

The Return of the Beehives, Brylcreem and Botanical!

An Historical Review of Hair Care Practices with a view to Opportunities for Sustainable Design

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Abstract

This paper considers hair care as a network of activities and routines which have consequences for environmental sustainability and which may be modified by design. It proposes that together with cultural knowledge, embodied skill and objects, these activities can be thought of as 'practices' that are reproduced and also change through time (Shove 2006). They consume resources and are therefore implicated in the issue of environmental sustainability.

The paper draws on research into hair care practices conducted through in-depth interviews with female participants, as part of the first author's PhD study. The discussion here however centres on historical work and Shove's (2003) writing on bathing to explore the changing products and substances including ideas, technological and infrastructural aspects of cleansing and conditioning hair. Because these factors may determine when to wash or not to wash your hair they affect resource consumption.

The paper concludes by outlining opportunities for sustainable design that follow from the insights gained by investigating the history of hair care in relation to the data collected during in-depth interviews. It highlights, as outlined by Hand et al (2005), that the resources consumed through hair care are influenced by the integrative nature of hair care as a practice rather than by individuals being dedicated to sustainability.

To concentrate on single products without taking into account that hair care is practiced in everyday life is not likely to provide opportunities for sustainable living. What is considered 'normal' standards of hair care and means to achieve them needs to be conceptualised to identify opportunities to modify what is considered 'normal' through design.

Keywords

Everyday Practices, Sustainable Design

Hair is visible – we manipulate it to show others who we are. Hair identifies us by announcing our age, gender, religious beliefs, occupation, politics and other aspects of life. Hairstyles, advertisements and products form symbolic systems, creating a series of signs legible to those in our social groups. Mass media, product advertising and celebrities play an increasingly influential role in determining hairstyle trends and fashion. Historical work on hair often reflects this by documenting historical developments of styles and their

interpretations in a particular period of time. These 'spectacular' aspects of the ways we 'do' hair are relevant to understanding hair care, but they do not represent the full story. Much of what we do with our hair we do in private as part of a network of everyday routines and habits – it is anything but spectacular, even though the results may be. What we do with our hair is determined by competences, knowledge, past experiences and temporal, sensual, contextual and emotional arrangements of everyday life; it can be thought of as a 'practice' in the sense that deCerteau, and Bourdieu use the word (DeCerteau 1984, Bourdieu, 1977). These daily practices can consist of taken-for-granted routines that are often so built-in in our everyday life that we hardly ever reflect upon them but these ideas and products create 'normal' standards of what there is to be cared for and the means to achieve them.

These hair care routines consume resources and therefore are implicated in the issue of environmental sustainability. Showering and bathing accounts for 17%-18% of UK daily domestic water consumption - on average we spend seven to eight minutes under a power shower that pumps out between twenty and fifty litres a minute. These figures account for only part of the environmental impact of hair care as they omit the energy consumed to heat the water or to power hair care appliances and the waste produced from used packaging and unwanted appliances. Whatever its precise level, the amount of resources used in hair care is not a 'given', indeed Shove has demonstrated that our current daily showering habit displaced the traditional British bath. (Shove 2003)

Past sustainable design strategies often disregarded the environmental and social implications of products in the use phase, concentrating instead on technical innovations (Sherwin et al 1998). Such design strategies for sustainability emphasise improving the environmental profile of products through, for instance, design for disassembly and enhanced efficiency, but as Demi notes, these should not be the only focus as they ignore the more slippery phase of use - for example everyday habits with hair (Fletcher et al 2001). Where designers have started to engage with the use phase by considering consumer behaviour, approaches are often solution-based; designers interpret and develop a design strategy and try to apply it to a certain context instead of being more explorative and considering if the strategy is actually appropriate for the context. These solution-based strategies apply so called product focused or result focused approaches (Fletcher et al 2001). While they sometimes address ways of satisfying needs these are often questioned in relation to lifestyles and behaviours on the ground of values and attitudes rather than patterns that determine habits and routines.

