

## **“AND MY MICROWAVE IS A FOX”**

*Reflecting domestic environments and technologies by means of self-  
documentation packages*

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**Abstract.** The paper investigates the role of domestic technologies in constructing conceptions of home. Rich qualitative data on Finnish households is analyzed in order to clarify the processes through which particular domestic objects and devices get their meanings. Interactions and atmosphere of the contemporary media-rich home are defined through the dynamics between private and public, individual and cultural and personal and familial. The paper highlights the significance of shared domestic media technology in defining and negotiating the domestic territories between household members. Also the varied spatial orders in relation to placing domestic devices are discussed. Furthermore, the authors examine the possibilities and limitations of the self-documentation package approach applied in the project. It is suggested that in the context of sensitive domestic environments practices originated by cultural probes can produce research data not acquired with traditional qualitative methods.

### **1. Introduction**

Living in Metamorphosis – Control and Awareness in a Proactive Home Environment (Morphome) is an ongoing research project funded by The Finnish Academy Research Programme on Proactive Computing. The key challenge of the project is to develop design principles for proactive home applications. The objective is connected with exploring the ways how the design of these new technologies can support existing domestic values (see also Hemmings et al. 2002). This kind of knowledge can be acquired only through exploring home as a social and cultural, as well as material environment. Thus, the goals of the project are not limited to constructing design principles based on prototype development and testing but we see this is also as an opportunity to develop and test novel methods. Through generating new knowledge of the meanings attached to domestic technology – both existing and forthcoming – we wish to produce a more holistic view on the research of ‘proactive computing’ devised to be used in home environments. Although Morphome project as a whole includes technology and concept development objectives the “cultures of home” subproject introduced here is supposed to produce more general knowledge on the domestication of new technologies and technologization of the home. Since this paper focuses on

documenting the findings of the subproject, straightforward design implications are mostly excluded from the paper.

The analysis sets twofold objectives. The first objective is to see *what are the key elements and actions people associated with home and what is the role of domestic media appliances and other technologies in these conceptions*. What we want to avoid, is the technology-driven perspective where home life is simplified into a continuum of interactions with various appliances. The other objective is to study *how emphatic design methods can be applied to produce understanding of users and use situations of domestic technology*. We believe the results can be of interest for both the emerging field of user culture studies and more comprehensive ethnographic studies of home.

Researching (use) cultures of homes is a challenging task because cultures of home are diverse and dynamic: the dialectics between private and public, individual and cultural, personal and familial, production and consumption, are continuously defined and re-evaluated. People's relationships to their homes are also determined nationally. Information and communication technologies and its accessibility compose an important part in current Finnish national strategies of information society. However, the studies asking how information and communication technologies actually influence on everyday domestic life, how domestic space affects user experiences of information networks or how people perceive their relationships to these technologies have not been in a focus in the Finnish research (see Talja and Tuuva 2003; Rantanen and Lehtinen 1997; Paasonen 1998). On the whole, qualitative research on contemporary western domestic space, everyday domestic practices and roles of technology within home, is also scarce (cf. Cieraad 1999; Hughes and al. 1998). If we want to understand cultures of contemporary homes more thoroughly we should approach them as dynamic social and material entities in which both culturally shared and particular notions and practices meet.

Hutchinson and al. (2003) propose conventional methods used in human computer interaction (HCI) research do not necessarily work very well in approaching complex personal everyday environments people live in. Early forms of participatory design were developed to explore workplace actions and focus on efficiency, rationalities of production, organization of labour and detailed analysis of workplace and profession specific tasks and goals. Therefore it is highly debatable whether these principles can be applied to the cultural and social settings of a household. Some earlier projects suggest that the seemingly different starting points represented by such approaches as 'cultural probes' can be used to address the methodological challenge posed by the 'home' setting (Hemmings and al. 2002). It is clear that we could have used traditional qualitative methods such as structured interviews, questionnaires or observation to explore homely events but instead we decided to experiment with self-documentation packages inspired by cultural probes. The decision was heavily influenced by the fact that the designers in the group had positive experiences of working with probes. Secondly the diverse and multimodal data (interviews, writing, drawing, photographs etc.) was appreciated since the objectives of the project during the first phase of the research were fairly open.

