

Changing ideas of bodily cleanliness

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Abstract

The modern bathroom reflects Western ideas on the handling of bodily wastes, and consequently ideas of cleanliness. Taking a historical study as the point of departure, the purpose of this paper is to understand the extent to which the idea of cleanliness influences the possibility of converting the water closet to a more sustainable technology. An examination of historical changes demonstrates that our present ideas on cleanliness are distinct in their own way. It also demonstrates that our present ideas of cleanliness represent a drawing together of several loose ends, development towards which having been incoherent. Great variation has been apparent in practices surrounding, and the social importance of, cleanliness. People have lived in different ways and have had different ideas about how to behave. The Roman culture thought of bathing and relieving oneself as social duties. In the Middle Ages, uncleanness ruled the day as people had a very natural and relaxed attitude to bodily waste. Following the urbanisation process, cleanliness was thought of as a step towards progress and a sanitational cure for epidemics in the cities. In more recent times, cleanliness became a project of orderliness and became institutionalised in society. The water closet is inextricably linked with our present ideas of cleanliness. This could impede a future conversion of the water closet, these ideas in several ways conflicting with the more sustainable toilet system. Nevertheless, it is also a point of this paper to illustrate that our present ideas of cleanliness are not self-evident. On the contrary, our ideas are con-textually bound and might thus change, for instance, due to a strengthening of e.g. the environmental discourse.

Framing the theme

The purpose of this paper is to understand the extent to which the idea of cleanliness influences the possibility of converting the water closet to a more sustainable technology. In this section I will elaborate on the theme of the paper and explain the link between cleanliness and the water closet in more detail. I will also describe why precisely a historical study can contribute to the purpose of this paper.

Aim

Water closets are the paramount technology for handling human urine and faeces in Western societies. Our cities are supported by great underground infrastructures that supply water to, and remove waste-water from, households, partly in connection with the operation of the toilet. The water closet is also an ingrained part of Westerners' everyday life, constituted by, and affecting, our ideas on how to be-have and our daily routines. The water closet has remained almost unchanged during the past 100 years, thus stressing its stabilisation in our society.

The two most important elements that seem to contribute to the popularity of the water closet are the use of water and the valve or water seal mechanism in the toilet. Water washes the waste out of the bowl and carries it out of the city. The valve functions as a barrier between the underground system and the home. With rising environmental awareness, however, the environmental friendliness of the water closet is called into question. Several researchers point to the present water closet as unsustainable. They advocate for the need to perceive wastewater from toilets as a resource instead of as a waste (e.g. Esrey 1998; Wriesberg et al. 2001). Some of the most important environmental problems with the water closet are the large amount of water used to flush the toilet and the flushing away of important nutrients from human excrements. This challenges the core of the water closet – the usage of water – and hereby also our infrastructures, our ideas and our routines. At this point in time it is uncertain whether this questioning of the water closet will result in future changes of technology. In Denmark there are several examples of pilot projects and greenhousing sectors, where water closets have been replaced by composting toilets or urine-separating toilets. On a wider scale, however, there have been no signs of changes potentially affecting the stability of the position of the water closet in Danish society.

My PhD project aims to analyse the environmental challenge of the water closet from a cultural and social point of view. The point of the analysis is to make a departure from primarily looking at the water closet as a physical element and move more towards a conceptual level. Generally speaking, it is important to understand how not only technology, but also our ideas and routines, are challenged by the environmental discourse of our time. What are the tensions between the ideas of today and the ideas of a supposed environmental tomorrow? The overall objective of the project is to grasp how modern ideas influence the possibility of altering the present wastewater infrastructure. As will be elaborated upon in the next section, the idea of cleanliness has been selected as the specific focus in this paper.

Focusing on the idea of cleanliness

Cleanliness is interesting to look at, because it has a deeper meaning in relation to the way we organise ourselves in society, especially in reference to the use of water closets. In the name of cleanliness we have specific expectations with regards to appearance and the way we handle dirt and bodily waste. This is reflected in our daily routines and the technologies that surround us. We live in a clean society, where dirt is systematically removed. We clean our homes and our streets. We bathe in order to clean our bodies. We have sewerage systems that handle different kinds of bodily waste. Cleanliness is thus an important part of who we are and how we behave.