This paper draws on the first author's PhD study¹ that is undertaken in collaboration with Boots the Chemist UK in order to investigate relationships between the elements that constitute the practice of hair care at home in order to develop opportunities for sustainable design. The study is based on in-depth interviews with 24 women and 12 hair care expert interviews, as well as a review of historical work on hair. It draws its analytical framework from Shove's (2003) writing on bathing and theories of social practice.

To work within the constraints of a short paper, we here mainly explore ideas, routines, products and substances over time around cleansing and conditioning to inform the investigation of everyday hair care as reported by the participants. By looking back in time, designers may find frameworks for thinking about design contexts in a new light in what Wright et al call a 'conceptual re-positioning of the design problem' (Wright et al 2006) and which Buchanan (1992) refers to as a 'doctrine of placements'. Indeed, multidisciplinary approaches encourage the designer's generative thinking and the creation of innovative, sensitive and meaningful concepts. This discovery-orientated process has been further advocated by Satchell (2003) who stresses the use of cultural theory as a lens for analysing qualitative data in design. The purpose of the paper therefore is not to provide a definitive history of hair care, as historical and cultural studies of hair already exist, but to draw on these for inspiration to engage with the interview data, explore consequences for resource use and identify opportunities for sustainable design. Hairstyles are the final outcome of practices that reflect processes, activities, skills, ideas and products used; it is these processes that are the main focus of this study not their results.

Here, 'doing things with hair' is seen as a network of activities that, together with cultural knowledge, embodied skill and objects, form a particular set of practices that reproduce and change through time (Shove 2006). Shove draws on sociological and anthropological studies of technology to highlight the limitations of analysing objects and their acquisition in isolation without investigation the 'reconfiguration of ideas, actions and habits' connected with their use and appropriation. In her analysis she relates our bathing habits to the domestic technical arrangements we live with every day, the infrastructure that provides us with the means to make these arrangements work and, crucially, the very powerful sets of ideas that motivate us to clean ourselves in the particular ways that we do. What is notable in her account is the coherence with which she integrates these elements of bathing and traces the ways in which they change over time. Extending Shove's insight, this paper recommends that we think more systemically about the relation between consumption, provision and practice to create ideas for sustainable living where the activity of designing exceeds the professional realm of a

¹ The empirical research design of the first author'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 the 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 to 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.

solely product-focused approach as designers investigate opportunities that go beyond the point of sale.

The paper offers an initial analysis of the nature of cleansing and conditioning hair in particular what is considered 'clean' hair and the means to achieve and detect it. The paper will start by introducing the practice of cleansing and conditioning hair with a brief reflection on their history. This is followed by an exploration into the ideas about what needs to be cleansed out of hair, drawing on Mary Douglas' (1984) conceptualisation of pollution and dirt. This allows an investigation into how 'hair that needs to be dealt with' is detected and evaluated for its acceptability. This introduces a discussion of ideas of 'good' and 'bad' grease that influence frequencies of washing hair, affecting resource use. The later part of the paper, investigates how people have dealt with hair including available tools and substances such as powder, shampoo and brushes that are based on varying resource intensive practices. This highlights a development from practices that concentrated on moving grease that was taken to be a healthy product of the head to removing it and enhancing 'condition' through adding another substance; conditioner. Here, the paper will particularly draw on Hand's et al (2005) study of showering and bathing.

Because the paper presents part of work in progress it is not possible to state definitive results or design concepts. However, it concludes by summarising the insights gained for sustainable design opportunities and discussing the usefulness of examining the history of hair care in relation to the data collected during the in-depth interviews. It highlights that notions of what it is to be normal and acceptable needs to be conceptualised when thinking about sustainable design. When thinking about research into design, hair care might be an unusual context to study, as traditionally designers are only involved in developing of packaging for hair care products, but this paper proposes that design might have a significant role when thinking about hair care in relation to sustainability.

