonstrating how private each other’s routines had become. During the interviews, women described times in their adulthood when they stayed with their parents for a few days. Often, they were surprised that they could not find certain products, such as the conditioner, on the bathroom shelf; products they would not be able to live without. During adulthood, products and tools not only establish the relationship but also confirm the independence of daughter from mother, as other relationships become more prevalent in the woman’s life, such as friends and sexual partners. In addition to the changing formations of relationships in terms of ways of dealing with and wearing the hair, throughout a women’s life the practice of hair care becomes more and more private, until women might lose the capacity to look after their own hair because of, for example, old age.

Experimenting with hair to serious play: From family members to friends and sexual partners

The repositioning of the time women deal with hair from the public to the private is also evident when considering friendship relationships. Early teenage interactions with hair are rather playful, whereas later on they become more and more serious, as the woman’s appearance is scrutinised more by others. Interactions with the mother are based on teaching and the inculcation of the mother’s hair preferences, whereas exchanges with friends are more experimental, at least during some of the early teenage years. Teenage girls are able to develop their hair care routines, including their understandings, competences and knowledge whilst experimenting with their hair. The development of ways of dealing with hair during teenage years brings specificities of gender to the fore.

After Hailey’s mother stopped braiding her French plait, there was a long period in Hailey’s life when she did not particularly care how her hair looked. During this time Hailey and her

friends started to experiment with each other's hair and recognised its potential transformative nature. Hailey used to organise sleepovers with her friends and when they were bored of eating pizzas and watching films they usually decided to give each other makeovers. Quietly, they went into Hailey's mum's room and started to try out her make-up, clothes and hair care products. Although it was an enjoyable way to watch other girls do their hair and exchange ideas, Hailey explained that the makeovers to the hair and face did not always improve their overall appearance. Hailey and her friends used to dress each other up as vampires and various other characters, just for the fun of it. McRobbie and Garber (1976) identified such 'get-togethers' of teenage girls as 'bedroom culture' and described them as predominantly feminine activities, as girls could role-play and experiment with their image in the privacy of the bedroom. Bloustien (2002: 109) has argued against the assumption that such activities are part of a "gender resistance", as assumed in research studies conducted during the 70s and 80s, but interprets them as a preparation for more "serious play" later on in their life (2002: 100). Teenage girls are able to explore their bodies, gender and relationships. The interactions with hair and products and tools between Hailey and her friends was an important part of these experimentations which, at first sight, still seem to be rather playful and not necessarily part of Bloustien's 'serious play'. The main emphasis was on transforming their appearance and not necessarily improving it.

Hailey and her friends had started to engage with more 'grown up' hair and beauty products and to comment on each other's appearances, as the 'play' became more serious throughout their teenage years. As they grew older, they were still experimenting with hair care products and tools in their bedrooms but with the aim of improving their appearance, as they wanted to go out together. They were getting ready to walk into town with the purpose of "trapping the boys" in front of McDonald's. This was the time when Hailey started to use hair straighteners. What used to be playful interaction between friends and hair care products had indeed become more like the 'serious play' Bloustien describes. To achieve a certain look and feel of the hair this 'serious play' with the objective to 'trap boys' could be regarded as one of the first stages of women being subjected to the 'male gaze' (Berger 1972), as the girls change their appearance to the benefit of the interest of boys. Feminist critiques have argued that beauty practices objectify women (Embree 1970), as they become an object to the male gaze. On the other hand, Hailey and her friends wanted to 'trap' the

boys, giving them a potential agency in these interactions. As discussed by Bordo (2004) in relation to Fiske's (1989) study of 'Madonna', women are able to defy the male gaze and reject being objectified through teasing them with their own stare. Such agency of women might be more wished for than apparent in these interactions, but the 'play' with hair becomes more serious as the stakes become higher in looking acceptable and attractive.

Such high stakes do not only transpire through interactions between men and women but in terms of the formations of friendship relationships, often resulting in women starting to rely on more tried and tested ways of doing their hair and of 'doing' the hair moving from the public to private spaces. Ruby, who is in her early 20s, is nowadays more careful not to be too experimental with her hair. Whenever she gets ready for a night out, she has to work with the time limit of having to leave the house at an arranged time. If her experimentation ends up with a "bad" look, she needs to rectify her hair in a rush and this is a risk Ruby often does not want to take. Some of the women in the study stressed the importance of making a visible effort with their hair when going out with their friends. Hair that looks as if time and effort was spent on it was often a way of showing friendship and respect. Moreover, women felt that if they have done their hair there was no potential danger of "bringing friends down" in front of other people, avoiding potential comments such as, "they must be rubbish because they have got a girl that looks horrible". Courtney, a surveyor in her late 20s, particularly expressed these feelings. The shift from experimenting with ways of dealing with hair through the use of hair care products and tools to relying on more tried and tested ways shows the increasing importance that is placed on the end result. Such a shift not only encourages a change in women's hair care routines but also sometimes aids the process of redefining these social relationships, as women no longer get ready with their friends but do their own hair in the privacy of their own home.

The end result of doing things with hair at all stages of a woman's life is open to be scrutinised by the gaze of others. During the first decades of a woman's life both ways of dealing and the end result are more public and form an important part of the relationship with mothers and friends. It seems that during adulthood discussions and experimentations about ways of dealing with hair start to play a less important role. The shift from the public to the private is further marked by negotiations about end results that are conducted with

sexual partners rather than mothers and friends. Hairdressers, mothers and friends might negotiate with women how they should wear their hair but during adulthood the compromises with sexual partners or husbands seem to have a greater effect. Stories and descriptions of husbands doing women's hair, as in Audrey's daughter's case, were rare. Nevertheless, partners frequently comment on, or also forget to comment on, the end results of women's hair, in particular after visits to the hairdresser.

Nowadays, Monica knows that after visiting her 'trusted' hairdresser she usually feels "nice in herself". Monica still needs the re-assurance of her husband when she gets back home to confirm that "the cut suits" her. The approval of somebody close to her is important. It verifies that the negotiation matched how she views herself and how others view her, in particular her husband. Although only two people are physically present during the negotiation phase of 'what are you having done to your hair today' at the salon, the hairdresser and the female client, women consider not only what feels and looks 'right' to them and the 'expert' hairdresser but also the expectations of their partner. Whether pursuing gradual changes to their hair or avoiding potential disaster, a woman often seeks her partner's approval of the cut and recognition of their changed appearance. Numerous women explained that whenever partners not notice the change to the cut through an appointment at the hairdresser, they feel disappointed. Many times after visiting the hairdressers their husbands do not acknowledge the change, sometimes even asking "I thought you were going to the hairdresser today", with the consequence that the women feel dissatisfied with their haircut.

Although most of the women regarded themselves as independent from their husband, the comments their husbands make affect how they feel about their hair and sometimes even how they wear it. A recent trip to Australia gave Emily the perfect opportunity to cut her below-shoulder length hair shorter than usual. Knowing that her husband prefers her long hair she explained her shorter hair by reminding him how hot Australia is during the summer and the relief she would feel because of having less hair. Despite this, her husband persisted he rather would see her with longer hair – he does not like her to have anything too "severe". Most of the time Emily accepts his preferences. As she points out, "sometimes it's easier just to keep the peace and leave it longer." When she was younger she experimented with

different colours and cuts for her hair, not feeling too concerned about “pleasing” anyone with the way she looked. Since getting married and moving into a little village she had to re-negotiate her experimental attitude to her hair. In order to “fit in a bit more” she “conformed” to her environment and started to compromise with her husband on how to wear her hair. Some of the women referred to the birth of their children as a time when their hair became less important to them. Hair was worn in ponytails or trimmed into more ‘practical’ cut, so that it would not take as long to do. Although the women regarded the increasing autonomy over their body and hair as important aspects of their independence and maturity, their hair really never becomes only their own. From teenage years up to adulthood there are various sources of tension with mothers, friends and sexual partners that lead to the negotiation of the end result and therefore, sometimes, to changes in hair care routines.

Conclusion

This chapter has sought to explain women’s relationships with their family, friends and hairdressers that can be traced through their hair care routines to explore their role in a practice-orientated approach and, in particular, their influence on how women wear and deal with their hair at home. The examples of Hailey, Tracy and Audrey show that social interactions around women’s hair not only initiate negotiations about hair care routines but also create a basis for women to redefine familial and friendship relationships. Through their hair care routines young women are able to negotiate their relative independence from their mothers and consolidate these relationships through product gifts in adulthood. When considering these relationships it seems that the practice of hair care not only intersects with practices that relate to other health and beauty practices, such as washing the body, but also with practices that are associated with the formation of familial and friendship relationships, including issues such as gender. Women are able to negotiate these relationships through their hair and hair care routine, indicating the significance of the exploration of social interactions in a practice-orientated approach to hair care.

In the introduction, and referring to the works of Halkier (2006) and Christensen and Ropke (2005), this chapter has drawn attention to the role of social interactions in everyday

practices. Although Christensen and Ropke (2005) acknowledge that there is an awareness of the social in Reckwitz's (2002) outline of a coherent approach to the analysis of practice, they argue that the theory seems to forget that practices are sometimes reproduced by numerous people, as "practices are not only performed by individual carriers" (2005: 13). The important role of the social in relation to the biological and emotional dimension of hair has been discussed in chapter 5 in terms of developing various acceptable standards. What becomes apparent in this chapter is that although women seem to deal with their hair in private throughout adulthood, throughout infancy and in the teenage years the hair is dealt with by the mother and performed together with friends. Even throughout adulthood the negotiation of the end result with hairdressers and sexual partners impacts on women's hair care routines.

According to Christensen and Ropke, the performance of practices through groups of people might play an important role in changing everyday practices. The role of social interactions creates a significant part in Manzini's and Jegou's (2003) proposal of designers recognising and facilitating social innovations that encourage sustainable ways of living. The role of the designer is to discover innovative people who come together to change their current practice into less resource intensive ones and facilitate this development through the systems or products that ensure the progression of these innovations. Julier (2007) has argued that, although Manzini and Jegou (2003) do not explicitly have a practice-orientated approach to their work, they come close to an application. They explore immaterial and material features of everyday practices such as taking children to school. Although their approach might be regarded as practice-orientated, some everyday practices such as hair care do not seem to allow for a straightforward formation of innovative communities. The examples above show that the practice of hair care consists of creative individuals who change their hair but then again the practice is mainly reproduced throughout adulthood in the privacy of women's own bedrooms and bathrooms and not in public. It might be possible as a designer to engage with innovative individuals who come together through the internet to share ideas about ways of doing hair. Nevertheless, such formations of innovative communities may be rare and sporadic.

The participants at the Boots' creative workshop suggested the potential to create hair care events such as 'Tupper-hair parties' and 'Hair holidays' where women could come together to discuss and experiment with numerous ways of wearing and dealing with their hair. Although the participants argued that the emphasis would not be on providing women with information on sustainable ways of dealing with their hair but on making the practice more experimental (even throughout adulthood), these interventions (i.e. the development of hair care events) might have similar drawbacks as some of the sustainable design and sustainable consumption approaches. Such interventions potentially may well still be based on the provision of information in terms of the amount and type of resources consumed in hair care, so that women are able to make changes to their individual hair routines and choose to do so. Nevertheless, the creation of an environment where women feel content to experiment with their hair through the encouragement of others and mainly discuss their hair routines instead of issues concerning sustainability might initiate a reconfiguration of the practice of hair care. Women might be able to not only negotiate the end result but also the process of the ways of dealing with their hair, including discussions of the achievability of current standards and their acceptability.

An examination of the relationship between women and their hairdressers it makes apparent that not all social interactions encourage change, as they require certain levels of trust and involve risk taking. What emerged, particularly from Hailey's example, is that changes to the hair are affected by women's fear of compromising their sense of self. The outcomes of a hairdresser visit cannot always be anticipated as it involves certain levels of risk grounded in the potential failed negotiation over the women's hair, leaving women sometimes to feel powerless. Negotiations over women's hair seem to be often tainted by concealed controversies over who is the 'expert' regarding women's hair. Relationships that succeed in negotiating changes to women's hair and their routine seem to allow the women to take ownership over those transformations, which is usually based on a long-term relationship such as in Monica's example. In other relationships, women sometimes invest an enormous amount of trust in the relationship in order to be innovative with her hair. The examples above show that any change to women's hair and their routine is combined with a 'leap of faith', as possible outcomes are uncertain, requiring the investment of trust and the willingness to take risks. Currently, women accept such risk either if they have developed a

familiar and trusting relationship with the person with whom they negotiate such changes, or when they wish to mark key transformations that represent changes in their lives.

Although social interactions seem to play a part in changing everyday hair care routines, interventions that prioritise social interactions, in order to reconfigure the practice of hair care, have yet to demonstrate an impact. These interventions should not disregard the current ambivalence of some of the current relationships and the important role of hair to redefine relationships. It seems that design interventions which aim to create change in the practice of everyday hair care need to consider social interactions among the multiple elements that make up the practice.

Chapter 9 Conclusion

“Your hair is vastly more important than you ever really give it credit for because it is something that you do every day and you never actually sit and think about it.” (Pamela)

In this research, an explorative and practice-orientated approach was taken to examine the practice of hair in order to explore whether it can provide a remedy to what appear to be deficiencies inherent within current sustainable design and sustainable consumption strategies. This thesis reflected on strategies that are concerned with the environmental and social impacts within products’ use phase and that assume positive changes in behaviour towards the environment largely occur through economic, moral and political persuasion or force. It proposes a critique that indicates that current strategies ignore the complex dynamics of everyday practices such as mundane activities of everyday hair care. This research has involved a review of the current literature on sustainable design and sustainable consumption and in particular Shove’s (2004) delineation of the limitations of these current strategies. The review aided the process of reflection and an expansion of the critique in order to put forward an alternative approach that uses everyday practices as a starting point. The practice-orientated approach has been examined empirically through an in-depth study into women’s hair care routines at home, drawing on an ethnographic methodology. This examination has particularly considered the performance and materialisation of the practice of hair care. The creative workshop at Boots the Chemist¹²⁹ aided the process of reflecting on a practice-orientated approach in relation to design activities that try to change practices. To examine the practice of hair care beyond women’s individual performances, interviews with the various hair care ‘experts’ and academic and commercial literature about hair care were useful for exploring some of the relationships between production and consumption.

This research has demonstrated that by considering practices as the unit of enquiry, instead of individual behaviours or products, it is possible to arrive at a deep understanding of an aspect of the dynamics of everyday life. The **contribution to knowledge** of this research is to inform sustainable design and sustainable consumption debates about changing everyday practices. Within this contribution, the thesis establishes a proposition of possible remedies

¹²⁹ An outline of the workshop is included in Appendix 8: workshop report.

to deficiencies within current sustainable design and sustainable consumption approaches, particularly when they try to reach a wider audience. In addition, the thesis contextualises and empirically verifies the identified deficiencies of current approaches through an examination of Boots' sustainable design strategies and the product development process. In relation to how practices may change, the thesis establishes a deeper understanding of the practice of hair care, including the interconnectedness of its elements and its stability and instability. This has led to the identification of key factors that stabilise and destabilise practices and therefore reinforce current routines, but can also potentially bring about change. The thesis argues that an understanding of these factors is not accessible to either Boots' product development process or current sustainability strategies. The research therefore provides starting points for the health and beauty industry to develop design interventions to change everyday hair care routines and has identified further work that needs to be conducted in the area of sustainable design that makes use of a practice-orientated approach. It is anticipated that the research will be of particular interest to sustainable design researchers, academics interested in the concept of practice theory and the practice of hair care.

Despite the fact that methodological insights for using practice theory in empirical studies was not the main aim of the study, the thesis is able to demonstrate that it is possible to gain explorative and contextualised insights into the multi-relational elements of everyday practices, when orientating the research towards an ethnographic methodology. The methodology provides enough flexibility and in-depth engagement with the practice under investigation to allow for themes to emerge that are relevant to an understanding of routines. The in-depth involvement and reliance on observation, as well as verbal accounts that an ethnographic methodology allows, led to creative and mixed methods that examined the intimate performance of women doing their hair. In particular, evocative interviews have proved valuable in developing an understanding of the subjective lived and felt experiences when women deal with and wear their hair that are difficult to observe.

This chapter firstly situates the thesis in sustainable design and sustainable consumption debates concerned with products in use and in research that applies practice theory to the examination of everyday life in order to reflect on the impact of the research and the potential of a practice-orientated approach. Secondly, it provides a short summary of the

research findings before situating these findings in recent work that makes use of practice theory. This section re-considers the stability and instability of practices and their multi-relational elements to reflect on the role of design in changing everyday practice. Finally, suggestions for further work are made.

Sustainable design and sustainable consumption debates and research that applies practice theory to everyday life

This research builds on Shove's work on sustainable consumption and research that applies practice theory to the study of everyday life (Southerton 2006; Christensen and Ropke 2005; Warde 2005). This includes a recent study that examines the interconnections between 'designing and consuming' to develop a theoretical understanding of the products and practices of consumption (Shove et al 2007). It provides arguments that identify deficiencies within current strategies and proposes possible remedies that a practice-orientated approach can offer. As outlined in the introduction, the resolution of specific problems, such as the consumption of resources arising from hair care was not the research objective. This thesis represents a starting point for further research to bring about change in practice through design.

In the literature review (chapter 1), the thesis examined Shove's critique of current sustainable consumption approaches, as these strategies place individual behaviours as the central unit in the enquiry into sustainable living, instead of practices. In chapter 1, the critique was extended to sustainable design strategies concerned with the product's use phase and to more complex models developed as part of sustainable consumption approaches towards behaviour change. Although current approaches are valid and should not be discarded, they have not been able to address a wider audience and bring about change towards sustainability on a larger scale. The findings show how sustainable design approaches are solution-based rather than explorative, often disregarding the complexities of everyday life. They either rely on environmentally committed individuals, concentrating on individual people or on individual product solutions to bring about change. They often assume needs as pre-existing, as concluded by Maslow (1954) or Max-Neef (1991) instead of regarding them as arising from the performance of everyday practices. The thesis showed how the critique of the identified deficiencies can be contextualised and empirically verified

through an examination of Boots' corporate social responsibility strategy and the product development process (chapter 3). The findings suggest that Boots characterises consumers in the way that Shove (2004) calls 'decision-makers', as their efforts to promote sustainability are concentrated on representing the environmental impacts of products to consumers so that they are able to make sustainable choices, and they rely on the articulation of a consumer 'need' towards the environment to bring about change.

Because the research has considered practices as the unit of enquiry instead of individual behaviours, it was never going to concentrate on women's attitudes towards the environment in relation to their hair care behaviours to examine what type of environmental information is most effective so that women feel inclined to change their behaviours. In addition, it did not delineate more or less resource intensive lifestyles, comparing each woman, to identify barriers and incentives that might change people's behaviours. Instead, the research explored the practice of hair care, to address a wider audience. Studying the dynamics of everyday life, the research has shown that patterns of resource consumption that derive from hair care do not necessarily rely on women's attitudes towards the environment but on routine ways of performing the practice and wearing hair. These routines determine how, and how often, women do things with their hair.