The ideas of cleanliness are interwoven with the water closet, because of the inherent characteristics of the latter. According to Shove (2003:79) it is necessary to work with themes of social order and propriety in the analysis of sociotechnical co-evolution. Her point is that changing ideas about how things should be and what people should do influences the way we organise ourselves in our society. To learn about the importance of cleanliness in society is thus also to reach a deeper understanding of why we use water-flushing toilets as we do today.

In this paper I have chosen to focus on understanding the importance of the idea of cleanliness. Although specific relation to the water closet is made, my understanding of cleanliness in the paper will be broader. The concept of cleanliness, itself, and how different societies relate to this idea will be dealt with first and, in summing up, cleanliness and water closets will once again be discussed in relation to each other.

Historical study as approach

A historical study of cleanliness is interesting because it can reflect the obvious of today. When we think about our present routines we can hardly see through them. There appears to be a kind of inherent logic within them and it could seem as though things have always been as they are. To trace the history of cleanliness is potentially a way to throw light on the peculiarities of our present ideas of cleanliness. Besides, such an inquiry can also elucidate the context in which the modern ideas of cleanliness have been instigated.

Cleanliness is an overarching concept and recounting its more general story would thus represent an immense task. The direction for this paper, therefore, is primarily to look into the issue of cleanliness in relation to bodily waste, especially the history of baths and toilets. A couple of more general read-ings will also be included. The history of bodily cleanliness is not a straightforward tale. It is not – as some would believe – an idealistic story of a straight road leading towards civilisation. Our present way of perceiving cleanliness seems to represent a drawing together of several loose ends, the development towards which seeming to have been incoherent. The development of ideas of cleanliness thus would seem to be contextually determined, therefore, a coherent and complete history of cleanliness will not be presented here. The idea is more to delve into interesting phases in the story and to high-light important points in relation to contextual development. Nevertheless, the story is arranged in a chronological order in this paper for practical reasons. The paper will neither expound the specific historical setting nor describe variations within time periods, across classes in society or the like.

The literature concerned with the history of bodily cleanliness contributes with a great historical span and many interesting details. Focus will rest on the developments that have occurred in the Western part of the world, most of the literature here focusing on Great Britain, France and America. Where possible, I will also include reference to the Danish situation. It appears that development has followed a similar course in these Western countries, the primary differences seeming to be time-displacement and minor local differences. Of course significant differences are apparent between the countries. My point here, however, is to investigate the more general features in history.

Examination of the history of bodily cleanliness

The story of bodily cleanliness can be told in many ways. In contrast to the literature on, for example, the development of the sewerage system, baths or toilets, the underlying emphasis in this paper is not on the technology itself. It is rather the purpose here to gather the cultural, social and technological threads. It is the intention to give an independent and coherent account of changing ideas of bodily cleanliness in different time periods. The sections that follow give an account of the way people have generally related to cleanliness and demonstrate how this relationship has changed throughout history.

Early appreciation of water's capabilities

Water has a natural capability that we seem to recognise instinctively. Of course, water has always been an important drinking source to human kind, but it seems that Ancient people also instinctively developed a habit of using water to cleanse and to carry away waste. Discoveries from Ancient times show that it was common practice to live beside water, putting water to a number of uses (Colman 1994:3). Wright (1960) mentions several examples of discoveries from Ancient cultures revealing that these cultures had primitive forms of baths and toilets based on water. As these cultures did not have our technological knowledge

about how to transport water, the water-source was either used directly or channels, or the like, were created to divert the flow of the water. It appears, furthermore, that Ancient cultures had developed a more sophisticated knowledge about how to use water. For example, the need for separating the use of water for drinking and washing from that of carrying excrements away was understood (Colman 1994:3; Wright 1960:3).