Cleansing and conditioning

According to the Mintel study Shampoo and Conditioner 2007, 25% of women wash their hair everyday, 59% two-three times a week, 16.5% once a week or less. During in-depth interviews women mentioned numerous rationales for washing or not washing their hair. These can be grouped into three concepts: 'cleansing', 'pressures of time' and 'creating a new canvas'. 'Creating a new canvas' equates to ideas of styling. Of these three, this paper concentrates on cleansing.

'Clean' means an absence of dirt. While this is a simple matter it is less simple to define what constitutes dirt, as the discussion below will indicate. In the hair, dirt can include dust, grease, pollution and smells. The intentions behind cleansing have included to promote health, to avoid odour, to enhance beauty and social acceptance. At the beginning of the 21st Century the resources used to cleanse and condition hair include synthetic detergent shampoos, conditioners and hot water from either a shower or bath. Shampoos cleanse the hair and scalp but they might 'over-cleanse', making conditioners necessary. The idea of modern chemical conditioner is to leave the hair 'conditioned' without making it heavy and greasy by smoothing the

cuticle that is the outside layer of the hair, making it shiny (Draelos 2005, Kinsely 2003). In contemporary practice, cleansing and conditioning consist of a sequence of interdependent steps and stages such as wetting hair, squeezing shampoo into hands, rubbing it in the hands, massaging it into the scalp, rinsing it off with water, squeezing conditioner into hands, rubbing it in the hands, massaging it into the hair ends, distributing it with the comb, waiting for a few minutes before rinsing it off. Depending on the women's² routine these steps and stages might be part of the evening bathing routine or morning showering routine. This list highlights the fact that cleansing and shampooing means women interact with a range of tools, facilities and fluids whilst carrying out a variety of activities in relationship to particular parts of our body.

This was not always the case. Access and availability to the products, appliances and substances that were gradually introduced during the twentieth century was not complete in UK homes until the 1960s. Piped water was provided to UK cities from the 1880s, but it was not until 1930s that most middle class homes were supplied with hot and running water and the 1950s for many working class homes (Hand et al 2005). Synthetic detergent shampoos were first developed during the 1930s but still had some shortcomings. The technology behind the products we use today was not introduced until the 1960s. Over the centuries women used a variety of different substances such as powders to dry-shampoo their hair. During the sixteenth to the seventeenth century women wiped the hair with sponges immersed in scented water and powder before combing it each day. At the beginning of the twentieth century the practice of dry-shampooing was accomplished by the use of either petrol or Carbon tetrachloride as a cleansing agent both of which resulted in fatal accidents. Petrol massaged into the hair could easily ignite if anything warm was around whilst Carbon tetrachloride is similar to chloroform and only to be used in ventilated places. As soap became more available it was promoted with the slogan³ that one bar would suit all possible uses including washing your body, hair, clothes and dishes. The use of soap for cleansing the hair never got well established, as it was difficult to rinse and dulled the hair (Cox 1999).

This brief history demonstrates a co-evolution of technological, chemical and infrastructural, i.e. material, elements of cleansing hair that have influenced hair care practice as they have become available to a wider market, more safely to use and more 'efficient' in cleansing hair. Nevertheless, it fails to reveal the whole picture of how practices of cleansing have developed into what we now consider a 'normal' practice. Next to products and substances a practice is comprised of ideas and routines and in the case of hair these include questions such as what is there to be cleaned and the appropriate means of dealing with it that affect resource use. The influence of ideas on cleanliness routines is demonstrated in historical practices of bathing. During the sixteenth and seventeenth century, people rarely immersed themselves in

² As this study has focused on women, the paper will refer to women instead of the more generic term of people. Some of the points suggested might not be gender specific. However, this would need to be further explored in a study that would include men and women.