Summary of key findings

An investigation into everyday hair care routines has drawn attention to the multi-relational elements that reproduce the practice. It is the reproduction of these elements that are significant as they determine what is considered 'normal'. From this examination it is possible to arrive at a summary of research findings that relate to the stability and instability of practices and their multi-relational elements. These findings are condensed in the following nine points:

The exploration of women's daily hair care routines sheds light on the centrality of the reproduction of the practice in everyday life and its materiality that is still relatively unexplored in academic research on design, sustainability and in the social sciences.

Factors that influence the stability of the practice of hair care, including designs, work dialectically – in some circumstances they may destabilise aspects of the practice but in others they may reinforce them. Their impact on both the stability and instability of a practice means these factors are interrelated, with implications for strategies to reduce resource consumption.

The existence of well-established feedback loops between consumers and producers in the product development process keep various rationales associated with the appearance and performance of hair care products stable (chapter 3). These rationales are sometimes associated with resource intensive practices.

The research empirically verifies that the intersections between practices that can be considered different from each other (such as bathing and hair care) impact on the stability and instability of these practices. Even if the practices are considered as separate in daily life, their interactions can influence ways of performing everyday routines (chapter 4).

The research shows that in addition to the daily performance of hair care, there are various other ‘doings’ that have a different rhythm. These are the regular but infrequent ‘ruptures’ that are potentially great opportunities to change practices, which are based on in interplay between what women do routinely and what they do ‘out of their daily routine’. In many cases, women have found various strategies to resist ‘ruptures’ in daily life routines (chapter 7).

When considering practices as embodied, not only mental and emotional elements that make up a practice transpire but also sensual and material ones. The emotional dimension of daily interactions with hair triggered by sensual interactions, influence ideas what it is to have acceptable hair.

Linkages exist between sensual product cues and ideas of what products do to the hair that configure ways of dealing with hair. The development of new links is not always straightforward, as some of the existing ones are well-established and therefore difficult to break (chapter 7).

The characteristics of hair care products and tools generate various ‘predicaments’ women have to deal with in daily life. These predicaments, for example achieving a balance between substances used on the hair, impact on how women feel about their hair and hair care routines and therefore shape the practice (chapter 6).

Despite the degree of autonomy from ‘experts’ in hair care (such as hairdressers) through the development of new products and tools that are used at home, women still rely on experts. However, the women’s dependence on the hairdresser includes tensions that make the relationship ambivalent. Therefore, advice from experts is often queried at home (chapter 8).

These findings validate and extend concepts developed in practice-orientated research projects. To relate them to the research aims (reflecting on the potential remedies that a

practice-orientated approach offers to sustainable design), the next two sections situate the findings in recent work that makes use of practice theory. They re-consider the stability and instability of practices and their multi-relational elements to reflect on the role of design in changing everyday practices.

The stability and instability of practices through the practice of hair care

One aim of this research was to reflect on the usefulness of a practice-orientated approach for design that aims to change practices. It identified some external and internal factors that can destabilise practices and that are therefore potentially able to bring about change.¹³⁰ It emerged that factors that influence the stability of the practice of hair care work dialectically – in some circumstances they may destabilise aspects of the practice but in others they may reinforce them. The summary that follows concentrates on the stability and instability of practices in terms of the interrelationship between consumption and production, borders and intersections between practices and rhythms of doing things with the hair and wearing it. The section then proposes possible implications for sustainable design.

This research empirically confirmed that consumption and production are interdependent in everyday life and that both impact on changes in practices, as McMeekin and Southerton (2005) and Shove et al (2007) argue. It demonstrated that an outcome of their interdependence is the existence of well-established feedback loops in the product development process that reinforce the design of certain product appearances and performances (chapter 3). These feedback loops keep some of the rationales associated with the practice of hair care stable over periods of time. Bijker (1997: 86) has argued that the “interpretative flexibility” of products and tools declines if various social groups associated with them start to agree on certain design features, such as how a product should be made and used, resulting in a form of “closure”. An investigation into the Boots’ product development process has shown that such ‘closure’ is also apparent for certain hair care products and tools, as companies have translated their features into benchmarks for the appearance and performance of products. The research shows that ‘closures’ not only exist

¹³⁰ The research contributes to studies that try to develop approaches to change current resource intensive practices. Further research is required that investigates whether practices can be stabilised after successfully changing current routines into more sustainable ones. Considering the evolving nature of practices, the development of less resource intensive practices seems more like an ongoing process.

but are also reinforced through the development of well-established feedback loops in the product development process. This is particularly the case when consumer research indicates how products should be made and used and the hair and beauty companies feel obliged to conform to these ideas and the 'needs' that the market research articulates.

The work with Boots indicated that it is consumers' various ideas about products and articulated 'needs' that are interpreted as product benchmarks and which are kept in place through institutionalised feedback loops. Similarly, Boots' corporate social responsibility strategies rely heavily on the 'needs' consumers articulate and concentrate on visualising the environmental impact of their actions to consumers so that they are able to make sustainable choices. Theories of demand that are applied in current product development processes and market research strategies often respond to 'needs' consumers articulate (Shove et al 2007) without reflecting on why these needs arise in the first place (see chapter 3 above). They are mainly interested in consumers' decision-making processes at the point of sale, and do not feel in a position to change certain well-established product features and therefore treat consumption and production as if they were separate, despite the fact that their own consumer research activities cross between them. Shove et al (2007) have argued that companies and their designers do not 'innocently' meet the needs consumers articulate but also configure them. From a practice-orientated perspective, needs arise through practices and are therefore flexible. Whilst applying a practice-orientated approach to the investigation of everyday practices, designers might treat consumers' articulated needs as flexible (Shove et al 2007) and consider the design process as interlinked with consumption beyond the point of sale (Ingram et al 2007). They might also be able to create 'disagreements' between producers and consumers on current 'closures' of how products are used and made. The resulting renegotiation of 'closures' could destabilise current resource intensive hair care practice and other practices then 're-close' them around less but also potentially more resource intensive routines.

Practices also develop autonomously from the production process, as they evolve through their reproduction in everyday life (McMeekin and Southerton 2005). They can, for instance, intersect with other practices (Warde 2005; Julier 2007), meaning the elements of one practice appear in others with which it intersects. This research has outlined some of the

ways practices impact on one other (such as in chapter 4). These entanglements potentially have an effect on the stability of a practice and are therefore important to recognise. Similarly, Julier (2007) has proposed that designers might not only investigate an individual practice but, in particular, how practices are ‘nested’ within each other, as they can both conflict with each other and depend on each other. The findings of this study empirically verify that practices do intersect with each other: for instance, the practice of bathing (chapter 4), the spatial ordering of products (chapter 6) and mothering¹³¹ (chapter 8) intersect with the practice of hair care. These relationships create dependencies that reinforce the performance of each practice in everyday life and can create conflicts, as advocated by Julier (2007).

In this study, women tended to consider the practices of bathing and hair care as separate, although parts of each are usually conducted at the same time. This shows that even though practices are considered separate, they may still be entangled in everyday life beyond their temporal connection. Some elements of practices that are otherwise considered separate can be shared, such as ideas about what it is to feel refreshed that appear in both bathing and hair care. This intersection between bathing and hair care has potentially impacted on increased hair washing over the years, as the shared idea reinforces the performance of both practices. These findings have demonstrated that it is not only the practice as a whole or its constitutive activities that can depend on other practices, as assumed by Julier, but also some of the elements can intersect, as proposed by Warde (2005) in practices usually considered as separate. Although designers may be aware of some of the ‘entanglements’ between practices, such as objects that are used for different practices, it requires research of this sort to make them evident enough that design can work with them in a thorough way.

In the light of these findings, one question occurs about the potential for design to change practices: how to define the interconnection points and therefore the boundaries of a practice under investigation if various practices impact on each other in sometimes subtle ways. Julier has proposed that the development of the boundaries of a practice through its associated products provides designers with a way of thinking beyond individual products and users, identifying the various complexes of products that belong to the practice. Such a

¹³¹ The relationship between mothers and daughters in relation to their hair and hair care were discussed in chapter 8, starting from section: ‘Like mother, like daughter?’.

product-focused approach to determining practice boundaries and interconnections might be useful in developing design innovations, but to facilitate changes to practices in order to promote sustainability that strategy could be questioned. This research has shown that practices, such as hair care, are likely to be linked not only through products but also through various other elements, creating connections that potentially reinforce resource intensive ways of living. Warde (2005) and Christensen and Ropke (2005) have argued that currently practice theory only provides a vague indication of the boundaries of practices and their interconnectedness. The findings from this research suggest that further research is required to explore the interrelationships of these entanglements at the borders and intersection between practices. They potentially aid the process of destabilising practices at the points they interconnect to facilitate changes towards potentially less resource intensive practices. Julier (2007) advocates how this process could be encouraged through the process of design.

The potential for design to bring about change in practices through an investigation of both the practice itself and related activities is evident in spatial arrangements of hair care products and tools (chapter 6). This thesis offers an understanding of the interconnectedness of spatial practices and the practice of hair care. Various aspects of the practice are interwoven; the doing of hair, the creation of hair spaces and the spatial ordering of hair items that help to create hair care routines and to reinforce the practice. Hair care products and tools play a part in configuring and organising ways of dealing with hair, as women integrate and exclude various products from their hair care practice. As Shove et al (2007) note, 'having and doing' have a bearing on each other and on the practice as a whole. The findings of this thesis also show that not only are 'having and doing' linked, but that the spatial ordering of products affects what women do. For example, women's 'spatial and temporal orderings'¹³² of products and tools by their frequency of use organise not only their hair care routine but also their lives in general. Conversely, the arrangement of products and tools around the home can potentially disorder not only spaces but also women's hair routines if their quantity is overwhelming.

¹³² 'Spatial and temporal orderings' refer to a spatial ordering that derives from the frequency with which products and tools are used. These spatial orderings are temporally driven, as discussed in chapter 6.

The 'spatial and temporal ordering' of products and tools by the frequency of their use, illustrated the varying degrees to which the practice of hair care is routinised, from habitual to less habitual. One of the key tenets of a practice-orientated approach is that it emphasises the routine nature of practices, which are often connected with routine ways of performing activities (Reckwitz 2002). Gregson et al (2007b: 188) have argued that such an assumption often fails to notice that "practices are embedded in social lives" and therefore in the case of women's hair care will not necessarily stay constant throughout a woman's lifetime. Practices are not only destabilised throughout a women's lifetime but that their stability is also influenced by the different ways of performing the practice in distinct rhythms, such as daily hair care and hair care for special occasions. Shove (2009a) has criticised sustainable consumption literature that considers habits and their routine enactment as barriers to change to more sustainable behaviours in everyday life. She questions the consideration of habits as "external drivers of behaviours" as if "there is some invisible habit that drives" behaviours and therefore create barriers. Instead she suggests defining habits as routinised "practices characterised by distinctive forms of regularity and persistence" (Shove 2009a: 3). This change of emphasis encourages an examination of the dynamics that exist in routine performances of practices. Routines stabilise activities, but the reproduction of routines can also change them (Shove and Pantzar 2005). For example, these changes can occur whenever women re-discover less frequently used hair products (such as a hairspray that is only used on holiday).

In addition to the daily performance, there are a variety of ways of doing hair that are done repetitively as part of the practice, but not daily. Regular but infrequent performances, such as doing things with hair for special occasions, often instigate a change to the hair's look and feel. These sensual experiences often transform how women feel about themselves. The change to the hair care routine is welcomed as the experience is considered positively. They allow women to break out of their more regular daily routine. A crucial part of such 'ruptures' is the interplay between what women do routinely and what they do 'out of their daily routine' because they are interdependent. This interdependence was examined in chapter 7, particularly on Odette's example, as she tried to negotiate her newly cut fringe with her regular routine. She tried to 'tame' the 'rupture' to her routine inflicted by the new cut.

Such ‘ruptures’ are potentially great opportunities to change practices and they can be instigated through the material arrangement of routines; through design (Southerton et al 2007).¹³³ This research has however shown that women resist ‘ruptures’, to avoid them or prevent them from reoccurring. For example, the agency of hair can potentially create ‘hair disasters’ that tend to repeat themselves in everyday life, exemplified by Monica’s description of her hair changing on her way to work on a rainy day. These ‘disasters’ are dealt with through various back-up plans or strategies that women know work for their hair, and that aid their resistance to potential changes. ‘Ruptures’ seem to be part of the practice, as women learn to deal with them and can potentially reinforce the current practice instead of transforming it. This is an instance of the dialectical character to the factors that influence the stability of practices that emerged. Considering the factors that impact on the practice of hair care, further research is needed into the interrelationship of the varying rhythms of the performance of the practice in everyday life and how they impact on each other to either reinforce routines or to facilitate change.

Aspects of the multi-relational elements of the practice of hair care

A practice-orientated approach brings the reproduction and integration of the multi-relational elements that make up a practice to the foreground. As the elements of a practice co-evolve, its changing configuration can destabilise or stabilise the enactment of routines. This section summarises the thesis contribution by outlining the understanding of the multi-relational elements it develops, particularly focusing on the material aspects, competences and social relations of practices. Shove et al (2007) have argued that although it is important to acknowledge the interrelationship between elements, the role of things in practices seems to be underdeveloped. To examine the material aspect of the practice of hair care, while drawing on practice theory, this thesis turned to work in material culture, in particular Miller’s (1987) concept of objectification, Gell’s (1998) writing on the agency of objects and Merlau-Ponty’s (1962) notion of embodiment in the ‘Phenomenology of Perception’.

¹³³ Future design research could incorporate methods that seek to ‘rupture’ people’s everyday practices, such as ‘breaching experiments’ (Crabtree 2004; Garfinkel 1963), ‘cultural probes’ (Gaver et al 2004) and methods associated with the art movement situationism (Leahu et al 2007) in order to examine their potential in changing everyday practices. For example, ‘breaching experiments’ are experiments set by the researcher that seek to examine people’s reactions to breaches of commonly accepted social norms.

The materiality of hair and its products and tools are closely linked with the material interactions between the body and the hair, which determine how, and how often, women do things with their hair and therefore the amount and type of resources consumed.

Practice theory breaks away from a Cartesian dualism of immaterial mind and material body. The body is not regarded as a mere instrument that is used to conduct various activities. Women “learn how to be bodies” (Reckwitz 2002: 251), which involves mental and emotional activities. This research makes apparent that when considering practices as embodied, not only the mental and emotional activities transpire but also the sensual and material ones that in the practice of hair care are closely linked to women’s emotions and past experiences. The emotional dimension of day-to-day interactions with hair governs feelings about its appearance and ideas of what it is to have acceptable hair that are triggered by sensual and material interactions. When the practice of hair care is considered phenomenologically, as an embodied practice, the significance of sensual interactions and their potential role in a practice-orientated approach become apparent. These sensual interactions are critical in understanding the dynamics of change in practices. They can conflict with the elements of the practice of hair and with each other. Women often have to deal with these conflicts, potentially destabilising but more often stabilising the practice, as they are part of its dynamics in everyday life. Women often know how to deal with these conflicts (chapter 4).

Examining these sensual interactions has also shown that the boundaries between the body and the hair often shift, as the hair is, on the one hand, attached to the body but, on the other, it can be experienced as ‘non-body’, which draws attention to the agency of hair (chapter 5). The hair is not passive; its social, biological and emotional dimensions actively impact on the intentions of the woman and how often they deal with it. Shove et al (2007) argue that, in a materialised theory of practice, things should be regarded as having an active role in the configuration of everyday practices. Although hair is not a ‘thing’ and cannot be experienced the same way as external objects, it can be perceived as a ‘non-body’ it not passive and therefore influences how routines are performed. The agency of hair is mediated through hair care products and tools, which, as complexes of things play an active role in women’s hair routines. They aid the process of women being able to assert ‘control’ over

their hair or failing to do so. This thesis has argued that from the point of view of this co-agentic interrelationship, what women do with their hair and how often, is not necessarily derived from their individual preferences, as is sometimes assumed in sustainable consumption approaches, but that the practice of hair care is bounded by various constraints (chapter 5). A ‘materialised’ practice-orientated approach uncovers such constraints and therefore provides a remedy to the deficiencies of positioning people as only decision-makers. The notion of the co-agency of people and their hair might also relate to other practices concerned with the care of the body and practices where the boundaries between the ‘body’ and the ‘person’ can be blurred. These boundaries are therefore also important to recognise when creating innovations to change practices.

To examine the materialised aspects of the practice of hair care and to explain the role of hair care products when women wear their hair and while they deal with it, the research drew on the work of Dant (2005) on material interactions. Like other products that change their viscosity in use, hair care products influence routines through product cues that are partly determined through what they are made of, such as the relationship between the consistency of conditioners and the frequency of their use (as exemplified on Holly’s example in chapter 7). Moreover, the linkages between sensual product cues and ideas of what products do to the hair became apparent through investigating material interactions with hair care products. These linkages are significant because they configure ways of dealing with the hair, including action sequences to confirm that products are ‘doing their job’, such as when the lather of shampoo verifies that the hair is being cleaned and that it can be rinsed out after enough lather has been created. Because some of the links between sensual product cues and ideas of what products do to the hair are well-established, the development of new links is not always straightforward. For example, Boots’ attempts to link hair shampooing temperatures with the health of hair to encourage more sustainable behaviours did not consider the various conceptions of ‘health’ that exist in everyday life. What is acceptable hair can be based on various conceptions of ‘health’ that can potentially conflict with each other, as demonstrated (in chapter 5 above). The development of individual products to impact on certain processes and ideas of what products do to the hair to encourage more sustainable behaviours seems to be a near to impossible undertaking, as the effects of products on everyday practices are difficult to control or foresee (Shove et al

2007). Still, well-established links between tangible product cues and ideas of what products do to the hair exist that might not have been intentionally designed but currently happen to keep certain aspects of the practice in place. It may be then, that design could break some of the existing links rather than try to ‘control’ the development of new ones. Further research would need to establish what role tangible product cues could play in the development of the future practice of hair care.

The active role of hair care products and tools to shape the hair care practice is not only based on cues during their use but also on their disposition and ownership that generate various predicaments that women have to deal with. These predicaments impact on how women feel about their hair and hair care routines as they shape and reinforce the practice of hair care (chapter 6). For example, the existence of a product that has not been integrated into the hair care routine might provide a constant reminder of failing to achieve expectations of what it is to deal with hair and have hair that is considered acceptable. Moreover, balancing the use of different products on the hair requires women to eradicate certain unwanted substances from the hair whilst restoring others. These actions to balance substances and the constant reminders of possible variations to routines that are provided by unused hair care products are interconnected with ideas and emotions that are part of the practice and depend on how women shape and reinforce hair care routines. The fact that hair care products influence the activities involved in doing things with hair and the experiences of wearing suggest that designers have a role to play in configuring of the practice of hair care. At the same time, the research also suggests that product cues, affordances and the predicaments caused by hair care products and tools are interconnected with ideas, emotions and competences and therefore, on their own, material interventions through design might not be enough to have an impact on the overall practice.