The Romans represent an example of a highly ingenious culture in Ancient times with regards to cleanliness. They did not limit themselves to direct use of e.g. a river, but managed to create a system that brought the water into the city itself. The Roman baths are still well known and the Romans are generally famous for their sanitary installations, including their public latrines and early versions of a sewage system. In this context, Horan (1996:13) refers to the Roman baths as a way of living. It was a social duty that was carried out in joint efforts (Wright 1960:2). Here, people met friends, cadged a free dinner and gossiped (Muir 1982:6). The purpose of bathing was to ensure physical wellbeing (Wright 1960:2). Avoidance of smell was also an important purpose for the Romans to bathe (Classen, Howes and Synnott 1994:30-33). When the Roman Empire was fought down and their inventions demolished, the monasteries continued in their footsteps, referred to as “the post-Roman pioneers of water supply and drainage” (Wright 1960:24). In contrast to the Romans, the monasteries were appalled by the idea of using water for wellbeing. Water had a religious meaning, it being for this reason they believed it important to maintain practices of cleanliness.

It is difficult to say exactly how the Ancient cultures perceived cleanliness. It seems as though some cultures were not concerned with the issue, practices being of a rather casual nature. They appreciated water, but did not become dependent on the usage of water for the purpose of cleanliness. They would settle away from the water bodies if necessary due to other circumstances, such as lack of space or available hunting grounds. This meant that water had to be transported from the waterside to the village, it not being difficult to imagine that this resulted in some adjustments in water usage. Using water for drinking and cooking was most likely prioritised, while bathing and waste removal was down-graded (Colman 1994:4; Wright 1960:4).

Ancient cultures are not likely to have had the same concerns about cleanliness as we have today. The act of relieving oneself was probably perceived as a natural thing to do, and everybody just did it whenever they had to and wherever they were (Colman 1994:3). Bathing and cleaning were probably not issues at all. Later on, some of the cultures came to appreciate the capabilities of water. It is likely that some advantages in using water for different purposes were instinctually recognised. There is much to indicate that water had a more profound meaning in the Roman culture and in monasteries than the earlier cultures, especially the evidence of the trouble went to, in order to be able to use water.

The above illustrates how water was instinctively appreciated in Ancient times and how various cultures had different ideas about why and how to make use of it. An important condition in order to make use of water was its availability. This was dependent either on the physical placement of the village or on the ingenuity of the community. Another important aspect also seems to have been the extent to which the idea of using water was deemed necessary for the community. Some cultures could easily adapt to routines without use of water, others went to great lengths in order to arrange their communities in ways that ensured the possibility of making use of water. This suggests that these cultures perceived and weighed cleanliness differently. Even though water seems to have been used in similar ways, the ideas about the usage have differed fundamentally.

Accepted dirtiness in the Middle Ages and on

It is certain, that the Saxons and the following cultures did not share the Roman ideas about cleanliness. The sanitary installations left by the Romans were demolished or ignored when they were defeated by other cultures in Europe (Wright 1960:22). Horan (1996:20) explains that findings from the time of the Vikings suggest that it was acceptable to ‘squat’ everywhere in these cultures. The Vikings are also often referred to as barbarians. The rural culture of the Vikings has probably been fundamentally different from the urban culture of the Romans. The Vikings lived in rural areas, where waste handling was not a problem. The Romans, on the other hand, lived in urban areas, where the physical realities of the city necessitated some kind of structured waste handling. This could explain why the victory of the Saxons resulted in a fundamental change in ideas of cleanliness, from appreciation of cleanliness to acceptance of dirtiness.

These ideas about cleanliness continued into the 20th century. Hoy (1995:3) points out that in the countryside in America during the 19th century it was natural to live with dirt. People regarded this way of living, which gave life and livelihood in the form of crops, as positive and even healthy. Cleaning, washing and bathing were laborious tasks that were primarily carried out due to health issues and ideas about gentility. According to Classen, Howes and Synnott (1994:70-74) many people also thought that water corrupted the body, both morally and physically. It was believed to be unhealthy. Sanitation was not unknown at this time, but most people did not feel any urgency with regard to cleaning up (Hoy 1995:3). This demonstrates how these cultures have widely accepted dirt and did not associate wellbeing with water.