³ The 1924 Ivory soap slogan was: 'Why buy a soap for toilet and bath, another for shampooing, another for fine laundry, a fourth for dishes, and a fifth for general laundry, when Ivory will fulfil all these needs?' (<http://siris-collections.si.edu/search/results.jsp?q=Ivory+soap+1924&x=0&y=0>)

water as the skin was considered to be porous. If fully covered by water, fluids could 'leak out' and dangerous substances could leak in. Furthermore, at the beginning of the 20th Century although the government promoted cleanliness in persuading people to wash their hair more regularly this did not increase the washing of hair, because popular belief connected getting the hair wet with poor health. During this era women did usually have long and thick hair that needed time to dry and without hairdryers people felt more susceptible to colds and fevers if their hair was wet. (Hand et al 2005, Cox 1999, Sherrow 2006, Vigarello 1988)

Origins of grease – what needs to be cleansed and how is it detected?

Hair is nonliving. The hair outside the scalp has no blood, nerves and muscles. On the other hand, it has got some attributes that make women believe the opposite, as each hair is connected to a follicle within the scalp with its own muscles. The look, feel and smell of hair constantly changes through women manipulating it, through external influences such as the weather and the indoor environment and through its own production of sebum. This oily substance, commonly referred to either as 'grease' or 'natural oils', is produced by the sebaceous glands and is made of fat and debris from dead fat-producing cells. It is odourless but its bacterial breakdown can produce smells. Sebum removes static electricity, protects and waterproofs the hair and therefore keeps it from becoming dry and brittle. Like sweat and the fungi and bacteria that live on the skin, sebum is close to us, almost 'internal' as it is produced by our bodies. Its effect on the feel, look and smell of our hair, influences our decisions to wash or not to wash it and consequently the amount of resources consumed (Draelos 2005). There are also external elements that can influence the hair and scalp such as nits, environmental dirt, dust, pollution and 'product build-up' from styling products. Throughout history the question of what there is to be cleaned from hair has emphasized a variety of 'acceptable' quantities and types of dirt, ways of detecting it and dealing with it.

Before the 19th Century people lived in relatively unsanitary living conditions with open sewers and in unventilated houses. People of the lower class who were the majority, often did hard and strenuous work. Their living conditions encouraged scalp infections, diseases and head lice. During industrialisation, the atmosphere of England's industrial towns was polluted - the buildings the rain and people's hair were smoke-blackened. Smut could fall from a clear sky if the wind was right. The growth of industry and of population resulted in an increase in 'dirt' that led at the beginning of the 20th century to a variety of public health acts, including an emphasis on cleansing hair. Environmental conditions have improved considerably over the last century, reducing the effects of pollution, dirt and diseases and it might be possible to suggest that external influences on hair have become more 'invisible' but they are still of concern nowadays – dirt from outside still needs to be cleansed from the hair. One of the participants suggested that you need to wash your hair, 'if you have been to the city centre and your hair feels like it is full of pollution and things like that or you have been to the pub and it is full of smoke' (Participant 2).

Dant (2004) argues that people are pragmatic when it comes to dirt, 'if they can see it, it is dirt or if they can smell it, it is dirt'. They use their senses to make decisions on what has to be done to remove the 'dirt'. If this were so one would expect that the greater 'invisibility' of external influences on the look, feel and smell of hair would result in less frequent washes, but this is not the case. In the 1950s women washed their hair not more than once a week, whereas nowadays frequent washes during the week are the norm (Cox 2005). Dirt does not need to be visible to our senses to be concerning - women report the existence of more 'invisible dirt'. They detect dirt through knowledge, touch and sight. Smells, which may once have betrayed the need to clean the hair, are mainly linked to choosing products, in particular when trying to make a distinction between what is preferred and what products are seen as 'artificial' and 'natural'. Now hair care smells are not related to the odour of hair. It seems that we have lost our sense of what hair actually smells like. This was not always the case; in the mid-eighteenth Century most people considered frequent washing as unhealthy (Trasko 1994). Hair was damped with a sponge or towel dipped in scented water and heavily powdered, like the wigs women wore at the time. This caused a perfect nesting ground for lice and created intensive smells (Cox 1999). It might be that then that the smells of a dirty head and the irritation caused by lice was a more pertinent issue than the disguising or removing of grease. Whereas nowadays the reduced occurrence of lice and the near disappearance of the smell of hair means that only grease is sensually apparent.