For Shove et al (2007: 143), competences to conduct everyday practices are “frequently distributed between persons and things”, the relations between markets in products and services, and the role of ‘experts’ all have implications on the practice as a whole. This research has shown that competences that were previously embodied in women to deal with their hair have been redistributed into products and tools. It therefore confirms Shove’s et al (2007) conclusion but also shows some of the limitations of this distribution (chapter 7).

This distribution means women can achieve some standards in hair more easily without the aid of an 'expert', potentially questioning the 'expert' role and assumptions about what women can do to their hair themselves. In spite of this development, the progress from 'straight' to 'poker straight' hair and the levels of coordination required to work on one's own hair suggest that just as there may be limits in these distributions in relation of the practice of hair care, there may also be for other practices. These limitations have implications for the development of products and services and frequently keep the 'expert' role of hair in the hands of hairdressers, as women still to some extent dependent on their services.

Despite the degree of autonomy that the distribution of skill between person and things, through the development of products and tools, may bring about, the role of hairdressers persists. Boots' use of celebrity hairdressers to promote some of their product ranges is evidence for this, which suggests that in order to change current hair routines one might require the expert role of the hairdresser to be integrated with the development of alternative standards and routines. When examining the practice of hair care through the various social interactions involved (Halkier 2006; Christensen and Ropke 2005), it becomes apparent that women's dependence on the hairdresser includes tensions that make the relationship ambivalent (chapter 8). The 'expert' role of the hairdresser is mainly represented by women through expressing the feeling that they lose control over both their hair and their sense of self at the hairdressers. The expert role is therefore frequently resisted as soon as the woman leaves the salon. This thesis has demonstrated that women's hair and even hair care routines are affected by their fear of losing their sense of self. Both may require a 'leap of faith', as possible outcomes are uncertain, the investment of trust and a willingness to take certain risks. Considering the link between things and competences it seems that designers have a role to play in the development of products and services and, through them, on the formation of social relations. Designers could encourage the building of trust between women that can lead to changes in hair care routines but also need to consider the tensions in some current relationships. Although in theory social interactions seem to play a part in changing everyday hair care routines, interventions that prioritise social interactions in order to reconfigure the practice of hair care have yet to show their impact.

Scope of the research and possible future research

Having detailed the interrelationship between the findings of this research in relation to existing research on practice theory and sustainable design, this final section reflects on the scope of this research and possible future research.

As outlined above, the thesis has provided an understanding of the current practice of hair care but has not been able to explore in any great depth the forces that have changed the practice over time. An in-depth historical analysis or longitudinal study of hair care would be required to determine these forces. Although such studies might be of significance in order to develop theoretical insights of how practices change over time, it is not clear whether an understanding of such forces would aid the process of developing design innovations to change practices into more sustainable ones. Another limitation to the research is a consequence of its scope which is based on an examination of the current practice. The limitation lies in not being able to conclusively determine whether a practice-orientated approach can generate innovations that lead to less resource intensive practices in everyday life, because the research did not consider design interventions that encourage less resource intensive practices in everyday life. However, results of the research can be used as the basis of developing interventions that could potentially benefit Boots' corporate social responsibility strategy. The work conducted during the workshop as well as the insights gained on the stability and instability of practices could provide some viable starting points for such interventions. Such work would require further research on how to incorporate a practice-orientated approach into the design process.

Attempts to link practice theory with design processes, some of which address issues surrounding sustainable design, have occurred concurrent with this research. For instance, Scott (2008) investigated ways to merge a practice-orientated approach with ideas of co-design, Munneke (2007) incorporated the concept of practice into a framework for design to conceptualise the dynamics of everyday life, and, at Lancaster University, McHardy is currently exploring concepts of diversity in design. The in-depth understanding of the current practice of hair care that this study has established sets the scene for further research to explore the role of ethnographic material in companies such as Boots the Chemist, as well

as design-led methods that link practice theory and design processes. In addition to exploring more practical implications of practice theory in order to develop design innovations, it might be beneficial to conduct more explorative and empirical research to develop the conceptions of practice theory. Research that is concerned with the integration of practice theory in the design process might simplify some of the complexities associated with practice theory and its conception. Whichever approach is taken, an exchange between explorative research projects should be encouraged in order to avoid a reductionist application of practice theory to sustainable design, which might therefore be no more than the solution-based approaches that this thesis has critiqued.

Another aspect of the study presented here that could be further explored, especially by academics in the social sciences, is the significant lack of work that studies hair (as argued by Cox 1999 and McCracken 1997) and other related practices surrounding the body. Further studies could explore in more depth how the materiality of the mundane aspects of the practice of hair care encodes identities, gender, fashion and social relationships. These studies could go beyond the visual aspects of the body and hair, images of fashion and their symbolic meaning and examine their materiality and the embeddedness of these practices in everyday life. This research has illustrated how the process of dealing with hair interlinks with the end result and therefore an understanding of the symbolic, ritualistic and religious nature of hair does not represent the full story of hair. Nottingham Trent University's art and design department and Sheffield University's department of geography plan to build on this study¹³⁴, with the aim to combine a design and social science approach to 'glamour practices'. The proposed study will empirically explore practices surrounding hair and nail extensions both on the micro level of the professional salon and the woman who lives with it in her everyday life, as well as on the macro level of the global hair and nail extension trade with its various actors, technologies and processes. It will examine how these phenomena relate to social science and design concerns, such as health, social and ethical issues connected to these practices.

¹³⁴ The proposed study builds on this thesis, as well as Helen Holmes's PhD work that is based upon an ethnography of women's hair salons.

Bibliography

- Akrich, M. (1992), 'The de-description of technical objects', in W. Bijker and J. Law. (eds), *Shaping Technology/ Building Society: Studies in Sociotechnical Change*, Cambridge, MA: MIT Press: 205-224.
- Appadurai, A. (ed.) (1986), *The Social Life of Things*, Cambridge: Cambridge University Press.
- Archer, B. (1995), 'The nature of research', *Co-design*, 2, 6-13.
- Arroy, E., Bonanni, L. and Selker, T. (2005), 'Waterbot: exploring feedback and persuasive techniques at the sink', in CHI 2005, Portland, Oregon, USA, 2-7 April 2005.
- Atkinson, P. (1992), *Understanding Ethnographic Texts*, California: Sage Publications Inc.
- Barr, S. (2003), 'Strategies for sustainability: citizens and responsible environmental behaviour', *Area*, 35 (3): 227-240.
- Barthes, R. (1972), *Mythologies*, London: Paladin.
- Baudrillard, J. (1968), *The System of Objects*, Cambridge: Policy Press.
- Beck, U. (1992), *Risk Society: Towards a New Modernity*, London: Sage.
- Berger, J. (1972), *Ways of Seeing*, London: Penguin Book.
- Bhamra, T. and Lofthouse, V. (2007), *Design for Sustainability*, Burlington: Ashgate.
- G. Biddle-Perry and S. Cheang (eds) (2008), *Hair: Styling Culture and Fashion*, Oxford: Berg Publishers.
- Bijker, W. (1992), 'The social construction of fluorescent lighting or how an artifact was invented in its diffusion stage', in W. Bijker and J. Law (eds), *Shaping Technology Building Society*, Cambridge, MA: MIT Press: 75-102.
- Bijker, W. (1997), *Of Bicycles, Bakelites and Bulbs: Towards a Theory of Sociotechnical Change*, Cambridge: MA: MIT Press.
- Birtwistle, G. and Moore, C.M. (2007), 'Fashion clothing – where does it all end up?', *International Journal of Retail and Distribution Management*, 35 (3): 210-216.
- Blevis, E. and Stolterman, E. (2008), 'The confluence of interaction design & design: from disciplinary to transdisciplinary perspectives', in Undisciplined! Design Research Society Conference 2008, Sheffield, UK, 16-19 July 2008.
- Bloustien, G. (2002), 'Far from sugar and spice: teenage girls, embodiment and representation', in B. Baron and H. Kotthoff (eds), *Gender in Interaction*

- Perspectives on Femininity and Masculinity in Ethnography and Discourse*, Amsterdam: John Benjamins Publishing Co: 99-138.
- Boess, S., de Jong, A., Kanis, H. and Rooden, M.J. (2008), 'Investigating designing: usage-orientated research in and through design', in Undisciplined! Design Research Society Conference 2008, Sheffield, UK, 16-19 July 2008.
- Boots the Chemist (2009), Our approach to CSR, from www.boots-uk.com (Accessed 14.08.09).
- Bordo, S. (2004), *Unbearable Weight: Feminism, Western Culture, and the Body*, London: University of California Press.
- Buchanan, R. (1995), 'Wicked problems in design thinking', in R. Buchanan and V. Margolin (eds), *The Idea of Design*, Cambridge, MA: MIT Press: 3-20.
- Burgess J., Bedford, T., Hobson, K., Davies, G. and Harrison, C. (2003), '(Un)sustainable consumption', in F. Berkhout, M. Leach and I. Scoones (eds), *Negotiating Environmental Change: New Perspectives from Social Science*, Cheltenham: Edward Elgar Publishing Limited: 261-292.
- Burgess J., Harrison, C.M. and Filius, P. (1998), 'Environmental communication and the cultural politics of environmental citizenship', *Environment and Planning A*, 30 (8): 1445-1460.
- Burgess R.G. (1984), *In the Field: An Introduction Field Research*, London: Allen and Unwin.
- Button, G. (2003), 'Studies of work in human-computer interaction', in J. M. Carroll (ed.), *HCI Models, Theories, and Frameworks: Toward a Multidisciplinary Science*, San Francisco, California and London: Morgan Kaufmann: 357-380.
- Campbell, C. (1997), 'Romanticism, introspection and consumption: a response to Professor Holbrook', *Consumption, Markets and Culture*, 1 (2): 97-196.
- Chapman, J. (2005), *Emotionally Durable Design: Objects, Experiences and Empathy*, London: Earthscan.
- Chapman, J. and Gant, N. (eds) (2007), *Designers, Visionaries and Other Stories: A Collection of Sustainable Design Essays*, London: Earthscan.
- Carbon Trust and L.E.K. Consulting (2006), Low carbon supply chain discussion of findings, for Alliance Boots.

- Charter, M. and Tischner, U. (eds) (2001), *Sustainable Solutions: Developing Products and Services for the Future*, Sheffield: Greenleaf.
- Cheang, S. and Biddle-Perry, G. (2008), 'Conclusion: hair and human identity', in G. Biddle-Perry and S. Cheang (eds), *Hair: Styling, Culture and Fashion*, Oxford: Berg Publishers: 241-254.
- Chodorow, N. (1987), *The Reproduction of Mothering: Psychoanalysis and the Sociology of Gender*, Berkeley and Los Angeles: University of California Press.
- Christensen, T.H. and Ropke, I. (2005), 'Can practice theory inspire studies on ICTs in everyday life?', 7th Conference of the European Sociological Association, Torun, Poland, 9-12 September 2005.
- Cieraad, I. (ed.) (1999), *At Home: An Anthropology of Domestic Space*, Syracuse: Syracuse University Press.
- Cooper, T. (2000), 'Product development implications of sustainable development', *Design Journal*, 3 (2): 46-57.
- Cooper, T. (2005), 'Slower consumption: reflections on product life spans and the 'Throwaway Society'', *Journal of Industrial Ecology*, 9 (1-2): 51-67.
- Cox, C. (1999), *Good Hair Days: A History of British Hairdressing*, London: Quartet Books.
- Crabtree, A. (2004), 'Design in the absence of practice: breaching experiments', Proceedings of the 5th conference on Designing Interactive Systems 2004, Cambridge, MA, USA, 59-68.
- Dant, T. (1999), *Material Culture in a Social World: Values, Activities and Lifestyles*. Buckingham: Open University Press.
- Dant, T. (2004), Think allowed: dirt and cleanliness, Radio programme, BBC Radio 4, London, 14 January 2007.
- Dant, T. (2005), *Materiality and Society*, Maidenhead: Open University Press.
- Dant, T. and Bowes, D. (2003), 'Dealing with dirt: servicing and repairing cars', *Sociological Research Online*, 8 (2): <http://scoresline.org.uk/8/2/dant.html>.
- Darnton, A. (2008), Behaviour change knowledge review – practical guide, Andrew Darnton for the Government Social Research Unit.
- De Certeau, M. (1984), *The Practice of Everyday Life*, California: University of California Press.

- De Certeau, M. (1998), *The Practice of Everyday Life Volume 2*, Minneapolis: University of Minnesota Press.
- Defra (2008), 'A framework for pro-environmental behaviours', Report, January 2008, from www.defra.gov.uk/evidence/social/behaviour/documents/behaviours-jan08-report.pdf.
- Defra (2009), 'Domestic water use', from www.defra.gov.uk/sustainable/government/progress/national/16.htm (Accessed 15.03.10).
- Defra and DTI (2003), *Changing patterns: UK government framework for sustainable consumption and production*, Department of Environment Food and Rural Affairs, London.
- Demos/Green Alliance (2003), 'Carrots, sticks and sermons: influencing public behaviour for environmental goals', Report produced for Defra, December 2003, from www.demos.co.uk/files/CarrotsSticksSermons.pdf.
- Deutscher, I. (1973), *What We Say/ What We Do: Sentiments and Acts*. Glenview: Scott, Foreman and Co.
- Dewberry, E. (1996), *Eco-design – present attitudes and future directions: studies of UK company and design consultancy practice*, PhD Thesis, Open University.
- Douglas, M. (1973), *Natural Symbols: Explorations in Cosmology*, London: Barrie and Rockliff: The Cresset Press.
- Douglas, M. (1984), *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*, London: Routledge.
- DTI (2002), 'Energy consumption in the United Kingdom', from www.berr.gov.uk/files/file11250.pdf (Accessed 15.03.10).
- Dunne, T. (1998), *Hertzian Tales*, London: Royal College of Art.
- Durning, P. (1992), *How Much is Enough*, New York and London: W. W. Norton & Company, Inc.
- Dus, C.A., Rudolph, M. and Civile, G.V. (1997), 'Sensory testing methods for claims substantiation', in L. B. Aust (ed.), *Cosmetic Claims Substantiation*, New York: Marcel Dekker: 211-234.
- Dwr Cymru Welsh Water (2009), 'Water efficiency', from www.dwrcymru.com/English/waterefficiency/school/_pdf/waterfacts.pdf.

- Edahiro, J. (2004), 'How to develop yourself to become an effective change agent', Sustainability Intensive: Tools and Methods for Accelerated Implementation, Imperial College, London, UK, 4th - 6th November 2004.
- Elgin, D. (1981), *Voluntary Simplicity: Towards a Way of Life that is Outwardly Simple, Inwardly Rich*, New York: William Morrow.
- Embree, A. (1970), 'Media imaged I: Madison Avenue brainwashing – the facts', in R. Morgan (ed.) *Sisterhood is Powerful: An Anthology of Writings from the Women's Liberation Movement*, New York: Vintage: 175-191.
- Entwistle, J. (2000), *The Fashioned Body*, Oxford: Polity.
- Eskeland, M.B., Svanes, E. and Sunsbj, L.K. (2005), 'Background report: third AHWG-meeting EU eco-label for shampoos and soaps', available at http://ec.europa.eu/environment/ecolabel/pdf/meetings/ahwg/backgrouns_aheg3.pfd (20.08.09).
- Fallmann, D. (2007), 'Why research-orientated design isn't design-orientated research: on the tensions between design and research in an implicit design discipline', *Journal on Knowledge, Technology and Policy*, 20 (3): 193-200.
- Fetterman, D.M. (1998), *Ethnography: Step-by-step*, Thousand Oaks: Sage.
- Fisher, T. (2008), 'Objects for peaceful disordering: indigenous designs and practices of protests', *The Design Journal* 11, (3): 221-238.
- Fisher, T., Cooper, T., Woodward, S., Hiller, A. and Goworek, H. (2008), Public understanding of sustainable clothing: a report to the Department for Environment, Food and Rural Affairs, DEFRA, London.
- Fiske, J. (1989), *Reading the Popular*, London and New York: Routledge.
- Fletcher, K. (2008), *Sustainable Fashion and Textiles: Design Journeys*, London: Earthscan.
- Fletcher, K., Dewberry, E. and Goggin, P. (2001), 'Sustainable consumption by design', in M. Cohen and J. Murphy (eds), *Exploring Sustainable Consumption: Conceptual Issues and Policy Perspectives*, London: Elseiver: 213-224.
- Fletcher, K. and Goggin, P. (2001), 'The dominant stances on ecodesign: a critique', *Design Issues*, 17 (3): 15-25.
- Foucault, M. (1979), *Discipline and Punish*, New York: Pantheon.

- Friedman, K. (2000), 'Creating design knowledge: from research into practice', Proceedings of the International Conference of Design and Technology Education IDATER 2000, Loughborough University, UK, 5-32.
- Fuad-Luke, A. (2006), 'Reflective consumption: slowness and nourishing rituals of delay in anticipation of a Post-Consumer Age', Design for Durability, Seminar at the Design Council, London, 11 April 2006.
- Garfinkel, H. (1963), 'A conception of, and experiments with, "trust" as a condition for stable concerted actions', in J.J. Harvey (ed.), *Motivation and Social Interaction*, New York: Ronald Press: 187-238.
- Garfinkel, H. (1967), 'Ethnomethodology's programme', *Social Psychology Quarterly*, 59, (1): 5-21.
- Gaver, W.W., Boucher, A., Pennington, S. and Walker, B. (2004), 'Cultural probes and the value of uncertainty', *Interactions* 11, (5): 53-56.
- Gell, A. (1998), *Art and Agency: Towards an Anthropological Theory*, Oxford: Clarendon Press.
- Gibson, J.J. (1977), *The theory of affordance*, in R. Shaw and J. Bransford (eds), *Perceiving, Action and Knowing: Towards an Ecological Psychology*, Hillsdale, Erlbaum: 67-82.
- Giddens, A. (1984), *The Constitution of Society*, Cambridge: Polity Press.
- Giddens, A. (1990), *The Consequence of Modernity*, Stanford and California: Stanford University Press.
- Giddens, A. (1991), *Modernity and Self-identity: Self and Society in the Late Modern Age*, Cambridge: Polity
- Glendinning, S. (1999), *The Edinburgh Encyclopaedia of Continental Philosophy*, Edinburgh: Edinburgh University Press.
- Goffman, E. (1971), *The Presentation of Self in Everyday Life*, London: Penguin.
- Goffman, E. (1974), *Frame Analysis: An Essay on the Organization of Experience*, Harmondsworth: Penguin.
- Gregson, N. and Crewe, L. (2003). *Second-hand cultures*. Oxford, Berg.
- Gregson, N., Metcalfe, A., Crewe, L. (2007a), 'Identity, mobility and the throwaway society', *Environment and Planning D: Society and Space*, 25 (4): 682-700.