The 18th century was a dirty age (Lambton 1998:16). Writers provide an image of “unbelievable squalor and stench” in their descriptions of the city in the Middle Ages (Horan 1996: 22). Dirt and filth were everywhere. People just squatted down whenever and wherever they had to relieve them-selves. A good illustration of the practices at this time is the common practice of using and emptying chamber pots. People threw the content of the pot (or the whole pot for that sake) out of the window and into the street. It was good manner to cry “Gardy-loo” before throwing it in order to warn the passers-by (Wright 1960:76). Water was sparse in the cities, primarily because it had to be fetched, so using it for bathing or cleaning would be a laborious task. In the beginning of the eighteenth hundreds each household got water three times a week (Wright 1960:148). Most people did not wash at all, but some took a yearly bath in a nearby river or the like. A major problem was that the cities were growing enormously. Copenhagen grew from 100.000 inhabitants to four times as many by the end of the century. Millions of people from the European farming land began to invade the larger European cities, including Copenhagen (Lützen 1998:80). This urbanisation also occurs in America (Hoy 1995:5). Waste could be found everywhere and there were no infrastructures to take care of the waste and no planning to ensure removal of the waste from the streets. Peoples’ ideas about cleanliness have also played an important role for the situation. Horan (1996) underlines that several attempts to change the inconvenient practices have been carried out in vain, since people were seldom convinced of the necessity of the changes and thus carried on with their usual practices.

Another important issue to mention is that people at this time had a relaxed relationship to bodily functions. It was seen as a natural and inevitable thing (Horan 1996:68). Chamber pots were put and used everywhere, they could usually be found in the dining or billiard room (Lambton 1998:16). It is also told that it was widespread practice for Kings and Princes to receive guests while they were “at the stool”

(Muir 1982:130; Wright 1960:102). People relieved themselves whenever it was needed and they were not concerned about privacy. When privacy is slowly emerging as an issue, this changes. The aristocracy of Europe was the first to incorporate the so-called privy into their homes starting in the 1500s. The privy was a closet or a small room with a chamber pot or a close-stool (a lidded box with a chamber pot within it) in it. This offered privacy behind closed doors and signalled an important change in attitude towards privacy in the well-to-do classes (Lambton 1998:48). The idea of privacy slowly penetrates attitudes towards objects used for handling human excrements. The chamber pot becomes indecent (Horan 1996:68). Furniture is used as hiding places for the chamber pots. Ideas about separate public toilets for men and women also begin to emerge at this time (Horan 1996:69). Another important development is the emerging of euphemisms, which means that the toilet is called different names so that it does not relate directly to the bodily functions. Lectures on moral propriety began in the Victorian Age (Horan 1996:77). This is highly influential on the generation of an increased self-control and a greater caution in order not to offend others. It contributed to regulation of the way in which people related to each other and created discipline (Eriksen 1980:47).

It is important to emphasise that the above account of this period is general and only an account of the most common practices. At this time people were divided in different classes in society. To begin with there has been no distinct difference between the poor and the well-to-do classes with regard to this issue. Later on, the well-to-do classes began to modify their practices. This is partly due to the fact that slaves are being used to do the dirty work, such as fetching water or emptying the chamber pot (Lambton 1998:7). In time, chamber pots began to reflect the user's status; some were decorated, some in gold, etc. (Horan 1996:45). During the seventeenth and eighteenth centuries, the wealthy people were also the first to install the primitive water closets in their homes (Horan 1996:65). Around 1780 wash-stands are beginning to emerge in the homes of the well-to-do classes (Wright 1960:218). These were used for e.g. washing and brushing teeth. At a later date the washstand was extended so it looked like a piece of furniture, often with a mirror and storage facilities. According to Shove (2003:106), Maurreen Ogle suggests in her work on the history of plumbing that the motivations for acquiring plumbing were bound up with social identity and comparison and with efforts to signal membership of a respectable society.