## 2. Theoretical background of self-documentation packages

Lately, there has been a significant increase in design-oriented human factors research. Straightforward usability studies have made room for approaches emphasizing user experience, context of use and cultural background of users. Various qualitative methods developed in social sciences and humanities have been applied and reconfigured to meet the targets of product and systems design. Contextual design introduced by Beyer and Holtzblatt (1997) relies on user observation, while other user-centred design paradigms utilize numerous methods, such as interviews, diaries and use scenarios. Research tasks are, quite rightly, subordinated to design objectives and the value of results is measured by their ability to inform and inspire design. Design initiatives tend to include a future-orientation of some sort and therefore any predictive capabilities that qualitative methods can offer are normally appreciated more than purely analytical ones. Compared to precise scientific techniques, design-oriented practices may seem to fall short in systematic organization but then again quick-and-dirty practices allow designers to react rapidly on findings and easily reconfigure the research setting if necessary.

Usability-based approach became popular during the 1990's and within it, it was typical to see products as tools and the usage of products as a bundle of particular tasks. The research objectives are often limited to validating 'user requirements' for technologies. In his critique of efficiency-centred usability studies Jordan (2002) claims that a large part of the human factors literature emphasizes only cognitive and physical qualities of users. Such new methods as cultural probes approach can be seen as a part of larger tendency in the development of human factors research methodology that aim at acquiring a more holistic perspective on people and their actions.

Cultural probes, pioneered by Gaver, Dunne and Pacenti (1999), are kits of manifold materials and tasks that are used in product design to provoke and gather responses from people. The emphasis is not only on exploring user needs but probes are supposed to provide opportunities to discover perceptions, attitudes and pleasures people attach to daily activities. A probe can be defined as "an instrument that is deployed to find out about the unknown – to hopefully return with useful or interesting data" (Hutchinson et al. 2003, 18). Rather than in precise scientific tradition, the cultural probes approach has its background in the traditions of artist-designers. Rather than being doctors, diagnosing user problems and prescribing technological cures, or servants, letting users set the directions for design, designers applying the original probes method try to establish a role as provocateurs. (Gaver, Dunne and Pacenti, 1999, 24-25)

Our approach on using probes was from the very beginning a bit different. Along with acquiring information for our future design objectives we assumed that we could use the data to produce a nuanced understanding of some parts of daily domestic life of the participants (for a more detailed contemplation see Mattelmäki 2003). Although every member of our research group had worked earlier in projects developing new (uses for) technologies, we had very little earlier experience on the role of technologies at home. Therefore this first phase worked also as a preliminary study of some sort, supplementing the literature review. Since 'proactive computing' and 'proactive home' are such new and abstract concepts, self-documentation packages with quite a broad



environments and the floor plans and photos provided information on spatial orders and ways of using domestic spaces. We also realized, that probably it would have been too tiring for the participants to examine all the self-documentation material in detail during the interviews. Moreover, the participants' arguments and motives underlying the sticker choices and photograph subject matters would have been almost impossible to guess by merely looking at the material.

### **3. Research frame and implementation**

Although our aim was not to produce results that can be generalized to certain groups of people we decided to look for households that differ with respect to mode of living, household composition, age group and gender of dwellers. We wanted to pay attention to different kinds of cultures of Finnish home but simultaneously we wanted to see whether people living in different social and material conditions had some significant similarities in producing the experience of home. The participants of the study were mainly obtained through personal contacts. When the contact information of a potential participant was received, we called them and sent an introduction letter about the research project by e-mail. If they were interested in participating, an appointment was arranged and the self-documentation packages were brought to their homes. As a research method the approach we adapted is fairly time consuming and laborious for both researchers and participants and because of that the number of participating households could not at least in our case be very large.