- Gregson, N., Metcalfe, A., Crewe, L. (2007b), 'Moving things along: the conduits and practices of divestment in consumption', *Transactions of the Institute of British Geographers*, 32 (2): 187-200.
- Groncow, J. and Warde, A. (2001), *Ordinary Consumption*, Reading: Harwood.
- Halkier, B. (2006), 'Preserving preserving? Cooking practices in medialised everyday life', paper presented at European Sociological Association Consumption Study Group Research Gathering, Durham, UK, 30. August – 1. September 2006.
- Hammersley, M and Atkinson, P (1995). *Ethnography: Principles in Practice*. London: Routledge.
- Hand, M., Shove, E. and Southerton, D. (2005), 'Explaining showering: a discussion of the material, conventional, and temporal dimensions of practice', *Sociological Research Online*, 10 (2): from www.socresonline.org.uk/10/2/hand.html.
- Heijns, W. J. M. (2006), 'Household energy consumption: habitual behaviour and technology', in P. P. Verbeek and A. Slob (eds), *User Behaviour and Technology Development: Shaping Sustainable Relations Between Consumers and Technologies*, Dordrecht: Springer: 149-156.
- Heiskanen, E. and Pantzar, M. (1997), 'Towards sustainable consumption: two new perspectives', *Journal of Consumer Policy*, 20 (4): 409-422.
- Hemmings, T. and Crabtree, A. (2002), *Ethnography for design?*, Proceedings of the International Workshop on "Interpretive" Approaches to Information Systems and Computing Research, London, Association of Information Systems: 122-124.
- Hielscher, S. and Fisher, T. (2008), 'Are you worth it? Can you fix it? Investigating the sustainability of mundane activities using theories of everyday practice and human/object interactions', paper presented at the Changing the Change Conference, Turin, Italy, 10-12 July 2008.
- Hinchliffe, S. and Woodward, K. (eds) (2004), *The Natural and the Social: Uncertainty, Risk, Change*, London: Routledge in association with The Open University.
- Hirschl, B., Konrad, W. and Scholl, G. (2003), 'New concepts in product use for sustainable consumption', *Journal of Cleaner Production*, 11: 873-881.
- HM Government (2005). *Securing the future – UK Government sustainable development strategy*, London: Defra.

- Hobson, K. (2002), 'Competing discourses of sustainable consumption: Does the 'rationalisation of lifestyles' make sense?', *Environmental Politics*, 11 (2): 95-120.
- Hockey, J. (2002), 'Interviews as ethnography? Disembodied social interaction in Britain', in N. Rapport (ed.), *British Subjects: An Anthropology of Britain*, Oxford: Berg: 209-222.
- Holbrook, M. B. (1995), 'The role of introspection', in R. W. Belk, N. Dholokia and A. Venkatesh (eds), *Consumption and Marketing: Macro Dimensions*, Cincinnati, South-Western College Publishing: 35-82.
- Hollway, W. and Jefferson, T. (2000), *Doing Qualitative Research Differently: Free Association, Narrative and the Interview Method*, London: Sage.
- Hoskins, J. (1998), *Biographical Objects: How Things Tell the Stories of People's Lives*, New York and London: Routledge.
- Hoskins, J. (2006), Agency, biography and objects, in C. Y. Tilley (ed.), *Handbook of Material Culture*. London: Sage: 74-84.
- Hughes, J., King, V., Rodden, T. and Andersen, H. (1995), 'The role of ethnography in interactive system design', *Interactions*, 2 (2): 56-65.
- IDEO (2009), Mobility, from www.ideo.com (Accessed 19.10.09).
- Illich, I. (1977), *Towards a History of Needs*. New York: Pantheon Books.
- Ingram, J., Shove, E. and Watson, M. (2007), 'Products and practices: selected concepts from science and technology studies and from social theories of consumption and practice', *Design Issues*, 23 (2): 3-16.
- Jackson, T. (2005), *Motivating Sustainable Consumption: A Review of Evidence on Consumer Behaviour and Behaviour Change*, London: Policy Studies Institute.
- Jackson T. (ed.) (2006). *The Earthscan Reader on Sustainable Consumption*. London: Earthscan.
- Jackson, T., Jager, W., Stagl, S. (2004), 'Beyond insatiability - needs theory, consumption and sustainability', in L. Reisch and I. Ropke (eds), *The Ecological Economics of Consumption*, Cheltenham: Edward Elgar.
- Jackson, T. and Michaelis, L., (2003), *Policies for Sustainable Consumption*, London: Sustainable Development Commission.
- Jackson, S. and Moores, S. (1995), *The Politics of Domestic Consumption*, London: Prentice Hall.

- Jelsma, J. (1999), 'Towards a sustainable society: the moralising machines?', paper presented at 4S annual conference, San Diego, 27-30 October 1999.
- Julier, G. (2007), 'Design practice within a theory of practice', *Design Principles and Practices: An International Journal*, 1 (2): 43-50.
- Kalof, L. and Satterfield, T. (eds) (2005), *The Earthscan Reader in Environmental Values*, London: Earthscan.
- Kemna, R., van Elburg, M., Li, W. and van Holsteijn (2007), 'Eco-design of water heaters, from www.eup-richtlinie.at/download/lot2/task5.pdf.
- Kingsley, P. (2003), *The Hair Bible*. London: Aurum.
- Kvale, S. (1996), *InterViews: An Introduction to Qualitative Research Interviewing*, London: Sage.
- Larsen, K.R.T., McInerney, C.R., Nyquist, C., Santos, A. and Silsbee, D.L. (2002). 'Learning organizations: a primer for group facilitators', *Group Facilitation: A Research & Application Journal*, 4: 30-44.
- Latour, B. (1992), 'Where are the missing masses? The sociology of a few mundane artefacts, in W. Bijker and J. Law (eds), *Shaping Technology/ Building Society*. Cambridge, MA: MIT press: 225-258.
- Leahu, L., Pederson, C., Thom-Santelli, J., Dmitriev, P. and Sengers, P. (2007), 'Uptake of situationism considered harmful', Proceedings of CHI-2007 Conference 2007, San Jose, CA, USA, April-May 2007.
- Lebbon, C., Rouncefield, M. and Viller, S. (2003), 'Observation for innovation', in P. J. Clarkson, R. Coleman, S. Keates and C. Lebbon (eds) *Inclusive Design: Design for the Whole Population*, New York and London: Springer: 402-419.
- Lefebvre, H. (1991 [1974]), *The Production of Space*, Oxford: Blackwell.
- Levi-Strauss, C. (1966), *The Savage Mind*, London: Weidenfeld and Nicholson.
- Lewis, J. (2003). 'Design issues', in J. Ritchie and J. Lewis (eds), *Qualitative Research Practice*, London: Sage: 47-76.
- Light, A. (2006), 'Adding method to meaning: a technique for exploring peoples' experience with technology', *Behaviour & Information Technology*, 25 (2): 175-187.
- Lilley, D. (2007), *Designing for behaviour change: reducing the social impact of product use through design*, PhD. Thesis. Loughborough University.

- Lilley, D, Lofthouse, V. and Bhamra, T. (2005), 'Towards instinctive sustainable product use', 2nd International Conference: Sustainability Creating the Culture, Aberdeen, UK 2-4 November 2005.
- Lorek, S. and Spangenberg, J. H. (2001), 'Environmentally sustainable household consumption', Working paper 117, Wuppertal Institute, Germany.
- Luhmann, N. (1979), *Trust and Power*, Chichester, Wiley.
- Lupton, D. (1998), *The Emotional Self: A Sociocultural Exploration*. London: Sage.
- Manzini, E. and Jegou, F. (2003), *Sustainable Everyday. Scenarios of Urban Life*, Milano: Edizioni Ambiente.
- Marchand, A. (2004). 'Sustainable users and the world of objects', in E. Van Hinte (ed.), *Eternally yours: Time in design*, Rotterdam: 010 Publishers: 102-131.
- Margolin, V. (2002), *The Politics of the Artificial*, Chicago: University of Chicago Press.
- Maslow, A. (1954), *Motivation and Personality*, New York: Harper & Row.
- Mason, J. (2002), *Qualitative Researching*, London: Sage.
- Max-Neef, M. (1991), *Human-Scale Development – Conception, Application and Further Reflection*, London: Apex.
- McCracken, G. (1997), *Big Hair*, London: Indigo.
- McKenzie-Mohr, D. and Smith, W. (1999), *Fostering Sustainable Behaviour: An Introduction to Community-Based Social Marketing*, Gabriola Island, BC: New Society.
- McMeekin, A. and Southerton, D. (2005), 'Innovation and final consumption: social practices, institutional modes of provision and intermediation', CIRC Discussion paper No 97, University of Manchester.
- McQuarrie, E.F. (2005), *The Market Research Toolbox: A Concise Guide for Beginners*, London: Sage.
- McRobbie, A. and Garber, J. (1976), 'Girls and subcultures: an exploration', in S. Hall and T. Jefferson (eds), *Resistance Through Rituals*, London: Hutchinson: 209-222.
- Merleau-Ponty ([1945] 1962), *Phenomenology of Perception*, London: Routledge.
- Merleau-Ponty (1976), *The Primacy of Perception*, Evanston and Chicago: Northwestern University Press.
- Michaelis, L. (2003), 'The Oxford Commission on Sustainable Consumption', *Journal of Cleaner Production*, 11(8): 931-933.

- Millen, D.R. (2000), 'Rapid ethnography: time deepening strategies for HCI field research', DIS '00: Proceedings of the Conference on Designing Interactive Systems, ACM Press: 280-286.
- Miller, D. (1987), *Material Culture and Mass Consumption*, Oxford: Basil Blackwell.
- Miller, D. (2004), How infants grow mothers in North London, in J. S. Taylor, L. L. Layne and D. F. Wozniak (eds), *Consuming Motherhood*, New Jersey: Rutgers: 31-54.
- Miller, D. (ed.) (2005), *Materiality*, London: Duke University Press.
- Miller, D. (2006), 'The poverty of morality', in T. Jackson (ed.), *The Earthscan Reader on Sustainable Consumption*, London: Earthscan: 225-243.
- Miller, J. (2008), 'Hair without a head: disembodiment and the uncanny', in G. Biddle-Perry and S. Cheang (eds), *Hair: Styling, Culture and Fashion*, Oxford: Berg: 183-192.
- Mintel (2005), *Hairstyling aids*, Mintel International Group Ltd.
- Mintel (2007), *Shampoo and conditioner*, Mintel International Group Ltd.
- Molotch, H. (1993), 'The space of Lefebvre', *Theory and Society*, 22 (6): 887-895.
- Molotch, H. (2003), *Where Stuff Comes From: How Toasters, Toilets, Cars, Computers and Many Other Things Come to Be As They Are*, London: Routledge.
- Munnecke, M. (2007), 'Future practices: co-shaping everyday life', from www.idsa.org/pdfs/2007_NES/A150-Munnecke-Future_Practices.pdf.
- Munro, M. and Madigan, R. (1999), 'Negotiating space in the family home', in I. Cieraad (ed.), *At Home: An Anthropology of Domestic Space*, Syracuse: Syracuse University Press: 107-118.
- National Audit Office (2008), 'Programmes to reduce household energy consumption', Report produced for the House of Commons, June 2008, from www.official-documents.gov.uk/document/hc0708/hc11/1164/1164.pdf.
- Norman, D.A. (1988), *The Psychology of Everyday Things*, New York: Basic Books.
- Nvivo (2006), *Qualitative data analysis software*, QSR International Pty Ltd. Version 7.
- OECD (2002), *Towards sustainable household consumption? Trends and policies in OECD countries*, Organisation for Economic Cooperation and Development Report.
- Oliver, P. (2003), *Writing your thesis*, London: Sage Publications.
- Overbeeke, C., Djadjadiningrat, J., Wensvee, S. and Hummels, S. (2002), 'Beauty in usability: forget about ease of use!', in O. Jordan and W. Green (eds), *Pleasure with Products: Beyond Usability*, London and Philadelphia: Taylor and Francis: 9-19.

- Papanek, V. (1985). *Design for the Real World: Human Ecology and Social Change*, London: Thames & Hudson.
- Parliamentary Office of Science and Technology (2007), 'Electronic waste', from www.parliament.uk/documents/upload/postpn291.pdf.
- Peattie, K. (1999), 'Greener marketing: shifting to a greener paradigm', in M. Charter and M. Polonsky (eds), *Greener Marketing*, Greenleaf Publishing: 57-71.
- Petitmengin, C. (2006), 'Describing one's subjective experiences in the second person: an interview method for the science of consciousness', *Phenomenology and the Cognitive Sciences*, 5 (3-4): 229-269.
- Priest, S. (2000), *The Subject in Question*, London and New York: Routledge.
- Prosser, J. and Schwartz, D. (1998). 'Photographs within the sociological research process', J. Prosser (ed.). *Image-Based Research: A Sourcebook for Qualitative Researchers*, London: Falmer: 115-130.
- Quitza, M. B. and Ropke, I. (2008). 'The construction of normal expectations', *Journal of Industrial Ecology*, 12 (2): 186-206.
- Reckwitz, A. (2002), 'Towards a theory of social practice', *European Journal of Social Theory*, 5 (2): 243-263.
- Redclift, M. (1996), *Wasted: Counting the Costs of Global Consumption*, London: Earthscan.
- Reynolds, J. (2004), *Merleau-Ponty & Derrida: Intertwining Embodiment & Alterity*, Athens: Ohio University Press.
- Richardson, J., Irwin, T. and Sherwin, C. (2005), Design & sustainability. A scoping report for the sustainable design forum, 27 June 2005, Design Council, UK.
- Ritchie, J. and Lewis, J. (eds) (2003), *Qualitative Research Practice*, London: Sage.
- Rodriguez, E. and Boks, C. (2005), 'How design of products affects used and vice versa: the environmental implications', in Environmentally Conscious Design and Inverse Manufacturing 2005, 12-14 December 2005.
- Rogers, E.M. (1983), *The Diffusion of Innovation*, New York: Free Press.
- Ropke, I. (2009), 'Theories of practices – new inspiration for ecological economy studies in consumption', *Ecological Economics*, 68 (10), 2490-2497.
- Rubin, H.J. and Rubin, I.S. (2004), *Qualitative Interviewing: The Art of Hearing Data*, 2nd edition, London: Sage.

- Rust, C. (2004), 'Design enquiry: tacit knowledge and invention in science in design' *Design Issues*, 20 (4): 76-85.
- Salvador, E., Bell, G. and Anderson, K. (1999), 'Design ethnography', *Design Management Journal*, 10 (4): 35-41.
- Sanne, C. (2002), 'Willing consumers – or locked-in? Policies for a sustainable consumption', *Ecological Economics*, 42: 271-287.
- Satchell, C. (2008), 'Cultural theory and real world design: dystopian and utopian outcomes', Proceedings of 26th annual SIGCHI conference on Human factors in computing systems, 1593-1602.
- Schatzki, T. R. (1996), *Social Practices: A Wittgensteinian Approach to Human Activity and the Social*, Cambridge: Cambridge University Press.
- Schatzki, T. R. (2001), 'Introduction: practice theory', in T. R. Schatzki, K. Knorr-Cetina and E. von Savigny (eds), *The Practice in Contemporary Theory*, New York: Routledge: 1-14.
- Schatzki, T. R. (2002), *The Site of the Social*, Pennsylvania: Pennsylvania University Press.
- Schmidheiny, S. and Zorraquin, F. J. L. (1998), *Financing Change: The Financial Community, Eco-efficiency, and Sustainable Development*, Massachusetts: MIT Press.
- Schwartz Cowan, R. (1983), *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave*, New York: Basic Books.
- Scitovsky, T. (1976), *The Joyless Economy*, Oxford: Oxford University Press.
- Scott, K. (2008), *Co-designing sustainable user practices: an exploration study for the Living Lab project*, MSc Thesis, TU Delft.
- Seligman, A.B. (1997), *The Problem of Trust*, New Jersey: Princeton University Press.
- Sherrow, V. (2006), *Encyclopaedia of Hair: A Cultural History*, Westport: Greenwood Press.
- Sherwin, C. & Bhamra, T. (1998), 'Using ecodesign to innovate - Present concepts, current practice and future directions for design and the environment', Proceedings of Design History Society Conference, Design Innovation – From conception to consumption: Design History Society Conference, Huddersfield, 99-105.
- Shields, R. (1991), *Places on the Margin: Alternative Geographies of Modernity*, London: Routledge.

- Shove, E. (2003), *Comfort, Cleanliness and Convenience: The Social Organization of Normality*, Oxford: Berg.
- Shove, E. (2004), 'Changing human behaviour and lifestyles: a challenge for sustainable consumption?', in L.A. Reisch and I. Ropke (eds), *The Ecological Economics of Consumption*, Cheltenham: Edward Elgar: 111-131.
- Shove, E. (2006), 'Towards practice orientated product design', presented at Towards practice orientated product design at Brainjuicer, London, UK, 14th September 2006.
- Shove, E. (2009a), 'Habits and their creatures', from www.lancs.ac.uk/staff/shove/transitioninpractice/tip.htm (Accessed 18.10.09).
- Shove, E. (2009b), 'Transitions in practice: reconceptualising consumption and sustainability', presented at Les enjeux de la consommation durable, Sciences Po, Paris, France, 15-16 January 2009.
- Shove, E. and Pantzar, M. (2005), 'Consumers, producers and practices: understanding the invention and reinvention of Nordic Walking', *Journal of Consumer Culture*, 5 (1): 43-64.
- Shove, E. and Pantzar, M. (2007), 'Recruitment and reproduction: the careers and carriers of digital photography and floorball', *Human Affairs*, 17(2): 154-167.
- Shove, E. and Warde, A. (1998), 'Inconspicuous consumption: the sociology of consumption, lifestyle, and the environment', in R. Dunlap, F. Buttel, P. Dickens and A. Gijswijt (eds), *Sociological Theory and the Environment: Classical Foundations, Contemporary Insights*, Lanham: Maryland, Rowman & Littlefield: 230-251.
- Shove, E., Watson, M. and Ingram, J. (2006), *POPD Manifesto*, Designing and Consuming workshop, 6-7 July 2006, Durham University.
- Shove, E., Watson, M., Hand, M. and Ingram, J. (2007), *The Design of Everyday Life*, London: Berg.
- Siegle, L. (2006), 'Your home might be hurting the planet', Guardian Unlimited, Thursday 8th June 2006.
- Simonsen, K. (2007), 'Practice, spatiality and embodied emotions: An outline of a geography of practice', *Human Affairs*, 17 (2): 168-181.
- Slater, D. (1999), *Consumer Culture and Modernity*, Cambridge: Polity Press.