Cleanliness was not an issue in this period. Horan (1996:31) believes from looking at the way of disposing of waste that convenience – and not health concerns – ruled the day. From the overcrowded cities and the lack of planning and infrastructure, it was evident that bodily wastes could be disposed of everywhere. People were at terms with the situation and accepted it. They had a relaxed and natural relationship to dirt. When looking at the situation from the point of view of today one could easily feel that people in these times may have felt sorry for themselves. Nevertheless, it would probably be nearer the truth to recognise that these people had a fundamentally different attitude towards cleanliness than we have today. As a matter of fact there are examples of their reluctance towards e.g. water closets, because they were accustomed to other premises and practices (Horan 1996:32). The idea of cleanliness was thus fundamentally different than that of today. But it is also at this time that the link-age between the ideas of cleanliness, privacy and social status begins to root although mostly in the well-to-do-classes.

Appraisal of cleanliness and orderliness

The inadequate handling of filth and dirt in the city caused a lot of health problems. Cholera epidemics raged throughout the 19th Century and caused fear and demoralisation among the population. It was widely held that there existed a link between the epidemics and the dirtiness and filthiness of the city. The

“miasma theory” was prevalent (Hoy 1995; Schmidt and Kristensen 1986). The theory was that an unexplainable atmospheric toxin – the so-called miasma – had pathogenic effects through inhalation. This atmospheric toxin was believed to emerge from filth, dirt and misery in general. Arising out of this theory, a sanitary movement was set in motion in order to exterminate the causes of bad air and stench (Schmidt and Kristensen 1986:41-42). In America, the civil war played an important role in this regard. More soldiers died of sickness caused by improper sanitary conditions in the camps than from the war itself and this forced the army to intervene (Hoy 1995). This raised the awareness of the link between bad sanitation and death. When the germ theory was finally accepted it became yet another rationale in the battle against dirt (Hoy 1995:70). This shows how the unsanitary conditions in the cities was being problematised and that action was being taken to find solutions to the problems. It is important to notice that the main motivation was to prevent sickness and death. The elimination of dirt was only a secondary issue, of concern only in so far as that it was linked with sickness and epidemic. Writers seem to emphasise different aspects in the conditions that lead to the introduction of the idea of cleanliness. Lützen (1998:94) indicates that neither the epidemics nor the bacteriological knowledge have been decisive for the hygienic endeavours. She points at the idea of progress as an important factor.

Sanitary projects were launched both in America and Europe. These projects aimed mainly to change people’s morality with regards to cleanliness and orderliness and to introduce planning measures and technical solutions to waste problems (Hoy 1995; Lindegaard 2001; Schmidt and Kristensen 1986). In her detailed description of the process of establishing a system of sewers in Copenhagen, Lindegaard (2001) reveals that health and hygienic prevention were important issues in the debate. A wastewater system that enclosed the waste from every household became the technical solution as well as ensuring better water supply. Cold water became available first and then later hot water. Concurrently, bath-tubs became more and more popular and could be installed in the home; here the bathtub was often placed in a recess in the wall in the bedroom. Many different models could be found on the market (Wright 1960:165). These bathtubs resembled current models. Water also began to play an important role in our way of handling human excrements, since water closets were beginning to become more popular. Besides the construction of sanitary systems, initiatives were also being taken to organise regular street cleansing in the city.

The issue on morality was primarily carried out by sanitary front figures. Cleanliness became a key point in the issue of morality:

“Since cleanliness had a proven record (because of experiences from the American civil war, ed.), sanitarians embraced it as a means of controlling their world. They instructed a nation bent on progress that filth bred chaos and barbarism, while cleanliness ensured order and advancement”. (Hoy 1995:69-70).