As mentioned, our purpose was that the participant households represent different modes of town living and compositions of household. In general Finnish people live fairly in fairly close quarters. An average floor area per person was approximately 36 square meters in 2002. Over half of the Finnish dwelling units are owner-occupied, while nearly third of them have been rented. The majority of the Finnish people live in detached houses while blocks of flats form 43 percent of household-dwelling units. (Statistics Finland). The study involved six homes that all situated in southern Finland. Three of them were in Helsinki (560 000 inhabitants), two in Tampere (200 000 inhabitants) and one in Nokia (27 000 inhabitants). Half of the homes were owner-occupied and half were rented. We had two households living in the detached houses and four households living in the apartments. Among the participants we had couples of different ages, two nuclear families, one single and one shared apartment comprising of three regular dwellers and children visiting every other weekend. By professions the participants represented the lower or upper middle class and among them was a student of nursing science.

The participants were told that they were not obliged to answer every question or use all the materials. Instead they were allowed to choose the most meaningful ones from their perspective. The self-documentation period lasted from ten days to two weeks. The participants were called after a week and asked when they estimated to be ready with the tasks. After we got the packages back we reserved a couple of days for examining and discussing them before the interview. The interviews in the participants' homes were not firmly structured ones although some general themes had been decided in advance. Interviewing in the participants' homes facilitated the discussion and our

interpretations because the participants were able to show the items and rooms that came under discussion during the interview.

#### **4. Remarks about self-documentation materials and interviews**

Self-documentation packages are a challenging research method since they produce diverse and fragmentary data. On the other hand, the material enables various readings and offers countless reference points. The following remarks represent some aspects of the data but we would like to remind that we might as well have chosen some other points to illustrate diversity of domestic life and signification processes around it. Although we emphasize activities and notions related to domestic technology and its placement and use, the interaction between individuals and their homes draws its forms and meanings from many sources (excluded here), such as architectonic solutions of domestic space, prevailing cultural notions about housing, dwellers' interpersonal relations, life situation, residential experiences and media histories during their life spans. The following remarks are based on interpreting the self-documentation materials together with the interviews.

##### **4.1. HOW TO MAKE A HOUSE A HOME?**

Home is an emotionally charged concept that is not reducible to the material dimensions of a dwelling (referring not only to dwelling houses but also to houseboats, campers, tents etc.). We pursue a contextual understanding of the concept of home, which combines material characteristics of domestic space to cultural, social and gendered practices around its use. Focusing on material and technological aspects of domestic environment is challenging because in people's descriptions they are blurred and intersected with emotional and interpersonal viewpoints. Typically people associate with home some kind of "state of mind" that is constructed and maintained, among others, through shared practices, common presence and attachment to personal objects.

Home as a physical setting involves spatial orders by which we mean here placements of objects and overall arrangements of spaces. The objects within home are arranged in certain ways and in proximity of certain objects. Some spatial orders can be a result of many negotiations and trials while other choices are not very conscious. It appears that typically dwellers' eyes adjust to spatial orders of home quickly and these orders become self-evident part of the materiality of the home (cf. Seppänen 2001, 31-36). All homes in our study had personal territories that vary from a room of one's own to one's own shelf in the cupboard. These micro territories are not unvarying or rigid but they change depending on the time of the day, the people present, and the activity people are engaged in. On the grounds of our data especially the presence of visitors produces changes in the use of space and make some personal territories more visible. For example, in the single household a sofa was normally a place of storage for clothes and other stuff but when visitors came it became a sitting place (emptied from the usual objects on it).

In the shared apartment personal territories seemed to be more stabile and respectable than in other homes. The inhabitants had clear territories marked as 'private' and 'public' and they had agreed on rules concerning the use of public areas.

In their home the living room, kitchen, balcony, bathroom and hall were defined as public (referring to joint use) while all bedrooms were private (see Figure 2).