- Smith, B. and Goldblatt, D. (2004), 'Whose health is it anyway?', in S. Hinchliffe and K. Woodward (eds), *The Natural and the Social: Uncertainty, Risk, Change*, London, Routledge in association with The Open University: 41-76.
- Snape, D. and Spencer, L. (2003), 'The foundations of qualitative research', in J. Ritchie and J. Lewis (eds), *Qualitative Research Practice*, London: Sage: 1-23.
- Southerton, D. (2006), 'Analysing the temporal organization of daily life', *Sociology*, 40 (3): 435-454.
- Southerton, D., Shove, E. and Hand, M. (2007), 'Home extensions: time, space and practice', *Environment and Planning D: Society and Space*, 25 (1): 668-881.
- Spaargaren, G. and van Vliet, B. (2000), 'Lifestyles, consumption and the environment: the ecological modernization of domestic consumption', *Environmental Politics*, 9: 50-77.
- Spencer, L. and Pahl, R. (2006), *Rethinking Friendship: Hidden Solidarities Today*, Princeton and Oxford: Princeton University Press.
- Stern E., Gabbianelli, A., Qualls, A., Rahn, J., Yang, G. and Meltzer, N. (1997), 'Views on claims support methods for hair care products', in L. B. Aust (ed.), *Cosmetic Claims Substantiation*, New York: Marcel Dekker: 21-68.
- Sustainable Consumption Roundtable (2006), 'I will if you will: towards sustainable consumption', from www.sd-commission.org.uk/publications/downloads/I_Will_If_You_Will.pdf.
- Thackara, J. (2007), 'Forward', in J. Chapman and N. Gant (eds), *Designers, Visionaries and Other Stories: A Collection of Sustainable Design Essays*, London: Earthscan: XVI-XVIII.
- Thorpe, A. (2007). *The Designer's Atlas of Sustainability*. Washington: Island Press.
- Thrift, N. (2005), 'Panicville: Paul Virilio and the esthetic of disaster', *Cultural Politics: and International Journal*, 1 (3): 337-348.
- Tilley, C.Y. (ed.) (2006), *Handbook of Material Culture*, London: Sage.
- Tomes, N. (1998), *The Gospel of Germs: Men, Women, and Microbe in American Life*, Cambridge, MA: Harvard University Press.
- Turton, P. (1998), 'The UK experience', presentation at CIWEM Water Conservation and Re-use seminar, February 1998, CIWEM.

- Transana 2.12 [Computer software] (2006), Madison, WI: The Board of Regents of the University of Wisconsin System, from <http://www.transana.org> (Accessed 15.09.06).
- UNEP (2001), 'The role of product service systems in a sustainable society', UNEP Press release, 2001, UNEP, Paris.
- UNEP (2003), 'Shopping for a better world', UNEP Press release, 2 June, UNEP, Paris.
- Van Hinte, E. (ed.) (1997), *Eternally Yours: Visions on Product Endurance*, Rotterdam: 010 Publishers.
- Van Hinte, E. (ed.) (2004), *Eternally Yours: Time in Design*, Rotterdam: 010 Publishers.
- Van Hoff, D. (2003). 'The tyranny of the plug; kitchen machines that do not need to be plugged', from www.vanhoffentwerpen.nl (Accessed 20.03.09).
- Van Manen, M. (1990), *Researching lived experiences: Human science for an action sensitive pedagogy*, Ontario: State University of New York Press.
- Verbeek, P. P. and Slob, A. (eds) (2006), *User Behaviour and Technology Development: Shaping Sustainable Relations Between Consumers and Technologies*, Dordrecht: Springer.
- Vermersch, P. (1994), *L'entretien d'explicitation*, Paris: Editions ESF.
- Walker, S. (2006), *Sustainable by Design: Explorations in Theory and Practice*, London: Earthscan.
- Ward, M. (2007). 'Why social science?', from http://tritychresearch.typepad.com/thinking_about_things/ (Accessed 19.07.09).
- Warde, A. (2005), 'Consumption and theories of practice', *Journal of Consumer Culture*, 5 (2): 131-153.
- Wasson, C. (2000), 'Ethnography in the field of design', *Human Organization*, 4 (59): 377-388.
- Waterwise (2007), 'Saving water in your kitchen, from www.waterwise.org.uk/images/site/products/kitchen%20product%20catalogue.pdf.
- Watson, M. and Shove, E. (2008), 'Product, competence, project and practice: DIY and the dynamic of craft consumption', *Journal of Consumer Culture*, 8, (1): 69-88.
- Weitz, R. (2004), *Rapunzel's Daughters: What Women's Hair Tells us About Women's Lives*, New York: Farrar, Straus and Giroux.

- Wever, A., van Kuijk, J. and Boks, C. (2008), 'User-centred design for sustainable behaviour', *International Journal of Sustainable Engineering*, 1, (1): 9-20.
- Wilhite, H., Nakagami, H. and Murakoshi, C. (1996), 'The dynamics of changing Japanese energy consumption patterns and their implications for sustainable consumption', *Human Dimensions of Energy Consumption 1996 ACEEE Summer Study on Energy Efficiency in Buildings*, Washington DC: ACEEE 8.231-8.238.
- Wilson, E. (2003), *Adorned in Dreams: Fashion and Modernity*, New Jersey: Rutgers University Press.
- Woodward, S. (2007), *Why Women Wear What They Wear*, Oxford: Berg.
- Woollett, A. and Marshall, H. (1997), 'Reading the body: young women's accounts of their bodies in relation to autonomy and independence', in K. Davis (ed.) *Embodied Practices: Feminist Perspectives on the Body*. London: Sage.
- World Commission on Environment and Development (1987), *Our Common Future*, Oxford: Oxford University Press.
- Wright, P.C., Blythe, M. and McCarthy, J.C. (2006), User experience and the idea of design in HCI, in: *Interactive Systems: 12th International Workshop, DSVIS 2005*, Newcastle upon Tyne, UK, July 13-15, 2005. Revised Papers Lecture Notes in *Computer Science* Volume 3941/ 2006, 1-14.
- Zacarias-Farah, A. and Geyer-Alley, E. (2003), 'Household consumption patterns in OECD countries: trends and figures', *Journal of Cleaner Production*, 11: 819-827.

Appendix 1 Bio-pics and interview dates

1. Anechka

She is originally from Russia, where most of her family still lives. Her husband is English. They have lived in their semi-detached house in Sheffield for fifteen years. She has two children. Her son lives overseas but her daughter has settled near to her parents. She is in her early 50s and works as an interpreter. She describes her hair as dark and curly and visits the hairdresser once a month. The interview was conducted on the: 27.01.08.

2. Anne

She lives with her husband in a detached house in Kent, which they own. Anne has two children in her late 20s from her first marriage. She is in her early 50s and most for her life she has been a housewife. She enjoys her busy social life and 'goes out' with her husband on a regular basis. She describes her hair as dark with highlights that is cut in a bob style. The interviews were conducted on the: 13.12.07 and 15.02.08.

3. Audrey

She lives with her husband in a village in Kent but they are originally from Northern Ireland. She is in her mid 60s and has got four children who live nearby. She is now retired, she was being a bank cashier and education welfare officer. She goes to the hairdresser every six weeks and describes her hair as short, blond and fine. The interview was conducted on the: 19.04.08

4. Courtney

She lives in Nottinghamshire in her own house. She is in her late 20s, single and works as a surveyor for the council. She describes her hair as dark brown, wavy and long hair. She visits the hairdresser every two to three months. The interview was conducted on the: 12.06.07.

5. Deborah

She lives in Nottinghamshire with her husband and is in her late 30s. She recently gave birth to her second child and therefore has been on maternity leave. She works as a doctor. She

goes to the hairdresser every six weeks and describes her hair as brown, fine and straight. The interview was conducted on the: 13.02.08.

6. Dory

She lives in a house just outside Sheffield with her husband and three sons. Two of her sons are autistic. She is originally from London and is in her early 30s. She started her degree course two years ago so that she could earn the money and her husband can look after the two autistic children. She describes her hair as long and curly. The interviews were conducted on the: 25.01.08 and 18.02.08.

7. Eileen

She is originally from London but has lived in Nottinghamshire for most of her life. She is a widow in her early 60s. She is now retired, formerly being a sales assistant. She has two sons. She describes her hair as short and blonde. The interview was conducted on the: 30.01.08.

8. Elizabeth

She is in her early 60s, and lives with her husband in a small village in Kent. They are both retired and keep horses. She looked after their four children until they left home. She is originally from London. She goes to the hairdresser every two months and describes her hair as short and coloured. The interview was conducted on the: 13.12.07.

9. Emily

She lives with husband in a flat that is attached to the campsite where she works as a campsite manager in Yorkshire. They recently bought a neighbouring house that they have refurbished over the last few months. Emily has two jobs and is in her mid 40s. She and her husband have no children. None of her family lives close by but they are well connected to the people living in their village. She goes to the hairdresser three times a year and describes her hair as straight and cut to mid-length. The interviews were conducted on the: 29.11.07 and 22.01.08.

10. Hannah

She is originally from Sweden but has lived in the UK for most her life. Her husband is English. They live in an ex-council flat with their son in South London. She is in her early 50s and works as a picture framer. She is also an artist and regularly exhibits her work. She goes to the hairdresser twice a year and describes her hair as medium long. The interviews were conducted on the: 15.12.07 and 02.02.08.

11. Hailey

She is a student in her late teens, studying to become a teacher. She lives in student halls but is planning to move into rented accommodation with some of her friends. She has a boyfriend. She does not see him very often because he is in the navy. The interview was conducted on the: 14.06.07.

12. Holly

She lives in Sheffield with her boyfriend and a group of friends, finishing her science degree. She is in her early 20s. Her parents and her two siblings live in Birmingham, where she is from. She describes her hair as brown and long. The interviews were conducted on the: 07.06.07 and 10.08.07.

13. Julie

She lives in rented accommodation with two male friends, and is in her early 20s. She originally is from Rotherham, where her parents still live. She is studying to become a nurse in the neighbouring town of Sheffield. She is single and likes to go on a night out with her friends. She describes her hair as frizzy, thick and dry. The interviews were conducted on the: 07.02.08 and 22.02.08.

14. Kerry

She lives with her partner and his son in a terraced house in Kent. She is in her late 50s and works as a shop assistant. She has two sons who live nearby. She goes to the hairdresser only occasionally because her niece cuts her hair. She describes her hair as short, thick and coloured. The interview was conducted on the: 12.12.07.

15. Lindsey

She is in her early 30s, was born in Nuneaton and lives in Derby since finishing her degree. She recently bought her own terraced house in which she lives with her two cats. She works as a pharmacy dispenser and currently leads a single life. Lindsey describes her hair as long and dark blonde. The interviews were conducted on the: 15.03.08 and 10.05.08.

16. Monica

She is her 40s, and lives with her husband and two dogs in semi-detached house just outside Sheffield. They have moved there five years ago. She works as a personal assistant and, during her leisure time, makes her own greetings cards that she sells to shops. She has a close bond to her family who does not live far from her. Monica describes her hair as straight, lightened, very fine hair that is cut in a bob style. The interviews were conducted on the: 23.02.07 and 05.05.07.

17. Odette

She is in her early 30s, and lives with her husband in a terraced house. She is originally from Doncaster where she works as a recruitment officer. She commutes daily from Sheffield to Doncaster unless she stays with her parents who also live in Doncaster. She goes to the hairdresser every three months and describes her hair as dyed blonde and long. The interviews were conducted on the: 17.12.07 and 05.02.07.

18. Olivia

She lives in north London with her partner and son and is her late 30s. They own the house. She is originally from Scotland where her parents still live. Olivia has a postgraduate degree and has worked as programme leader in a local college for numerous years. She describes her hair as long and brown. The interviews were conducted on the: 10.03.08 and 14.05.08.

19. Pamela

She is in her early 50s and is divorced with three children. She owns a house in Doncaster but is not be able to keep it for a lot longer because of financial reasons. She studies law and works as an investigator for the local government. She is originally from the Midlands. She

describes her hair as layered and coloured and visits the hairdresser every five weeks. The interviews were conducted on the: 26.02.07 and 12.04.07.

20. Rita

She lives in Sheffield but used to own a farm with her husband, living a self-sufficient life. She is originally from Germany and lived in Australia for several years. She is in her late 60s and has two daughters. One of her daughters lives next door, who she sees often, including her grandchildren. She describes her hair as short and grey. The interview was conducted on the: 22.02.08.

21. Ruby

She is originally from Scotland but currently studies in Yorkshire. She lives in a semi-detached house with her three friends. She is in her early 20s and single. She goes to the hairdresser every three months and describes her hair as above shoulder length and layered hair. The interview was conducted on the: 01.02.08.

22. Simone

She is in her 30s and works as a nursery nurse. She lives in her boyfriend's house in Doncaster. She has always lived in Yorkshire, where her parents live. She loves to go out on a night out with her friends. She describes her hair as curly and frizzy and visits the hairdresser three times a year. The interviews were conducted on the: 19.06.07, 24.08.07 and 14.02.08.

23. Tracy

She is in her early 30s and is from Yorkshire where also her family (her parents and sister) live. She recently divorced her husband and therefore lives with her daughter in a rented terraced house. She works as a course administrator. Tracy describes her hair as dyed blonde that is cut just below her ears. The interviews were conducted on the: 23.01.08 and 20.02.08.

24. Winona

She is in her mid 30s and lives with her partner and one year old child in Canterbury. She owns the terraced house in which they live. She is divorced and works as a teacher. She

grew up in south London where her parents still live. She goes to the hairdresser every three months and describes her hair as bleached, layered, coarse and frizzy. The interviews were conducted on the: 28.02.08 and 10.04.08.

Extreme sample

1. Kendra

She is from the Caribbean, and has lived in the UK for several years. She grew up in Guyana where her father still lives. She is in her early 30s, single and is currently a graduate student. The interview was conducted on the: 05.03.08.

2. Ann-Marie

She had a period in her life where she did not wash her hair with shampoo for several months. She is in her 30s and works as a journalist. She lives with her partner and young child in Manchester. The interview was conducted on the: 18.08.07.

3. Gemma

She has synthetic, coloured dreadlocks that are braided into her 'real' hair. She is in her early 20s and lives in Kent. After finishing her degree, she started work as a sales assistant in an art shop. The interview was conducted on the: 15.03.08.

4. Hui Mai

She is Taiwanese, and a student in the UK. Her family lives in Taiwan and regularly send her hair care products. She is in late 30s and single. She regularly cuts her friends hair. The interview was conducted on the: 04.03.08.

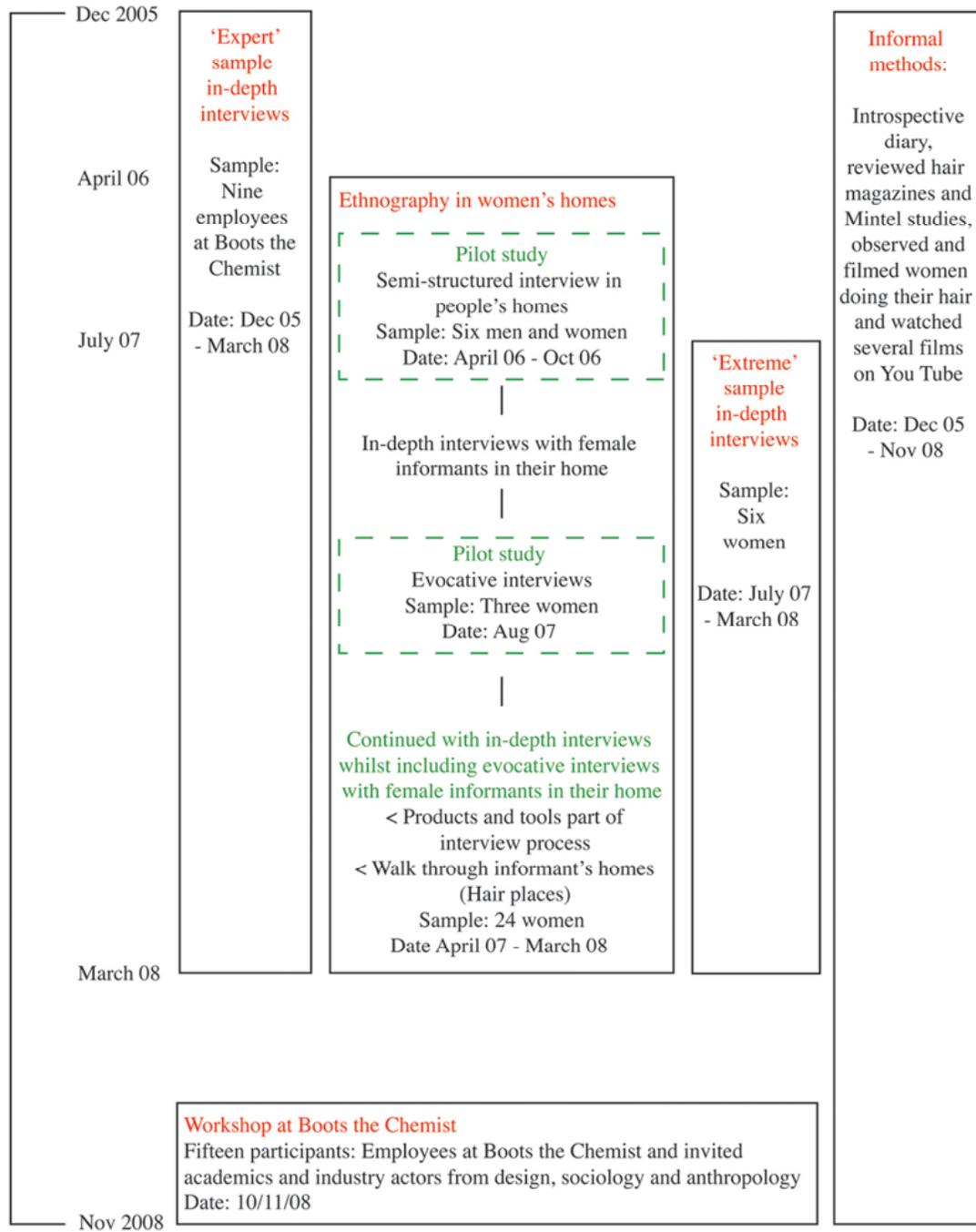
5. Shirley

She had breast cancer a few years ago and lost her hair through the treatment. She is in her 50s and divorced. She works as a probation officer. The interviews were conducted on the: 23.01.08 and 08.02.08.

6. Shatha

She is from Saudi Arabia and is studying in the UK. She is Muslim and wears a hijab. She is in her early 30s, has two children and is married. The interview was conducted on the: 06.07.07.

Appendix 2 Chronology of methods



Appendix 3 Interview topic guide

Could you tell me more about it?
Earlier you said you do ... could you tell me a bit more about it
What makes you say that?
Could you give me an example?
How does that feel like? What was it like?

Activities – Sensual and physical interactions

Note things and activities

To get us started could you describe for me the things you do and think about with regards to your hair care in a typical week?

You have mentioned you do ... could you tell me a bit more about it?

(Sensual and physical interaction)

- ❖ When consider your hair to be ready to ...
 - Description of feel/ look/ smell of hair/ body
 - Deal with...
 - Tell me about days when you don't wash your hair

- ❖ Describe me how you...
 - When you say you... what do you do exactly
 - How do you know you have finished ... - describe hair before/ after
 - What are you trying to achieve? Watch out for?