The idea of cleanliness became interlaced with the idea of propriety and greater self-control. Much was done to improve the conditions of the lower classes by propagating the idea of cleanliness (Hoy 1995). Cleanliness became central for those who wanted to live better lives. Shove (2003:100) actually talks about the emergence of a discriminating language of cleanliness. It was easier to convince people to change their behaviour and attitudes compared with in the Middle Ages due both to the linking of cleanliness with morality and to the problems with sickness and death.

Women and water were important constituents in the morality project. Water was believed to be an important mean of ensuring cleanliness (Hoy 1995:64). Women were perceived as important agents in the battle against dirt (Hoy 1995; Schmidt and Kristensen 1986). Women were chosen on the basis of widely held beliefs that they had certain intuitive convictions when it came to matters of order and cleanliness

(Hoy 1995:72). At this time it was common that women were responsible for maintaining a clean, healthy and comfortable home and so the increased burden of cleanliness naturally felt mainly on women. In 20th Century in Denmark, the orderliness project became, in essence, a purifying and cleaning project (Schmidt and Kristensen 1986:115). The housewife became the central agent in this project and different initiatives followed concerning the education of housewives, e.g. schools of home economics, housewives' leagues and housewives periodicals. The Danish history of the housewife shows that she has been responsible for the practical integration of the ideals of cleanliness and orderliness into everyday life (DR2 2004). This brings about new expectations on women's work in the home in Denmark, and in Europe and America in general. The mother becomes responsible for house-keeping, in general, and it becomes socially important to be a good housewife.

There seems to have been several reasons for wanting to eliminate the dirt in the cities. The idea of progress seems to have been of importance. Quickly, cleanliness also became allied to prevention of epidemics and bacteriological knowledge. The perceptions of dirtiness and cleanliness are altered. Dirtiness became a problem in the cities, and cleanliness the solution. An important weapon in the battle against dirt was to implement technical infrastructures. These infrastructures are the foundation of our present system and they have great influence on our everyday life and the way we handle bodily waste today. It is important to notice that the new ideas about cleanliness became fundamental in the process of formation that was initiated. Cleanliness became a question of morality and housewives became a central agent in the promotion and establishment of new ideas and habits.

Institutionalisation of cleanliness

The bathroom, as such, emerged as an independent room parallel with the establishment of water supply and wastewater systems. In the beginning there were a lot of practical problems with e.g. frozen pipes. The bathroom was not very popular until the pipe systems became more stable (1960:191). The earlier mobile functions became fixed in the bathroom due to their attachment to the sanitation pipes (Lupton and Miller 1992:3). Three earlier separate activities melted together with the installation of the bathroom: to bathe, to cleanse the body and to dress (Illich 1989:103). Before this, the functions of the bathroom were dispersed. The bath was usually found in the bedroom and the toilet in a closet or in an outhouse. The establishment of a bathroom brings these functions together as a coherent group. One explanation for this particular coherence is the infrastructure itself. It is easier to connect the functions to the pipe system if they are situated close to each other. Another explanation is that these functions fit together fundamentally, because they concern the handling of waste. Lupton and Miller (1992:3) describes the bathroom as a laboratory for handling biological waste, such as urine, faeces, hair, sweat, dead skin cells, bad breath and fingernails. In an obvious way, this links the purpose of the bathroom with the idea of cleanliness. According to Gullestad (1989:54), the activities of e.g. the bath-room are symbolically tied up with secondary scenery and back rooms, while the living room is the cultural master scene. This is due to a distinguishment between nature and culture, where e.g. going to the lavatory is perceived as more closely related to nature than e.g. entertainment and being together.