Figure 1, Powder and wigs 18th Century (Trasko, 1994)

In Douglas' social theory of dirt she suggest 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' (1984:36). When people wash and clean they are making their environment i.e. hair conform to a societal pattern. Douglas illustrates this with cleaning the house, 'we are separating, placing boundaries, and making visible statements about the home that we are intending to create out of the material house' (1984:69). As outlined above, our embodiment of smell, touch and sight and our knowledge indicate to us when to deal with hair. How 'dirt' is detected and what is considered 'dirty' reveals a reconfiguration of social ideals that are dynamic and change through time. What is acceptable or non-acceptable dirt in hair partly depends on our ideas of cleanliness in the society we live in.

This is not so say that we only cleanse our bodies to make us socially acceptable and distinguish ourselves from others. There might be something about the feeling of hair that is unwashed that touches us more fundamentally - we don't feel right in our skin. As one of the participants said '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'. A

full discussion of the relative power of social acceptance or intrinsic aversion to dirt to motivate hair care is outside the realm of this paper, however it is the system that defines what is personally and socially acceptable that leads to the dealing with 'dirty' hair and the use of resources and this is therefore further discussed in the next part of the paper.

Good and bad grease

For the women interviewed, dirty and greasy hair is 'messy', 'lank', 'not clean', 'damp', 'looks a bit flat', 'coated in a layer of fat', 'stick together', 'limp' and 'heavy'. This greasy dirt seems to have different origins - it can be produced through the body as in 'my body creates grease' or through sweat 'I sweat and therefore my hair feels sweaty'. Environments such as motor garages can influence the greasiness of hair, as can certain styling products and conditioners. These different origins seem to influence attitudes towards grease and the resulting desire to wash hair. The grease that my body produces seems to be viewed as 'good grease' as it regulates the 'health' of hair. However when this greasy dirt is called 'sweat' it is entirely negative. Further, the natural production of oil can be related to having a greasy hair type and an 'overproduction' of grease that is 'bad' as it attracts dirt from the atmosphere. There is a fine line between good and bad i.e. accepted and non-accepted grease highlighted in the different stages of greasiness women refer to: "lightly greasy, really greasy, doesn't get that greasy, not overly greasy".

Ideas of good and bad grease are relevant for design as they are influenced by the products and substances women use on their hair. Shampoos 'do not do their job' if they still leave the hair feeling greasy - which is in direct conflict with being concerned about shampoos stripping hair of its natural oils. So for one of the participants,

'it (shampoo) doesn't really feel like it does the job. It is clean, it is almost like too clean because you know that feeling where you feel like you are taking too much out of your hair and it is not how I would want my hair to be after I washed it. I want it clean but I don't want it to be like wrecked. I want it to be like clean but still soft and that you know like still moisturised'.

Here, conditioners play an important part. They are often associated with putting back the grease i.e. 'coating' the hair with what the shampoo has removed. Conditioner is a synthetic product that substitutes for natural oils but will not leave hair lank and greasy like natural oils. Mirroring the balance between 'good' and 'bad' grease, the use of products and substances for hair tries to achieve a balance that keeps it half clean, a bit greasy but healthy where the natural production of grease has been replaced by the synthetic product, the conditioner.