- ❖ Tell me about your experience...
 - At the hairdresser
 - Doing hair: bath, shower, sink

Everyday – Weekly image, hair do's, hair part or outside me, body and clothes and make-up

- ❖ Description of lifestyle / in relation to your hair
- ❖ If you reflect on the last week or two weeks tell me about in relations to doings with your hair?
- ❖ Could you tell me about... in relation to your hair?
 - Work
 - A day off
 - A special occasion
 - Personal care - (Clothes/ make up)
- ❖ Tell me about the different ways you wear or 'do' your hair?
- ❖ How if you do you would say you do things with your differently to other people?

Things - Technique versus product, doing the job, magic, build-up, 'greasy' product, sensual/ physical interaction

- ❖ Tell me about using the ...
 - How does it feel like using it? - Look, feel, smell/ on hands/ hair/ body...?
 - What does it do/ not to hair: Describing feel/ touch/ smell
 - Describe me your hair if you would not use it?
 - Tell me about the time when you started using...
- ❖ If you would describe your... to a friend – what would you say? - Characteristics of product influence performance
 - Packaging - (size, weight, design)
 - Labels, Smell, look, feel – on hands, in use, on hair, Instructions – Credibility, Ingredients, Features, Compare to other products, Cost
 - Overall look
 - Comparing two products
- ❖ If your... would be a person – how would you describe it?

Things in general

- ❖ Tell me about - last edition to your hair care?

- ❖ Tell me about a hair care products you
 - Would take on holiday?
 - Would not use?
 - Bought and needed to read the instructions for?

My hair

- Description of own hair
- ❖ What do you like/ dislike about it – descriptions

Levels of engagement

- Tell me about the last thing you have read/ heard about hair care/ hair
- Imagine you are on a tent holiday - tell me about the experience in relation to your hair

Past – Practice changing

- Tell me about memorable events in your life in relation to your hair/ hairstyle/ doing with hair

Hairstyles

- Hairstyle biography – change? What would be written in it/ title?
- Tell me about you choosing a hairstyle
- ❖ The most time consuming hair – what was it about it – more products?

Social

- ❖ Tell me about your hair/ hair care in relation to
 - Boyfriend/ husband
 - Parents
 - Friends
 - Strangers
- ❖ Tell me about you going to hairdresser (other professionals)
 - Conversations
 - Relationship
 - Credibility

- Is there anything else you can think of? Or anything else you would like to say?

Walk through the house take pictures

- ❖ Tell me about your bathroom in relation to your hair care?
- ❖ Just imagine you've been shopping... where would things usually go?
- ❖ Could you give me a picture of you doing your hair here?
- ❖ Have you got any products that you do not use? – Packaging kept
- ❖ Tell me about going shopping for hair care items

Appendix 4 Index of interview themes

Cycles, flows, steps, stages

- Frequency of doing/ using
 - ❖ New canvas
 - ❖ Cleanse
 - ❖ Time
- Time of the day
- Routine and change
- Comment amount
- Ways of doing
 - ❖ Attention, effort, take pride
 - ❖ Time spend
 - ❖ Pressure of time
 - ❖ Looks like spend lots of time

Products

- Ideas
 - ❖ Stripping
 - ❖ Build-up
 - ❖ How it is made
 - ❖ Grease/ natural oils
- Material interactions
 - ❖ M Smell
 - ❖ M Touch
 - ❖ M Sight
- Intangible thing/ brand
- Physical thing
 - ❖ Ingredients
 - ❖ Packaging
 - ❖ Description
- Invisible/ Magic
 - ❖ Doing the job
 - ❖ Visible cues
- What products do to the hair
- Product choice
- Lifetime
 - ❖ Keeping products
 - ❖ Brand lifetime
 - ❖ Product lifetime
- Believability

Techniques

- Body as tool
- Attention paying
- Techniques versus product
- Comment ability
- Abilities/ competences/ skills
- Over-rely

Body and hair

- Hair touching the skin
- Part of me
- Body wet all over
- Conflict of interest
 - ❖ Temperature
 - ❖ Smell/ dirt

Hair

- Length
- Fringe
- Texture
- Style
- Illness
- Ideas
 - ❖ Gender
 - ❖ Age
 - ❖ Hair colour

Standards

- List of 52 such as natural, greasy, healthy...

Detecting standards

- Embodied
 - ❖ H Sight
 - ❖ H Smell
 - ❖ H Feel/ Touch
 - ❖ H Touch
- Intangible knowledge
- External/ internal factors

Strategies

- Control, tame
- Repair, treat, protect
- Playing
- Heat issues
- Hygiene
- Practicalities
- Beauty, attractive

Things and activity

- List of 13 activities such as shampooing

Attitude doing things to hair

Emotions

Me

- My lifestyle
- Me – image
- How I feel/ look
- People notice me/ or not

Me and others

- Hairdresser
- Fashion/ trends
- Family
- Friends
- Opposite sex
- Society

Occasion

- At home
- Work
- Special occasion

Past

Sustainability

Appendix 5 Breakdown of how often women shower, take a bath and shampoo their hair per week

	Shower	Bath	Shampooing
Anechka	7	/	2
Anne	/	7	3
Audrey	4	3	2
Courtney	7	/	7
Deborah	7	0.5	7
Dory	/	7	7
Eileen	2	7	2
Elizabeth	7	/	4
Emily	7	0.25	7
Hailey	7	/	4
Holly	7	/	4
Hannah	7	/	1
Julie	4	/	4
Kerry	7	/	7
Lindsey	7	/	7
Monica	7	7	7
Odette	3	7	3
Olivia	4	1	4
Pamela	7	7	4
Rita	4	/	2
Ruby	7	0.5	4
Simone	4	7	4
Tracy	1	7	7
Winona	4	1	3

(Excluding the extreme sample)

Appendix 6 Breakdown of places for keeping hair care products (P) and tools (T) and places of ‘doing’ hair care at home, including total number of P and T

	Places of keeping: Bathroom	Bedroom	Other	Total amount	Places of doing: Bathroom	Bedroom	Other
Anechka	T2/P13	/	/	15	x		
Anne	/	T9/P11	/	20	x	x	
Audrey	P1	T6/P5	/	12	x	x	
Courtney	P2	T4/P3	/	9	x	x	
Deborah	T2/P4	/	/	6	x		
Dory	P8	T1	T2	11	x	x	x
Eileen	P3	T3/P3	/	9	x		x
Elizabeth	P3	/	T2/P2	7	x		x
Emily	P7	/	T4/P6	17	x	x	x
Hailey	/	T4/P4	/	8	x	x	
Holly	P3	T1/P4	T3/P4	15	x	x	
Hannah	P2	T4	/	6	x	x	
Julie	P4	T7/P12	/	23	x	x	
Kerry	P3	T3/P3	/	9	x	x	x
Lindsey	P10	T6/P2	/	18	x	x	
Monica	P9	T3	/	12	x		x
Odette	P4	T4/P4	/	12	x	x	
Olivia	P4	T3/P5	/	12	x	x	
Pamela	P7	T11/P1	/	19	x	x	
Rita	T2/P2	/	/	4	x		
Ruby	P2	T4/P4	/	10	x	x	
Simone	P2	T8/P4	P4	18	x	x	
Tracy	P5	T5/P2	/	12	x	x	
Winona	P10	/	T3	13	x		

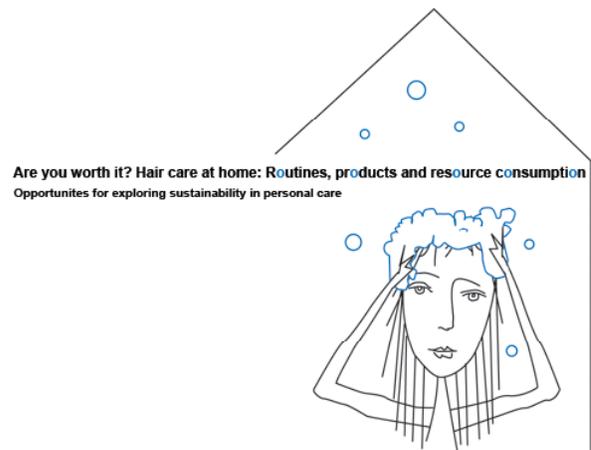
Number of hair products (P) and tools (T) around the home (excluding bubbles, clips, mirrors, hair pieces, travel and gym bags or products and tools of other co-occupants) and places of doing hair (excluding the extreme sample)

Appendix 7 Breakdown of hair care products (P) and tools (T) into the frequency of their use: ‘Frequent use’, ‘infrequent use’ and ‘not in use’

	Frequent use	Infrequent use	Not in use	Total amount
Anechka	T2/P3 = 5	P1	P9	15
Anne	T3/P3 = 6	T3/P6 = 9	T3/P2 = 5	20
Audrey	T3/P2 = 5	T1/P2 = 3	T2/P2 = 4	12
Courtney	T3/P4	T1/P1	/	9
Deborah	T2/P4 = 6	/	/	6
Dory	T3/P3 = 6	P1	P4	11
Eileen	T3/P3 = 6	P2	P1	9
Elizabeth	T1/P3 = 4	T1/P2 = 3	/	7
Emily	T2/P2 = 4	T2/P9 = 11	P2	17
Hailey	T2/P3 = 5	T1	T1/P1 = 2	8
Holly	T1/P3 = 4	T1/P5 = 6	T2/P3 = 5	15
Hannah	T4/P1 = 5	/	P1	6
Julie	T4/P3 = 7	T3/P12 = 15	P1	23
Kerry	T3/P4 = 7	P2	/	9
Lindsey	T2/P4 = 6	T3	T2/P7 = 9	18
Monica	T3/P6 = 9	P3	/	12
Odette	T4/P3 = 7	P5	/	12
Olivia	T2/P3 = 5	T1/P3 = 4	P2	12
Pamela	T4/P3 = 7	T7/P3 = 10	P2	17
Rita	T2/P2 = 4	/	/	4
Ruby	T3/P3 = 6	T1/P2 = 3	P1	10
Simone	T5/P3 = 8	T2/P3 = 5	T1/P4 = 5	18
Tracy	T2/P2 = 4	T3/P4 = 7	P1	12
Winona	T3/P2 = 5	P5	T1/P2 = 3	13

Frequency of using hair products (P) and tools (T) and number of products owned (excluding the extreme sample)

Appendix 8 Report - Creative workshop at Boots



Workshop report:
**‘Are you worth it? Hair care at home –
routines, products and resource consumption’**

Held at Boots the Chemist D80 on the 10/11/08

Sabine Hielscher, Nottingham Trent University, November 2008

On the 10th of November 2008, Sabine Hielscher, Tom Fisher (Nottingham Trent University), Tim Cooper (Sheffield Hallam University) and Andrew Jenkins (Boots the Chemist) conducted a creative workshop at Boots the Chemist D80, as part of Sabine's EPSRC funded PhD study¹³⁵. This report outlines the workshop aims and objectives, proceedings and creative activities, as carried out by the workshop participants. Finally, it presents some of the outcomes that emerged:

Table of contents

1. Introduction – workshop background and purpose
 - Three key workshop themes
2. Synopsis of proceedings
 - Power-Point presentation
 - Three key workshop films
3. Workshop activities
 - Introduction activity 1 – Responses to films
 - Introduction activity 2 – Re-birth
 - Activity 1/2: Outcomes – Theme 'Products and Techniques'
 - Activity 1/2: Outcomes – Theme 'Time and Lifestyle'
 - Activity 1/2: Outcomes – Theme 'Using products'
 - Introduction activity 3 – Random links intervention
4. Outcomes review session
 - Outcomes: Theme 'Products and Techniques' intervention pitch
 - Outcomes: Theme 'Time and Lifestyle' intervention pitch
 - Outcomes: Theme 'Using products' intervention pitch
5. Final thoughts

¹³⁵ The empirical research design of Sabine's PhD is explorative in the organisation of the research, hence building on qualitative methods for the production of data and comprising a non-representative sample. In the study the in-depth interviews have a flexible and interactive nature and are based on open-ended questions and probes. These are used to investigate multi-relational elements of everyday hair care – how women interact with everyday things including the dynamics of their cultural and physical environments. The sample consists of 24 women between the ages of eighteen and sixty-nine with varying attitudes, motivations, understandings, practical competences and degrees of involvement in relation to hair care and hair care experts such as employees at Boots the Chemist and hairdressers.

1. Introduction – workshop background and purpose

The workshop brought together people from varying backgrounds such as designers, anthropologists, geographers, scientists and market developers in order to:

- Share some everyday hair care stories that are based on in-depth interviews and observations (data collected as part of Sabine's PhD)
- Identify and explore opportunities for changes in everyday routines that are based on fewer resources than current ones
- Develop these opportunities into interventions that could bring about changes in everyday routines and deliver improved sustainability

The term intervention was chosen, as the participants were encouraged to think about opportunities for routine changes in a broad sense. An intervention could be a product, a service, a set of products, an idea, a concept, an activity, a physical infrastructure in/outside the home, an information source, a collaborative platform, a business model, a campaign, a non-profit organisation or a marketing strategy, etc.

In order to focus the workshop, the workshop team developed three themed questions that arose out of the data (listed below). During the workshop the participants were divided into multi-disciplinary groups, each working on a different theme question in relation to everyday hair care routines and sustainability:

Theme - Products and techniques

Women state that they often over-rely on products instead of trusting in techniques¹³⁶ to achieve standards in hair. This might be a reflection of the knowledge, skill and confidence women draw upon when using products and techniques or of the standards women try to accomplish.

¹³⁶ Performance of hair care: use of actions and procedures

What interventions could bring about changes in everyday routines that utilise products and techniques and deliver improved sustainability?

Theme - Time and lifestyle

Women develop routines for how often and for how long they do things with their hair. These are often influenced by busy lifestyles and standards in hair¹³⁷.

What interventions could bring about changes in everyday routines that adapt to contemporary lifestyles and deliver improved sustainability?

Theme - Using products

Women have various routines for storing and using hair care products that lead to different disposal behaviours and quantities of waste.

What interventions could bring about changes in everyday routines that consider products in use and deliver improved sustainability?

Each theme group consisted of four to five participants and a moderator (i.e. a member of the workshop team). The participants were provided with engaging and inspirational materials on the table such as different colored pens, paper, hair care magazines, glue, play-doh, cards and sweets. Part of the workshop design was to employ a drawer, Neil Kelly, to capture the group discussions that emerged during the activities. The team decided on a drawer instead of a scribe or note-taker to emphasise the creative nature of the workshop and to inspire the participants to think visually. Several of the workshop participants considered the presence of someone drawing as liberating. Even though the drawer wasn't sketching what the participants were saying most of the time, the fact that he was drawing what participants were doing in the room gave a sense of focus to the discussions.

¹³⁷ Standards in hair such as clean, bouncy and shiny hair

2. Synopsis of proceedings

A Power-Point presentation introduced the participants to the workshop aims and objectives, the PhD study, hair care (including its activities and products) and sustainability in relation to hair care in the use phase. The presentation particularly highlighted the performance of hair care that often builds on routinised activities, including ways of doing hair that is considered normal as well as material interactions with products – all of which result in a resource intensive use stage.

Further, the participants were introduced to the themed questions through three inspirational films. The films brought together images, quotes and film clips gathered during the data collection of the PhD study. Each film was based on a story and therefore had two main characters: a female character who represented the 24 women in the study and a product character (see figure 1). Each theme group watched all of the three films. Although, prior to the event the team questioned the amount of information to be taken in by the participants, it was regarded more important to show how the multi-relational elements of hair care¹³⁸ interlink. Further, the films were introduced during the workshop to be regarded as inspiration and not as information. The workshop participants could bring their own interpretations to the films, deciding which elements were relevant for their theme question. The sections below provide a brief synopsis of each film:



Figure 1: Female character and product character

¹³⁸ ‘A routinised type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge.’ (Reckwitz 2002: 251)

'Products and techniques' film

The clips of the 'products and techniques' film showed the female character and some of her friends doing their hair at home: they all use products and techniques and have a variety of skills to achieve standards in hair. The film was mainly concerned with: the different ways of doing hair including the use of knowledge and skill, interactions women have with their products to achieve standards in hair and the role of hairdressers, family and friends in gaining advice on hair care. Finally, the film stated that the use of 'products and techniques' influences resource consumption and that the amount of resources consumed is not a given, figure 4.

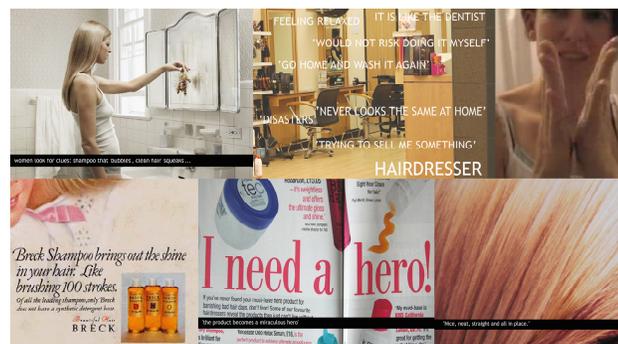


Figure 4: Visual extracts of the 'products and techniques' film

'Time and lifestyle' film

In the 'time and lifestyle' film the female character showed the participants how life has a way of piling up: time affects the way in which women go about doing things with their hair. This can have an effect on how they feel. Overall, this theme was concerned with: temporal arrangements of everyday life: how long and how often women do things with their hair, the importance of embodied interactions with products and hair, the differences of getting ready for work, home or a special occasion, standards women try to achieve whilst caring for their hair, the influence of routines (i.e. knowing how it should feel and look like) and hair care strategies to cope with busy lives and hair. Finally, the film stated that how often and how long women do things with their hair influences resource consumption and that the amount and type of resources consumed is not a given, figure 5.



Figure 2: Visual extracts of the ‘time and lifestyle’ film

‘Using products’ film

The ‘using products’ film introduced the participants to a shampoo character. The story was based on tracking the journey of the character from the shop to the owner’s home. In the owner’s home the participants were introduced to challenges the shampoo character and the fellow products are faced with in their lifetime - trying to avoid a premature end. This theme was related to buying behaviours such as bulk buying and choosing products in the shop but also related to ways of keeping products in the home: places of use and storage, floating and stable products and their visibility, differences between products types, routine changes and disposal behaviours, figure 3.



Figure 3: Visual extracts of the ‘using products’ film

To break up the introductory presentation and viewing the of the theme films, participants were introduced to a game so that they could get to know each other. At the beginning of the workshop, the participants were given an envelope including their name badge, featuring a symbol to denote their group allocation and a cut out of a famous person’s haircut. During

the ‘getting to know each other’ activity the participants were asked to introduce themselves, sum up their hair care in one or two words and pin the cut out of their famous person’s haircut on the famous person’s head (see figure 5). The humorous nature of matching the haircut with the face started to create a relaxed atmosphere, encouraging participants to think about hair care and to share their own experiences with the other participants.