The emergence of the bathroom was not self-evident. Before the bathroom era there was no room in the house dedicated for this specific purpose and, besides, all other rooms in the house had some kind of purpose. It is unclear how the transition towards houses with bathroom happened. In existing houses, rooms with other purposes probably shifted status. In apartments in Copenhagen it has been the custom to transform the maid's room or lumber-room into a bathroom. Around 1880, the new bath-room

standards are taken into account when new houses are being built (Wright 1960:225). This is a demonstration of the institutionalisation of the bathroom. Implicitly, this is also a sign of the rooting of specific bathroom ideas into people's everyday life. The idea of cleanliness became so ingrained that each household needed to have a specific room to carry out activities in this regard. To begin with bathrooms looked like any other room in the house. This means that wallpapers, curtains and furniture were used, thus making the room unfit for a vaporous atmosphere (Wright 1960:191). It was also customary to have big bathrooms with a lot of space between the different equipment. Later on, the big room shrinks into a more compact bathing cell, following the lead of American hotels, with an ensemble of industrial enamelled porcelain equipment placed on one wall, positioned as a linear sequence of working stations (Lupton and Miller 1992:3,34; Wright 1960:234).

Another important point is how the bathroom, and bathroom ideas, became central in the consumption culture. Lupton and Miller (1992) point to how both the interior of the bathroom and personal cleanliness became new shopping areas. Commercials began to promote different ideas about how to redecorate the bathroom and, more essentially, how to look and take care of the body. Specific sexual roles were reflected, such as the masculine male and the feminine female. This occurs at a time where Westerners became richer, the dividing line between rich and poor became smaller. This meant that more people were able to pursue the ideals of the time. Besides, there also appears to be a shift from cleanliness as a general orderliness project to cleanliness as a way of expressing personal values and status.

The physical establishment of the bathroom shows how the idea of cleanliness is institutionalised in Western societies. Keeping clean is a paramount ideal in this society. Cleanliness is no longer pressured down from above; it is rather a congenial part of everyday life and something of individual importance. This does not mean that cleanliness has no social importance – on the contrary – it only means that the social expectations are normalised and hereby concealed. Cleanliness becomes a way of staging oneself and the bathroom becomes an important stage for doing this.

What does history tell us about cleanliness?

Going through the history of ideas of cleanliness show that these ideas vary in many different ways. In this section I will draw out some of the most important points about the ideas of cleanliness. I will do this by reflecting on what kinds of characteristics our perception of cleanliness has in more recent times.

Cleaning is a process of making and reproducing division and distinction (Shove 2003:90). The historical background shows how these divisions and distinctions have changed throughout time. Much suggests that we today perceive dirt and smell as repulsive and unacceptable. We have social expectations with regard to dirt and smell, and these influence our way of behaving. Just as the people of the Middle Ages had a natural relation to dirt, we now have a natural relation to cleanliness. A study of Danish people's time-use demonstrates how much time was spent on chores related to cleanliness in 2001 (Bonke 2002:55,68). An average Danish female uses 2 hours and 17 minutes on house chores (including making food) and 1 hour on personal hygiene and appearance, and males use a little less. Our preoccupation with cleanliness fills up a substantial part of our everyday life. We do not think consciously about the social values of cleanliness, but live up to these unreflectedly. Lack of cleanliness can result in strong feelings such as disgust, revulsion, humiliation and embarrassment (Illich 1989:98; Shove 2003:79). This is probably the result of a strong social codex that we naturally live by today. It is not only about how to handle dirt and to keep clean. Nielsen et al. (2002) indicates that their interviewees are very concerned

about hiding the activity of going to the toilet. The euphemisms from the Victorian Age are to some extent still used today. Besides keeping clean, privacy is also an important part of the social codex of cleanliness.

The history of cleanliness shows how ideals shift in time along with changing conditions. Our present society is, in many ways, a succession of earlier times. The infrastructures built around 1900 are still in use; both the water closet and the bathroom have been stabilised and normalised in present society. Clearly, there are common points throughout history, but also important peculiarities. Our present situation has a lot in common with the project of orderliness, where cleanliness became linked to the idea of morality and greater self-control. A crucial difference is that the project of orderliness was a thirst for progress and an escape from sickness and death. As a result of this, cleanliness was imposed on most people as pressure from e.g. sanitational reformers. The massive focus on cleanliness and the duties of the housewife does not exist today. The roles of females and expectations have changed fundamentally. Today, there are no great class barriers and no immediate threat of epidemic in the Western world. Cleanliness has become what we do and not what we preach. It has been normalised and routinised. The conditions of the time have changed thus affecting the inclination of cleanliness. My belief is that the step away from preaching cleanliness and the tendencies of modern times mean that we are more free to decide how to relate to cleanliness, although still within social boundaries. This kind of individualisation may contribute to movements in the boundaries of our social codex. The preliminary analysis of some of my qualitative interviews seems to indicate some changes in the rationales connected to the bathroom, e.g. changes in the relation between public and private.