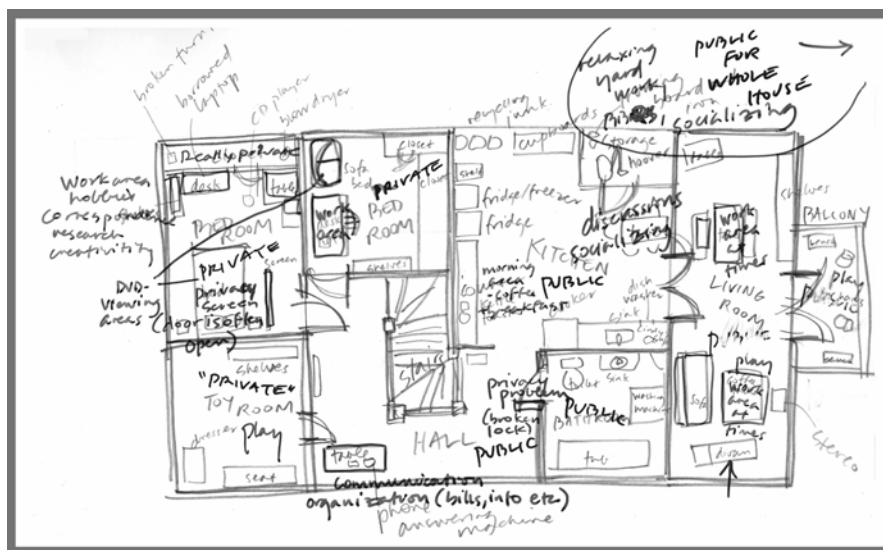


Figure 2. A floor plan drawn by the participants of the shared apartment

One aspect of pleasant domestic atmosphere relates to communicating with one another, both between the household members and keeping in touch with one's intimates outside the home. In the data the importance of the communication between household members emerged mainly through common activities, such as drinking coffee together, having a common breakfast or meal and singing together by a piano. Conventionally the kitchen table symbolized common presence in one of the participant families (Figure 3).

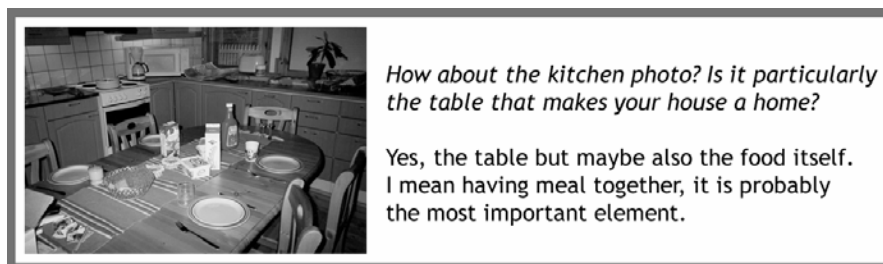


Figure 3. A photo taken by a participant accompanied by a quotation from the interview

According to Douglas (1991, 6), common meals are used for coordinating arrangements, negotiating exemptions, diffusing information about the outside world, and making shared evaluations. The main point is not having a meal or a cup of coffee

together but discussing daily happenings with family members, negotiating rules of the family and on the whole, being present at the appointed and probably fixed time. In our study, some of the families had a common meal daily, some had it on weekends and separately living family members had it typically only during feast days, such as Christmas and Easter.

Among our female participants chatting with close relatives and friends unhurriedly by phone seemed to be a central activity that contributes to making a house a home. They referred primarily to keeping in touch with a close kin living somewhere else but also to daily conversations with family members. For instance, a single woman highlighted the importance of her landline telephone and she attached it to relaxing discussions in privacy while her mobile phone she saw more as a tool for “matter-of-fact” talk.

With it [a landline telephone], you can get in touch with important people and take your time and then also talk about different kinds of ordinary things and just chat there on the phone differently from how you would talk on the mobile phone. With the mobile phone I take care of urgent and important things but the landline phone is a kind of tool for communication, a machine for asking how is it going. (Female, 25) (*All interview citations are translated from Finnish by the authors and proper names have been changed*).

For a female participant, aged 60, both a landline telephone and a mobile phone represented for her attention and care of her children and grandchildren. She had chosen a sticker of a mother koala with a baby to symbolize the family’s landline telephone and a sticker of a mother deer with a baby to symbolize her mobile phone. The main user of the landline telephone was the female participant, while her husband told that nobody usually calls him via landline telephone. So the use of the “common” phone was highly gendered. The husband who worked as an executive director chose a snake sticker to symbolize his mobile phone since mostly the ringing mobile phone indicated some problems at his workplace. In this case the work intruded into the home through the mobile phone and challenges the idea of home as a private place of calm and happiness.