Figure 5: Cut out of famous persons’ heads

After introducing the participants to the themes and viewing the films, they were allocated to their theme groups in order to take part in three creative activities: ‘Responses to the films’, ‘Re-birth’ and ‘Random links intervention’. The workshop concluded with a review session using a ‘Dragons’ Den’ format.¹³⁹ The workshop activities, including their outcomes will be presented in the next section.

3. Workshop activities

Introduction activity 1 – Responses to films

The first activity encouraged the participants to respond to the films and the presentation, engaging them with the PhD’s interview and observation data. The moderators joined the groups to assist the participants throughout the activities. Each group received 15 photos representing parts of the film in case they needed to trigger their memory. The first part of the activity required each group to write or draw their responses on post-it notes and stick them on a prepared A0 paper, considering the following words as starting points: surprises, issues, opportunities, questions and inspirations (see figure 6).

¹³⁹ The idea of using a ‘Dragons’ Den’ format in the review session was based on the TV programme called the ‘Dragons’ Den’. In the programme people can pitch their invention to potential investors i.e. the ‘Dragons’ jury’ who then have the opportunity to question the inventor in order to decide if they would like to invest.



Figure 6: Example of A0 paper with post-it notes including participants' responses

For the second part of this activity the participants were asked to circle the post-it notes that they regarded as opportunities for routines changes or could be developed into opportunities. Further, the participants had the possibility to add comments next to their fellow group members' post-it notes by writing next to them.

The final part of the activity required the participants to identify one opportunity for sustainable routine change that they regarded as most inspirational and to visualise it through drawings or magazine cut outs on an A2 paper. The participants were given fifty minutes to complete the three tasks.

Introduction activity 2 – Re-birth

Four accounts were prepared prior to the event describing historical ways of how people did hair, used products and their beliefs about hair, which related to the group's theme. These accounts were printed on A3 paper and handed to each of the theme groups. The activity involved the participants re-inventing aspects of those accounts for the future: bring them back to life through re-birth. The workshop facilitator presented the participants with an example to clarify the activity and stressed the aim of it: to think 'out of the box' and about how hair care routines have changed. The participants were given twenty-five minutes to complete the task and visualise their re-birth on an A2 paper.

The next three sections of this report outline the discussions, drawings and interventions developed by each theme group during activity 1/2. The outcomes described throughout the report combine studying the written and drawn material produced by the participants on the day, listening and noting down the participants discussions during the activities, considering

the drawer's sketches and watching the video footage of the final forty minutes review session, which was filmed with a HDV camera.

Activity 1/2: Outcomes – Theme 'Products and Techniques'

The group consisted of a multidisciplinary mix of participants, from science, sociology, design and geography. This created an interesting discussion between the material and social aspects of 'products and techniques' that were united in their final intervention (see below: outcomes - review session) including social networks and fictional products.

During activity 1/2 the group discussed the relationship between products and techniques initially coming up with questions and issues rather than answers: How do women learn to use tools and techniques? Do they use techniques and products because it is part of their routine or to create a particular effect? Could women get the same effects by using only a product or a technique? If women will be able to use more techniques to reach standards in hair would that lead to an increase of consuming products, water and electricity? Whilst thinking about these questions, the group recognised that hair care routines are often private and unique to the individual's hair texture. Subsequently, they are difficult to change and women often feel reluctant to alter them in the first place (see figure 7).



Figure 7: Drawer's interpretation of the group's discussion: 1 Routines create comfort zones and changing them sometimes seems like a too high mountain to climb 2 Women might need help to get over the 'hurdles' or 'climb the mountain'

The group went on to reflect on the emotional side of hair and hair care. It was pointed out that having unwashed hair is associated with certain feelings. Hair is a part of our emotional identity and our overall image (see figure 8). The group started to question what clean hair is

and how our feelings and beliefs towards clean hair have changed over the years. Shampooing hair daily might actually lead to the need to wash it more regularly. Should greasy hair be embraced or disguised? This seemed to have been a question that also arose in other theme groups. The group's final intervention adopted both aspects: 'embracing bad hair days', and therefore less frequently washed hair, and on the other side creating products that are based on disguising such hair (see description of final intervention in outcomes – review session section). Moreover, the group pointed out that the ability to control hair such as having it clean and neat might be a way of illustrating that one is in control of her life.



Figure 8: Drawer's interpretation of the group's discussion: Would women feel free if they could leave their feelings about 'less frequently washed hair' behind?

Early interventions were based on physical changes such as re-designing the bathroom in particular creating re-useable water systems in which the shampoo would clean the used water (see figure 9), developing products that allow for routines that would not be based on the use of water and designing hairbrushes that could clean the hair. Discussions about specific tools and techniques were perceived by the group to be mundane and less creative. Although, activity 2 (i.e. developing a re-birth) was considered challenging with regard to the theme question, the group could 'enter the realm of fantasy' and develop interventions such as 'cold heat straighteners', 'placebo objects' and 'paper soap' that created an important part of their final intervention.

Concepts that the group explored were not only material but also had a communal/ social side. It was highlighted that products, techniques and hairstyles are influenced by fashion and in order to make less frequently washed hair more widely acceptable, it would need to be fashionable. At the moment, the public nature of hairstyles seems to be at odds with the private nature of hair care. The group's first reaction to this discussion was to develop an arrangement of street furniture such as bus shelters or air-conditioning outlets as communal

hairdryers (see figure 9). Exploring the social aspects of doing hair lead to the recognition that there seems to be a lack of education with regards to using techniques and products (as seen in the films: dragging a tight bristle brush through wet hair) and being conscious of the environmental impact of hair care routines (see figure 9).

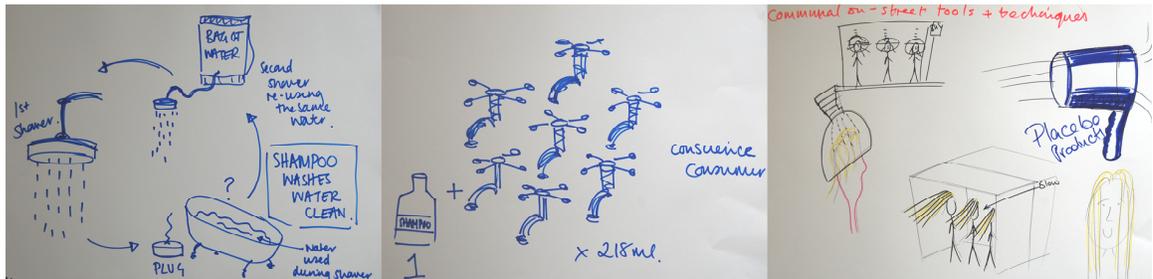


Figure 9: Illustrations of theme group: a reusable water system in the bathroom, a representation of creating water use awareness and communal street furniture

Further, the group considered the ambivalent role of hairdressers to influence the use of products and techniques. On the one hand, the hairdresser could provide standards in hair that are achievable and demonstrate them to women. On the other hand, the role of the hairdresser is multiple, ambivalent and not fixed. Women’s relationship to hairdressers can be based on trust and confidence. Nevertheless, hairdressers have also got the power to change ‘who I am’ and create styles that are non-reproducible at home, resulting in fear and ‘nightmares’ for women. The group noted that the role of the hairdresser has changed over the years. Whereas during the 1950s hairdressers washed and set women’s hair every week (i.e. hair care was mainly left to the hairdresser), women nowadays do their hair care on a daily basis and visit the hairdresser only for an occasional cut.

Finally, the group focused their thoughts on time, learning and communication in relation to their theme - products and techniques, as reflected in their final intervention ‘Tupper-hair parties’. Here, the group considered material and particularly social aspects of hair care, highlighting not individual tools and techniques but a holistic concept. This holistic concept would advocate the embracement of ‘bad hair days’ (see description of final intervention in outcomes – review session section).

Activity 1/2: Outcomes – Theme ‘Time and Lifestyle’

As part of activity 1/2 this group mainly considered the frequency of washing and shampooing hair in relation to time and lifestyle, discussing in particular social norms and how they vary when working at home or in the office. The group consisted largely of design academics. Therefore, it seemed that the group early on in their activities tried to synthesis ideas into intervention concepts.

Early concepts were based on the theory that in order to prompt and support behaviour changes that are founded on less resource intensive hair care routines the ‘hardware’ (i.e. the bathroom) would need to be changed and re-designed. Some of the members of the groups regarded routines to be sustained by the products, tools and appliances that are available to women. Therefore, if they were re-designed they could influence routine changes. The groups interventions were based on re-designing bathroom appliances such as limiting the shower time through visible water and electricity meters and larger basins so women could wash their hair without having to wash their body. Further, the group considered re-designing products and tools such as inventing a hairdryer that cleans hair, a product that doesn’t need water to be activated, a ‘magic’ sponge that provides women with the feeling of having had a daily refresh without the need of a full shower or a product that would wash, condition and style hair without having to use appliances such as the shower (see figure 10 for some of these concepts).

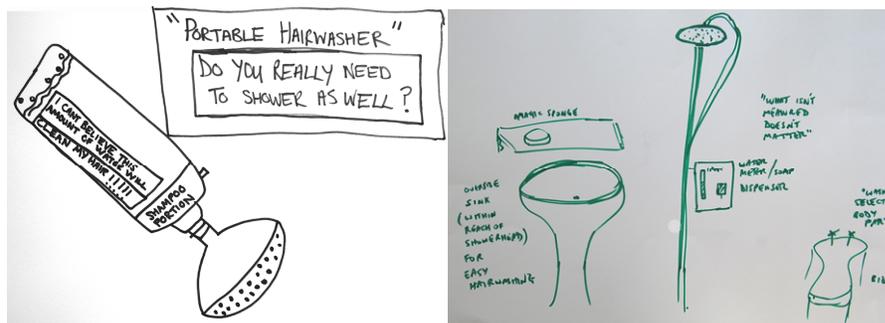


Figure 10: Alternative bathroom design as visualised by the group and drawer's sketch of the group's discussion: visualisation of a portable dispenser including water and shampoo to wash hair without the need of having a shower

Whilst examining these interventions the group identified that one of the major issues with regards to ‘time and lifestyle’ and resource consumption is that women feel the need to

shower and wash their hair everyday. This has become a social norm. The group concluded that washing hair daily might actually not be necessary. Some women wash their hair daily and therefore they might feel the need to wash it daily as a result. However, if they would stop washing their hair daily they might not feel that need any longer. Similarly to the 'products and techniques' groups, this group recognised how difficult it is to change routines (i.e. 'make that change'). The group highlighted that if women would start washing their hair less frequently it might get rather greasy and 'grubby'. Women's hair might not do what it normally does which might be the cause of a 'bad hair day'. The group agreed that bad hair days often result in women feeling bad overall.

The group examined cleanliness – what is clean and dirty hair, discussing whether less frequently washed hair should be embraced or disguised. For example, less frequently washed hair could be disguised through hairpieces, wigs and headscarves. The group wondered why these products are not as widespread anymore and how to bring them back into fashion. Exploring cleanliness introduced the group to discussions concerning how women feel about their hair but also to influences of cultural and social norms. Numerous participants in the group had days when they would work in the office but could often also work at home, too. Home and work hair seemed to be somehow different to the group because at home the participants cared less how their hair looked and felt like than at work.

The group pointed out that this attitude often relates to issues such as confidence, the difference between the 'public and private face' and being open for judgement by others. The group started to question how often people actually view and judge each other and whether if women could work from home they would wash their hair less often. Finally, the group concluded that to facilitate change to less resource intensive hair care routines women's perceptions would need to change and in particular public perceptions of less frequently washed hair. This could occur through discussion groups on a 'clean hair wiki space' or marketing campaigns that advocate the time saved by spending less time on hair (see figure 11).

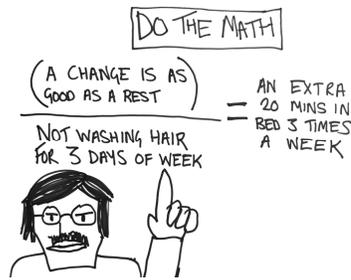


Figure 11: Drawer's interpretation of the group's discussion illustrating how time could be saved by washing hair less frequently

The group's final intervention builds on their discussion that perceptions of clean and dirty hair need to change and the recognition that changing routines that are based on less frequent hair washes is not easy, as hair in the public sphere is exposed to the judgment of others. The intervention the group pitched is a 'hair holiday'. During this holiday women are introduced to a 'natural hair management' programme in a supportive and reflective environment (see description of final intervention in outcomes – review session section).

Activity 1/2: Outcomes – Theme 'Using products'

In comparison to the other groups the 'using products' group produced more drawings and sketches than written material. The summary of activity 1/2 is therefore largely based on the interpretation of these drawings and the drawer's sketches. On the whole, the group seemed to have identified and concentrated on a key issue with regards to their theme question: hair care products get thrown away even if still half full and therefore create 'unnecessary' waste. The group identified that hair care products (i.e. its packaging and content) seem to last for too long when considering the owner's potential lost interest in the product.

Early on, the lack of co-evolution between the product's life and owner's routines was illustrated in their drawings. The group developed concepts to address this issue. For example, after being used for a few weeks the shampoo could evolve into a bathroom cleaner. Here, the product function stays the same (i.e. it cleans). However, it becomes less connected to the body/ hair but associated with its second 'purpose' to clean bathroom appliances. This concept might challenge women's concepts of a 'powerful' cleaning product and a 'gentle' hair care product (see figure 12).



Figure 12: Illustration of shampoo to bathroom cleaner evolution by the theme group

The second concept was based on a ‘Swap shop’ idea. Here, products would not need to co-evolve with their owners, as they would be passed to somebody else participating in the system. If the product does not keep its promise after using it at home it still gets another chance with somebody else. The group discussed that part of this concept is to encourage women to pass on their unwanted hair care products earlier rather than later, as they might become ‘dusty’ and therefore unappealing for others (see figure 13).



Figure 13: Illustration of ‘Swap shop’

During their discussions the group discovered that a lack of co-evolution often seems to relate to the following issues: the loss of appeal of a product, in particular in relation to look and novelty when being displayed in women’s homes and secondly, the pack sizes sold in shops often do not reflect ‘real’ usage time. The group identified that women often like to ‘display’ their hair care products in the bathroom or bedroom. However, this display is often short-lived due to factors such as fashion and the appeal of new products (regarded as more ‘beautiful and shiny’). Older products often get relegated out of sight and eventually become waste. The group started to wonder whether women actually use up perfume bottles, as they are often designed to look ‘beautiful’ and ‘pleasing’ (see figure 14). They knew that half full hair care products are frequently regarded as ‘messy’, leading to the question: How does the look of the packaging influence its use and disposal?



Figure 14: Drawer's interpretation of the group's discussion considering the display and look of products

As well as issues relating to the look of hair care products, the group questioned the pack sizes of products sold at any one time. They identified that products might sometimes not be sold in the right pack sizes. For example, shampoos and conditioners are sold in similar pack sizes but not consumed at the same rate, often leading women to discard half full conditioner bottles.

The group appeared to have had a 'can do' approach to the activities and produced numerous design concepts addressing the issues of display/look and pack sizes to prevent early disposal. The following design concepts were drawn up during activity 1/2: products that would have an on-pack information about how many applications there are per pack, products that could be refilled (see figure 15) and finally products that would be concentrated to reduce the amount of packaging.



Figure 15: Drawer's interpretation of the group's discussion concerning refillable packaging

The group's final intervention builds on the above discussion of look/display and pack size. It considers the notion of co-evolution of product and owner throughout its lifetime not only through it being refillable but also including a variety of customisation and personalisation

options. The final intervention of the ‘using products’ group is described below in the review section.

Introduction activity 3 – Random links intervention

The final activity of the workshop invited the participants to firstly, take ten minutes to individually brainstorm ideas that developed throughout the day when reflecting on the theme question - carrying out a so called brain dump. The participants were encouraged to note down every idea that would come to their mind, as they all would be of value. For the final part of the activity, the participants were asked to share their brainstorms with the group in order to create an intervention together. The intervention needed to be visualised or/and modelled, using their theme question as a brief and also the opportunities and ‘rebirth’ principle developed from the first and second activity. For this activity the participants were provided with paper, hair care magazines and modelling materials.

The participants were given fifty minutes to complete their intervention. To share the intervention and its development process with all of the participants, the groups were asked to ‘pitch’ their intervention to a ‘Dragons’ Den’ (i.e. the workshop team). Further, the participants were informed that after their ‘pitch’ the ‘Dragons’ would have the chance to ask questions to clarify their intervention and to finally decide if they want to invest in it, like on the TV show. The next part of this report presents the outcomes of this activity.

4. Outcomes – Review session

The ‘Dragons’ Den’ set up was chosen to provide the workshop participants with an engaging and humorous format that would give the groups the opportunity to share their process and intervention with the workshop in a relaxed environment. This format also allowed the ‘Den’ to follow up the pitch with some challenging questions to clarify and expand on the interventions. Although, the activity was not introduced as role-play per se, the moderators seemed rather comfortable adopting their ‘Dragons’ role, ‘grilling’ the groups with questions and deciding with their money in front of them if they would invest. (One of the ‘Dragons’ even invented his own multi-million pound company).

Some of the discussions during the review session were based on gender. The ‘Dragons’ wondered if the intervention would be suitable for both men and women. The workshop moderators absorbed themselves in their roles as ‘Dragons’ highlighting that an intervention, which would be sold to men and women may find a larger market and therefore potentially make them more money. As the PhD study only includes women in its sample, these discussions were not included in the report. This does not suggest that they are not relevant or that interventions in hair care needed to be gender specific - this decision only reflects the nature of the research and its sample.

Outcomes: Theme ‘Product and Techniques’ intervention pitch

As part of their ‘pitch’ the group presented a concept called ‘Tupperhair’ to the ‘Dragons’. It was introduced with the following slogan ‘Don’t keep your hair in a box’ and motto ‘Grease is good’. The group highlighted that this concept would be a new approach to hair – ‘a more holistic approach’, including a company, website and blog. Its main aim is to provide advice on hair care and sustainable hair care practices to women. The approach would be based on washing hair only once a week, including a seven day plan to do so. Throughout the week women would get advice on ways of wearing hair depending on its state of greasiness (i.e. tying it up, swept back, etc). This would be facilitated through ‘Tupperhair’ parties where trainers could visit women’s homes to teach them about techniques, hair care and new practices. These parties could also happen in health and beauty stores. In addition to advice, ‘Tupperhair’ would also offer new inventions such as ‘paper soap’, ‘cold heat straighteners’, ‘time-release conditioners’, ‘reusable water techniques’ and ‘grease proof serum’. The ‘grease proof serum’ could become a bestseller according to the group. The group introduced their concept using a visual board showing their seven days hair approach (see figure 16) and presented a token voucher to the ‘Dragons’.