I believe that there are two important points to make about the special features of the present ideas of cleanliness. Firstly, many of the ideas of privacy, propriety and so on have been normalised in our structures and our routines. We only notice their importance for us, when someone steps over the tacit boundaries. We live by them, but we do not think about them. Secondly, cleanliness has become a more individualised question that reflects different values and ideas. Within the boundaries of the social codex of cleanliness, we are following our own paths and ideas about e.g. why and how to bathe, and the extent to which we wish to dress up.

Intersecting the ideas of today and those of a green tomorrow

Pointing out the possibilities with regard to altering the present wastewater infrastructure necessitates an understanding of how technologies, ideas of cleanliness and different conditions co-evolve. Ideas about cleanliness imbue our society and our everyday life, including the stabilised water closet. Historical changes in the idea of cleanliness and devices used for relieving oneself point to the fact that two important kinds of development can take place. On one side, there is the possibility of fluent changes where minor adjustments take place. In this case ideas of cleanliness and devices change in an expected way built on previous notions. On the other side, there is also the possibility of more marked ruptures and shifts. In this case, ideas of cleanliness and/or devices take unexpected turns due to sudden changes in the existing conditions.

After the shift from the “dirty days” to the “clean days” it would appear that the changes in the devices for handling human excrements and the ideas of cleanliness have only changed in a fluent way. The water closet comes into play and is stabilised as the way of handling this type of bodily waste. The question is whether the change of the water closet into a more sustainable technology could happen naturally or not.

Much suggests that this would not be the case because of fundamental differences between these sustainable toilet technologies and our present ideas of cleanliness. By introducing e.g. a urine-separating toilet or a composting toilet one would challenge several characteristics of the water closet. To minimise or totally remove the use of water could probably question the cleanliness of the new technology, since our idea is that water assures cleanliness. The idea of recirculating waste could challenge our idea of having an enclosed system that handles dirt. This could also challenge our idea of hiding our toilet activities, because the result of these activities is disposed of in public spaces like farming land or gardens. A last issue is potentially the fact that the present level of easiness and responsibility that we have become accustomed to could be challenged by a more sustainable toilet system. It seems clear that urine-separating toilets and the composting toilet do not offer an obvious alternative to the present water closet, unless our ideas of cleanliness change fundamentally. Seen in this perspective, the stability of the water closet is probably a fundamental barrier and it is difficult to see how we should naturally move towards a more sustainable toilet system in light of present ideas and expectations.

The history of ideas of cleanliness also point out the fact that sudden changes have occurred. A war resulted in demolition of the Roman ideas and the introduction of more barbaric ways. Of course, this also represented a shift in cultures. But from the dirty days to the clean days the shift was also quite sudden. This change seems to have occurred as a result of the emergence of the idea of progress and the outbreak of epidemics and the wish to solve these problems, including new knowledge. Looking at the present situation, such a sudden change is not unthinkable. The environmental discourse has arisen as a result of new knowledge about environmental problems that may have great influence in our lives. It is not unthinkable that this could not some time in the future provoke a sudden change in attitudes and technologies.

My paper shows that ideas of cleanliness are ever-changing and emphasises the importance of considering the cultural and social setting of technology in order to understand these changes. There seem to be several different dynamics in play that influence the way our ideas of cleanliness and our technologies evolve. The possibilities of altering the present wastewater infrastructure seem to depend on fundamental changes in our ideas of cleanliness, which are, however, not necessarily unthinkable.

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