The idea of 'good' and 'bad' grease makes it possible to construct a scale where the extremes are 'too greasy' and 'too clean', with intermediate points 'greasy; and 'clean'. After several days without washing, hair is 'too greasy' and looks and feels 'lank', 'limp' and 'clumped'. Hair also seems like this if styling products are over-used or conditioners are used that are 'too heavy and rich' which leave hair 'coated in a layer of fat'. Women avoid having 'too greasy' hair so this state is an exception as cleansing practices pre-empt

it. 'Too greasy' hair is associated with being ill or unhealthy or being a homeless person.

On the other hand, too clean hair is stripped of all its natural oils and therefore 'fly-away', 'unmanageable' and 'dry'. It is lacking 'good' grease. When hair starts to show greasiness at the roots and along the hairline by being a bit shiny it is not always viewed as being 'bad'. This grease can keep the hair 'manageable', as a 'natural' styling aid that provides the necessary hold for certain pin up styles and curls. Clean hair is described as 'bouncy', 'shiny' and 'free-floating' and is the most desired hair and is achieved through a fine balance between finding a shampoo and conditioner that balance each other in terms of natural grease reduction and synthetic grease production.

Little research has been undertaken on ideas of dirt and grease in hair; research mainly concentrates on styles and fashion. However, such studies do allow some conclusions to be drawn about ideas about grease and dirt in the hair. In the recent past the idea of having grease in hair was accepted as a way of styling it, including for example styles in the 1980s and styles of the youth-based subculture called 'Greasers' in the 1950s. In the early twentieth century grease in hair seems to have been more acceptable, even being visible and encouraged. Women were keen to have natural looking hair that was shiny, sleek and healthy looking (Figure 2). Earlier, men had used Macassar oils to make their hair glossy, leading to the conventional use of a small cloth, known as an antimacassar pinned to chairs and sofas to keep the upholstery from being damaged by the greasy Macassar oil. This 'good' grease was not only visible on the hair but also on the things that came into contact with hair. The scale of the change in our relationship to hair grease is demonstrated by the degree to which in our hygiene aware and resource intensive century this level of grease would be unthinkable and frowned upon. (Cox 1999)



Figure 2, Long hair of the 1900s (Cox 1999)

It is ideas towards grease and dirt that determine washing frequency and therefore they are significant when thinking about resource use. Because these ideas are fluid and change over time, design might engage with them – for instance to make natural oils more acceptable today. As shown above, oils are still perceived as an integral part of keeping hair healthy and shiny. However, along with different ways of dealing with grease and dirt, over time natural oils have been replaced by synthetic ones. When grease was brushed from the roots to the ends, hair cleansing used up fewer resources than today's frequent washes of hair. Ways of dealing with grease and dirt is examined in the next part of the paper.

Moving and healthy production to removing and adding

The Victorian convention of brushing the hair one hundred times each night was intended to move excess hair grease from the scalp to the ends of the hair – distributing it evenly. Regularly brushing was believed to encourage a healthy production of natural oils - grease was moved, not necessarily only removed. In this era, natural oils gave hair a shininess that was a sign of a healthy person. Combs were used to keep the head free from disease, often having two sets of teeth with different spacing, one fine set for cleansing including removing lice and their nits and the other set with wider-spaced teeth for styling (Cox 1999, Sherrow 2006). Whereas dust and lice were removed from the hair, a certain amount of grease was tolerated. Specific methods and techniques for using combs and brushes for cleansing were still advocated until the 1950s – the time of the bouffant and beehive when brushing became once more an important part of the beauty routine, as the style meant hair could only be washed infrequently. Furthermore, the styles of the 1950s were rather time-intensive to achieve and required a liberal use of lacquer hair that needed to be brushed out (figure 3) (Cox 1990).