Figure 16: Visual board for pitch – ‘products and techniques’ theme group

After listening to the pitch of the ‘products and techniques’ group, the ‘Dragons’ were wondering how such an approach to hair could cater for all the different hair types and textures and if the word grease might have negative connotation and therefore it should be called ‘natural oils’ or ‘good grease’. One of the ‘Dragons’ expressed his concern about wearing hair each day in a different way, as some women might want to have their hair looking and feeling the same every day. Although, the group was keen to change people’s acceptability around grease, the introduction of their interventions such as the ‘paper soap’ could give women the look and feel of having freshly washed hair every day. ‘Dragon’ number three welcomed this approach, as it would build on what is already happening – women learning from each other about hair: how to wear hair or to look after it. The new hair approach would mainly institutionalise this practice. The group highlighted that this approach would encourage women to share ideas around hair that is washed less frequently and therefore, they could learn from each other. Each ‘Dragon’ invested in the concept.

Outcomes: Theme ‘Time and Lifestyle’ intervention pitch

The theme group ‘time and lifestyle’ pitched to the ‘Dragons’ what they felt was a concept rather than an invention – a ‘Hair Holiday’. On this hair holiday women could re-discover that their hair does not need to be washed every day by leaving it and sharing this experience with other women going through the same experience. The women would be supported throughout the holiday but also create a safe environment amongst each other. The group highlighted that they did not want to market the holiday on pure environmental terms or on a ‘back to basics’ idea but to advertise it as a luxury spa holiday. As part of the overall holiday pack women could think about issues such as water and electricity usage, in particular

emphasising that women can still feel happy and healthy when using less resources. The group recognised that this concept could be very attractive to the middle class but would not appeal to everyone. Therefore, they suggested in order to facilitate not washing your hair daily it needs to become fashionable. This might be particularly supported through celebrity endorsements – the Jamie Oliver’s for hair care.

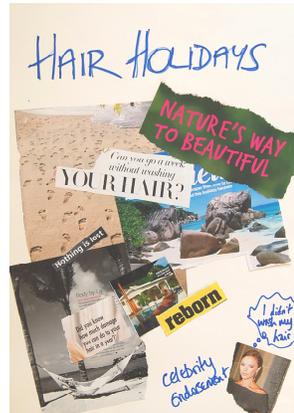


Figure 18: Visual board for pitch – ‘time and lifestyle’ theme group

After listening to the pitch, the ‘Dragons’ main concern was based on questioning the benefit for women i.e. the consumer (well-being for hair or better for the environment) and retailers in participating in the concept. One of the Dragons wondered if calling it a ‘holiday’ (positive connotations) and including celebrity endorsements would be enough to convince women to walk around with ‘disgusting’ hair.

At first, the group clarified that the ‘hair holiday’ is not about getting ‘disgusting’ hair but about hair management. Women get to know what their hair does ‘naturally’ by not washing it for a while and giving the hair the chance to ‘balance itself out’. The group pointed out that women have used shampoos and conditioners for such a long time they do not actually know what their hair would do if ‘just left’. After the phase of ‘just leaving it’ and ‘balancing itself out’ women would know what their hair needs, including how often it would need to be washed. This would happen in a supportive environment where each woman would go through similar experiences and could learn from each other (i.e. taking time out to re-experience hair). Time women often have not got when considering their busy lifestyles.

With regards to the benefits for retailers to support such a concept the group replied that retailers would sell knowledge and expertise rather than products. The concept would link retailers to more sustainable ways of living rather than a short-term quick fix solution. Further, the group pointed out that retailers might sell less products with regards to volume but if women would know what their hair does ‘naturally’ and what it needs, retailers could develop more tailored solutions and sets of products for each woman. Women would consume fewer resources but they are ‘good’ resources. Further, the group revealed that the ‘hair holiday’ would not only provide women with help to understand their hair better but also give retailers novel insights into their consumers and an opportunity to create closer relationships with their customers. Finally, the group also presented their design concepts that included sponges and flannels to provide women with the feeling of freshness without showering the whole body. It was not considered how this concept would be integrated into the ‘hair holiday’. Each ‘Dragon’ invested in the concept.



Figure 19: Drawer’s interpretation of group’s intervention

Outcomes: Theme ‘Using products’ intervention pitch

The ‘using products’ group pitched to the ‘Dragons’ a ‘total body system’ which they considered a solution to address the issue of wasting products that are still half full. During activity 1/2 they identified the following issues that needed to be focused on: storage and use of products (i.e. look/ display in the home), products that don’t keep their promise when used at home and finding a pack size that reflects ‘real’ usage time.

The ‘total body system’ concept was based on the idea that rather than having ten bottles in the bathroom women would only need one. The design would consist of a generic base product, including the detergent and nine little units that would contain active ingredients (see figure 20). Once the base and units are mixed together, they could create foam baths, exfoliating scrubs, shower gel, shampoo and conditioners. In order to mix a product women would need to ‘dial around’ the base product and push it down at the desired little unit. The detergent would then be dispensed in one of the little units and activates its ingredient. The little unit can then be taken from the base and used in the shower. Each little unit provides five uses. At the end of their life the units can be replaced by refills in the shop. The generic base container would come in four different colours: white, chrome, black and turquoise to match the bathroom colour schema. The group stressed that this system would allow women to make up their mind about a product at home because they would only waste five usages if they did not like it. Further, it could be fitted into the bathroom’s colour schema, creating a matching look and finally women would be able to make up their own product according to their mood, as only the active ingredient would be bought in the shop.

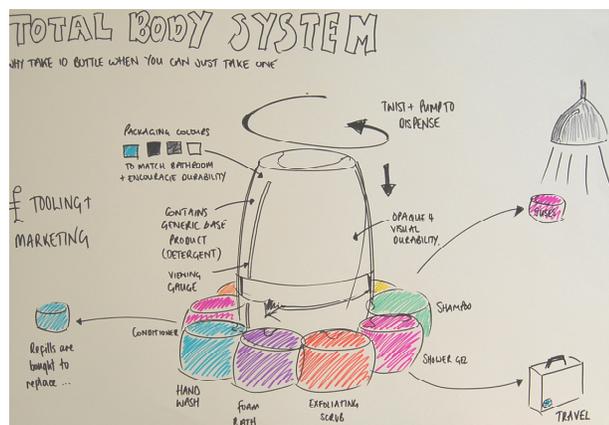


Figure 20: Visual board for pitch – ‘using products’ theme group

During the ‘Dragons’ question time one of the ‘dragons’ stepped right in announcing that his life would be made more complicated through such a system, as he would only use a bar of soap and shampoo and now he would have nine different products. The group replied that this product would be marketed at women. It would reduce the amount of volume for each product that a woman would have and therefore prevent half-full containers from being thrown away. There seemed to have been a general consent between all of the workshop

participants that a product for men would need to be designed and marketed on completely different terms (i.e. a one silver little unit). Furthermore, the ‘Dragons’ wanted to clarify whether the units would be refilled, replaced or thrown away, as it seemed to them that the group had increased the product/ packaging ratio. The group replied that the generic base product would never be thrown away but would be refilled. The little units when empty would be recycled and a replacement bought in the shop, as they can be attached and detached from the base container. The material of the little units would not need to be very durable, as it would only contain enough product for five usages. The ‘Dragons’ also wondered if the little units would actually be recycled, as they might be perceived to be too small to actually make an environmental impact.

Discussions continued around incineration, waste and recycling in which the group tried to defend their system. One of the ‘Dragons’ tried to move the discussion on from waste to the high level of commitment a woman would need to have to buy into such a kit/ system. The group felt optimistic about this, as women are familiar with similar systems already on the market such as coffee systems. The group further stressed that smaller bits of packaging are often associated with higher end products and that woman would buy an essence of something ‘really special’. Even though the group received some rigorous questioning all of the ‘Dragons’ decided to invest in their system.



Figure 21: Drawer’s interpretation of group intervention

5. Final thoughts

Throughout the workshop it was interesting to observe the willingness of the participants to share their own hair care experiences. In everyday life, women seem to talk with their friends and family about their hair but these conversations often consist of hair problems

that might have occurred but are less based on the mundane activities of washing, drying and styling. Interestingly, all of the groups concentrated on shampooing and washing hair. The reasons for this can only be guessed but may be the groups felt that washing hair represented the highest impact on resource consumption. Additionally, washing hair often starts off other hair care activities such as drying, styling and straightening and therefore is a relevant activity to explore.

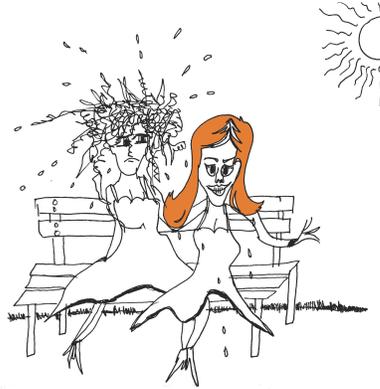
During the final review session the drawer pointed out that there seemed to have been one common agreement between all three groups: in order for routine changes to occur the activities of hair care need to become more 'social' and supported by experts, as routines create 'comfort zones' for women which are hard to make an impact on. Therefore, routine changes might only be facilitated by giving confidence to women through advice by experts and in particular through social networks, as presented by the 'products and techniques' and 'time and lifestyle' group. All of the groups created an interesting combination between the social (i.e. social networks) and the material (i.e. physical design interventions), highlighting that mere product based approaches might be too limiting to create any significant change to deliver improved sustainability in women's hair care. Furthermore, these social networks did not emphasise the communication of sustainability per se but emphasised the facilitation of change in everyday hair care routines that could lead to more sustainable ways of doing hair that use up fewer resources.

Alongside discussions of hair care activities becoming more 'social', the groups regularly considered today's acceptable norms and how they would need to change, in particular when examining norms around dirty and clean hair. Interventions were often based on embracing less frequently washed hair but on the other hand provided products for women so that they could cover it up or hide it. Whilst the groups reflected on these issues, expressions such as 'disgusting' and 'I wouldn't want to do that' arose from the participants, demonstrating how deep rooted and active our beliefs, attitudes and feelings are about having less frequently washed hair. One of the groups did not stop with hair care when thinking about cleanliness but also thought about body and laundry washing, illustrating how interlinked these activities are. The body and its hair is part of us and clothing is often associated with being our 'second skin'.

Finally, the workshop demonstrated that to facilitate routine changes in everyday hair care is a complex undertaking in which multiple elements need to be reconciled. I feel that the workshop contributed to a positive outlook towards this process, perhaps taking one step along the way.

I would like to thank once again everyone who attended the workshop. These events can be planned to a great extent but what will come out of the day is strongly influenced by the people involved. It was great to have such supportive, engaging and creative participants on the day.

Appendix 9 Examples of analysis drawings



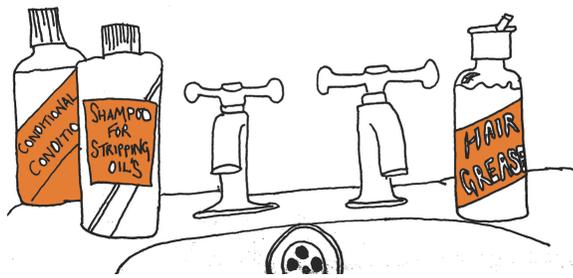
Drawing 1: What is acceptable hair?



Drawing 2: Alternative drying?



Drawing 3: Heath and hair



Drawing 4: Balancing substances on hair



Drawing 5: What is acceptable hair?



Drawing 6: Alternative straightening?

Appendix 10: Environmental impacts of hair care routines

In the recent past, environmental impacts of individual households have been considered as minor in contrast to the impacts of industrial and public sectors. Nevertheless, considering the combined impacts of households the significance of their contribution, some environmental problems emerge (Zacarias-Farah and Geyer-Allely 2002). Performances of the practice of hair care are implicated in the issues of environmental sustainability through the consumption of three material groups: water, energy and products. Water is used to wet and rinse the hair, energy is consumed to heat the water or for hair care tools, and products are employed to do things with hair such as shampoo. In addition, secondary consumption can be taken into account, such as the use of towels that need to be laundered when shampooing the hair. Considering current sustainable consumption research in the home, studies usually emphasis laundering, showering, lighting, heating and eating as the main areas for investigation. The practice of hair care might be an unlikely context to choose when examining issues surrounding sustainability. Still, when following the lifecycle of the numerous hair care tools and products a variety of environmental impacts become apparent, during the raw material extraction and refining, ingredient manufacturing, product manufacturing, impact on use and disposal (see for example Eskeland et al (2005) for a detailed review of the lifecycle impact of shampoo).

Eskland et al (2005) have found that the use phase of shampoo accounts for a significant environmental impact on the overall lifecycle of the product, in particular the use of water. Similarly, a recent study by the Carbon Trust and L.E.K. Consulting (2006) for Boots the Chemist concluded that the use phase accounts for the largest carbon footprint when considering the product lifecycle of Boots' 'Botanics' shampoo. The significance of the use phase becomes apparent when taking into account that women only use a small amount of product in relation to high volumes of water and electricity to heat and pump the water when shampooing their hair. In addition, the relevance of the use phase for most of the hair care products and tools becomes apparent when considering the lifetime of the hair carer and their routines as a basis, instead of product lifecycles. The impact of, for example, manufacturing individual products may have less of a bearing when examining how women's practices influence the amounts of water and energy used during the course of a

woman's life. Detailed discussions about the lifecycle of each hair care product and tool are therefore not crucial for this research.

It might also be insightful to examine the impacts of hair care on a societal level to explore how routines relate to macro-level impacts such as resource depletion and pollution. These quantifications are desirable but outside the scope of the thesis. Nevertheless, it is possible to provide an overview of the use of energy, water and product in the UK that relates to hair care routines and illustrates the significance of their impact. Although the thesis mainly concentrates on resource consumption, in chapter 6 it also discusses divestment patterns. Therefore, the next section does not only concentrate on energy, water and product use but also on the production of waste through hair care routines.

Water use

The typical UK household uses about 30% of their water on toilet flushing, 13% on clothes washing, 8% on washing up, 7% for the outdoor, 4% in the kitchen and 33% on personal washing (Waterwise 2007). Out of the 33% of personal washing about 37% of water consumption occurs during the shampooing process of hair. In other words, each 250ml bottle of shampoo results to an average use of 218l of water. Although over the recent years "there has been no clear underlying increase in per person consumption rates" (Defra 2010), the amount of water used has steadily increased since the seventies when each person consumed 110l per day to today's figure of around 157l (Dwrcymru 2010).

The environmental impacts of the use of water are comprised of abstraction related impacts, water pollution and the depletion of water as a resource. Although there are less immediate concerns for the UK and other European countries, concerning the depletion of water, fresh water scarcity impacts, for example, on the global food production and are therefore not only a localised issue for countries such as Northern Africa. The regions that deal with the localised impacts are concerned about the lowering of water tables and the salinisation of land. Land has become infertile because it is so dry, often leading to an expansion of deserts. Moreover, dry lands can absorb salt water from nearby oceans, contaminating fresh water resources. In the UK the pollution of water through hair care routines are relatively

insignificant in comparison to industrial sources. Nowadays, a majority of households are connected to infrastructures that provide a treatment of sewage that goes down the drain. One of the concerns that still exist is the depletion of oxygen through the release of wastewater. (OECD 2002) Considering the above issues regarding the abstraction, depletion and pollution of water, the amounts of water consumed for hair care routines seems to be an issue worth discussing.

Energy use

The majority of energy consumed in UK households is for space heating, which accounted for 58% of the energy consumed in 2000 (DTI 2002). 42% of the energy consumption is for lighting, the use of appliances, cooking and the highest amount for the heating of water (24%). It is difficult to allocate the exact amount of energy consumed when considering hair care routines in relation to the heating of water to shampoo hair and the various electrical hair care products, as such use patterns are widely unknown. Statistics incorporate, for example, the heating of water not only for showering and bathing but also for laundering and the use of various appliances. Nevertheless, what is possible to state is that although energy improvements have been implemented and contributed to improvements, the energy consumed in households has increased by 19% since the 1990 and by 32% since the 1970 (DTI 2002). It seems safe to assume that hair care routines have contributed to this increase. UK households account for 31% of the overall amount of resources consumed within the UK (DTI 2002). According to DTI report (2002) this is mainly due to increase of households, disposable income and total number of appliances in the home. For example, the energy used by appliances has increased by 157% since the 1970 and 9% since 1990. This increase is mainly caused through new technologies that arrived in the home such as home computer and various hair care tools.

In UK households, natural gas and electricity are the main source of household energy. Natural gas is still the main choice for cooking, hot water supply and central heating, accounting for 67% of the domestic energy consumption in 2001 (DTI 2002). One of the biggest impacts that are linked with electricity use and the combustion of gas in households is the emission of CO₂ and other greenhouse emissions. In addition, impacts are based on

the pollution of air through Nox and SOx emissions and the potential risks of nuclear waste, depending on the reliance of nuclear power. Studies that directly link hair care routines with overall emissions have not been conducted. However, the overall impact of household energy consumption accounts of 27% of all carbon emission (National Audit Office 2008) in the UK.

Product use

The ingredients of hair care products regularly end up in the sewer after use, in the atmosphere or in landfill. Eskland et al (2005) have highlighted the popular but baseless belief that products which are considered as not being harmful to human beings must also hardly have any impacts on the environment. After studying the environmental impacts of shampoo, Eskland et al (2005) have suggested that the impact of the ingredients of shampoo in the sewer stream is potentially very high. For example, Zinc Pyrithione has a high environmental impact but a low influence on the health of a human being. Although the combined effects of product ingredients are unknown and their impact on the water quality is small in comparison to total emissions, the ingredients of products cause harmful effects to aquatic organisms. Moreover, uncertainties and controversies remain about the ecotoxicity and the human toxicity of the use of chemicals in beauty products, including hair care products.

Waste

The packaging of hair care products mainly consists of plastic bottles and cans that are manufactured from steel. Plastic packaging accounts for 53% of all goods whereas metals sum up to 7%. The major plastics are Polystyrene (PS), Polypropylene (PP) and Polyethylene (PE). These types of materials do not degrade biologically and therefore stay in landfills forever or they are incinerated (Eskland et al 2005). Currently, in the UK 275000 tonnes of plastic are used each year that accounts to 15 million bottles each day – out of which some are hair care products. Only a small amount of plastic is re-used and about 23% of all plastics are recycled in the UK. A quarter of all steel cans that are produced in the UK, are made out of recycled steel, the rest ends up in the waste stream.

In addition to the packaging waste, hair care routines lead to the divestment of hair care tools most of which are electrical. In this research, women only replaced their hairdryer whenever their old one broke whereas hair straighteners that incorporated novel technologies often took the place of existing ones that were still functioning. There are numerous causes for the divestment of hair care tools (as discussed in chapter 6). Approximately 940,000 tonnes of domestic waste electrical and electronic equipment (WEEE) is produced each year, which sums up to four WEEE items per household. This waste is currently growing three times faster than any other domestic waste. After their disposal WEEE items are incinerated or dumped of in landfills. Some items can be re-used or recycled, however, these markets are not well developed in the UK. (Parliamentary Office of Science and Technology 2007)