Figure 3, 1950s Bouffant style (Trasko, 1994)

Dry-shampooing has been practiced over the centuries with varying prominence. Dry-shampoo penetrates the hair absorbing 'dirt', distributed by brushes and combs and is then combed out. This way of dealing with grease involves moving it and removing it by adding a special substance and using a special set of techniques of brushing and combing. Though this used fewer resources than current ways of cleansing hair, it might be that it was the start of using a substance to remove grease. The practice of dry-shampooing has become more popular recently and lost part of its old-fashioned image. Boots reports a '45% rise in sales of dry shampoo in the past year, suggesting that, far from being an excuse to go all Swampy, the new generation of dry-shampoos offers a practical alternative to a daily wash and blow-dry' (The Sunday Times 2008). However, this is not likely to be motivated by resource reduction but by time saving.

During the 1960s seven days a week shampooing was advocated next to the introduction of today's technology of synthetic shampoos and conditioners (Cox 1999). Styles of hair became more free-floating supported by the idea of having 'natural' hair that just falls into place (figure 4). Techniques of brushing were by this time completely replaced by a chemical substance to remove grease and with the removal of natural oils balanced by conditioners to add 'good' grease. Losing their role in cleansing and the distribution of natural oils, combs and brushes had by this time become exclusively styling aids, specialised for different applications such as teasing, backcombing and curling. This process started as early as the 1920s, the time of the Bob and the finger wave, when women worried about combing out an expensive and time consuming style abandoned regular brushing and combing (figure 5). The emphasis on brushes and combs as styling tools became more established

when women started to backcomb their hair to create body and lift during the 1950s (Cox 1999, Sherrow 2006). The diversity of round brushes, vent brushes, paddle brushes, cushion brushes etc. that are available now are designed for specific techniques of blow-drying and styling hair (Daerlos 2005) (figure 6,7) and to encourage women's autonomy from the hairdresser by making it possible to create a style easily at home. One side effect of this is that the use of metal and stiff plastic brushes has led to trichologists increasingly warning women of the damaging effects on the hair of the extensive use of brushes and combs (Kingsley 2003). From being a process that benefits hair health, in combination with chemical cleansers and conditioners brushing and combing now threaten it.



Figure 4, 5, 1960's Vidal Sassoon graduated Bob and 1920's Bob with wave (Trasko 1994)

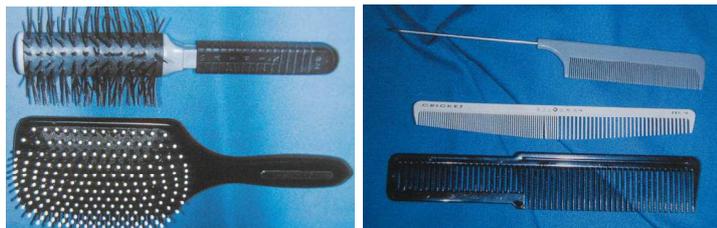


Figure 6,7, A small selection of combs and brushes today (Draelos 2005)

Women judge products on a surprisingly functional basis – whether they 'do their job' – though this job is mysterious; one participant describes a hair care product as 'magic'. This seems to result from the 'job' that hair care products and equipment do now being divorced from the physicality of sebum, smoke and parasites; they remove intangible dirt and address conditions that are aesthetic rather than physical. Intangible 'dirt' and grease are removed and added through chemical processes embedded in the formulations that we use. The intangible 'job' that products do is defined through advertising where the invisible is made visible by illustrating and naming conditions that pathologise 'dryness' or 'lack of shine' and offer quasi-scientific remedies for them.

Although chemical products 'doing their job' seem to have replaced the human labour of brushing, combing and dry-shampooing, one of the expert participants, a hairdresser, stressed that if people do not use the 'right' technique with a product it will not create the desired effect. This fact suggests that the design of hair care products is an opportunity to encourage techniques for cleansing that are supported by products that are less resource intensive – if technology can supply synthetic substances that 'do the job' the design and marketing of those substances can also define what that job is.

Summary and conclusions

The paper has provided insights into the nature of cleansing and conditioning practices today whilst reflecting on the history of hair care. It examined sensual experiences with hair as a way of detecting grease and dirt, the dynamic and changing personal and social acceptability of grease and natural oils and the various ways of dealing with grease and dirt over the last century.

This examination of the history of hair care can facilitate opportunities for sustainable design, as a variety of past approaches were based on less resource intensive practices. However, it does not suggest that to move towards sustainable hair care practice designers need to 'retrieve' the past by encouraging the use of brushes and combs as cleansing products. Rather the design of hair care products is an opportunity to encourage more sustainable everyday techniques for cleansing which are supported by chemical products rather than being supplanted by them. Such techniques and substances could rely on less resource intensive processes by for instance, encouraging a new balance between natural and synthetic oils promoted by more diverse concepts of what it is to have clean and healthy hair. Also this paper has dealt with only one aspect of cleansing hair that largely ignores the significance of time and styling. It is an initial analysis of the aspects of washing hair which indicates that further work needs to be carried out to develop more detailed design concepts and scenarios to confidently specify approaches for more sustainable practices and products for cleansing and conditioning.

This paper has tried to highlight that when thinking about opportunities for sustainable design it is less effective to concentrate only on single products in isolation from their use in everyday practices. In this case, this means considering the reconfiguration of what it is to cleanse and condition hair as the basis for sustainable changes. Resources consumed are shaped by the nature of cleansing and conditioning as a practice rather than by individual consumer choice, so if designers want to influence change they have to consider the composition of all of the elements of a practice: ideas, conventions, expectations, substances, products, available infrastructures, temporal arrangements and routines that make the current resource consumption possible. Following Shove, (2003) what is considered a 'normal' standard of hair and hair care needs to be conceptualised which requires a cross-disciplinary approach to designing that uses 'designerly' thinking in conjunction with theories of everyday practice and human/ objects interactions.

Understanding material things requires understanding practices. Given that practices and things are mutually constitutive, changing things might accompany changing practices.

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Sabine Hielscher

Sabine Hielscher graduated from the BA (Hons) course in Ecodesign at Goldsmiths College, London in 2004. The course enabled her to engage with ecological, social and cultural issues in design. While studying and upon graduating Sabine gained work experience with the Institute for Ecological Economy Research and more recently with Forum for the Future, where she developed valuable insights into sustainable research projects and in particular in the business programme of the Forum for the Future into corporate social responsibility. Further, Sabine worked for Startup Design and the Thomas Heatherwick Studio as a Design Assistant, and this afforded many work-related design challenges. She is currently a PhD student at Nottingham Trent University. Her research interests lie in sustainable design, human-object interactions and design-led qualitative research methods.

Dr Tom Fisher

As well as craft learning and musical instruments Tom Fisher's research interest in human-object interactions encompasses the industrially produced designs found in every day domestic spaces such as plastic objects and packaging as well as designs that come about through informal processes, such as the devices used in non violent direct action. This draws on his education in Fine Art and Sociology and his background as an artist, craftsperson and musician. He is currently working on a book for Earthscan about packaging reuse, with Janet Shipton, and is Professor of Art and Design at Nottingham Trent University.

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Dr Tim Cooper is Senior Lecturer in Consumer Studies and Head of the Centre for Sustainable Consumption at Sheffield Hallam University. After graduating in economics he worked in industry for fifteen years, latterly as an environmental consultant, before establishing the Centre for Sustainable Consumption in 1996. His research interests include the life span of household products, environmental policy, and consumer attitudes and behaviour. From 2004-08 he managed the EPSRC Research Network on Product Life Spans. He has acted in an advisory capacity to the European Commission, European Environment Agency, Council of Europe and Defra and has been an Evaluator for the Irish Environmental Protection Agency and Belgian Federal Science Policy Office. He was Specialist Adviser to the House of Commons Environment Committee for its enquiry *Reducing the Environmental Impact of Consumer Products*. He has undertaken consultancy work for a wide range of industrial and environmental organisations and has written two books and numerous papers and articles.