#### 4.2. PRIVATE AND SHARED USE OF MEDIA TECHNOLOGIES

While home is a focal setting of everyday life, it is also the quintessential space for escaping it. Various media technologies contribute to the experiences of escaping daily life and “being somewhere else”. (Paasonen 1998.) For many children and young people using media technologies in privacy of their own bedrooms can appear as an important context for dreaming, fantasies and communication with their friends. Although use of mobile phones has been strongly associated to communication that is independent of place and time, Finnish youth has been reported to spend plenty of time by using their mobile phones at home, in their own bedrooms, often late in the evening or at night-time (Kasesniemi and Rautiainen 2001, 34).

Sonia Livingstone uses the term ‘bedroom culture’ to describe the phenomenon where children’s and youngsters’ bedrooms have become privatized media-rich spaces within current western homes. Multiplication of personally owned media has facilitated children’s use of their individual space as opposed to communal family space. Further,

media-rich bedrooms are locations of display and use of consumer goods and sites of reception for advertising. The emergence of the bedroom culture relates to increasingly generalized perception of the home as a center of a screen entertainment and individualized leisure culture. (Livingstone 2002, 137-159.)

One common discourse around children and information society is to present children as naturally adept users of technology eagerly and effortlessly engaging with technology on their own account (Selwyn 2003). This tendency appears also in the way many Finnish parents are prone to idealize technologically proficient, self-reliant children. According to Oksman (2003), everyday discourse of Finnish culture includes a widespread notion in which children and young people are seen to be by their nature skilful and creative media users who appropriate and domesticate new devices quickly and who are very interested in novel media technologies. To some extent this notion is put into practice in children's privatized bedrooms that are equipped with various media goods that children are allowed to use fairly independently, without adults' help or control.

According to our data children's bedrooms are territories where children's autonomy and privacy is respected but simultaneously parents have a perception that it is not appropriate to spend too much time in one's own room being separated from other family members. It is commonly shared assumption that talk, togetherness, group activities are good for the 'family', while being alone and separate is problematic (Livingstone 2002, 184-185). The time teenagers devote to using media technologies alone is often felt both as worrying and as something natural related to the process of growing up. The mother of a nuclear family commented the way her son withdraws in the evenings to his bedroom as follows:

So Markus comes over to the sofa some time later in the evening but when we [the parents] are at home he pretty much likes to stay in his own room and sometimes I wish that he would enjoy being with us more. He has his own things to do.

Later in the same interview the mother returned to the subject and that time the sofa together with television was represented as the focus of harmonious familial togetherness.

We often watch television together sitting side by side with Markus or Anna or both, so there are all four of us on the sofa, crammed together, and then also Rekku [the dog] creeps in to join us.

In current media-rich households watching television has remained a popular familial activity although many other activities are more culturally valued as a means of spending time 'as a family' (see Livingstone 2002).

Another related issue concerns the presence of other family members, independent from what they are doing or where they situate in domestic space. That kind of being accessible to one another refers to situations in which people do not actively participate together but they are present at the same time being more or less attainable to each other (cf. Pennartz 1999). It seemed that people could not generally verbalize the significance of being accessible to one another but it was readable between the lines. Availability of family members to each other was brought out most clearly in the family with two school-aged children who spend time together by playing games with a computer or the

two game consoles in their own bedrooms. According to the parents a typical playing situation consists of one child playing and the other following the game beside (one photo taken from the girl's bedroom supports this claim). Alternatively one could play with the computer and the other with GameCube console since they were both situated in the boy's room. The older game console (Sony PlayStation1) was placed in the girl's room. The parents also reported that their son often chooses the console he wants and the daughter has to settle for the remaining one but this way of action was not perceived to be a problem. When the parents were asked the reason for placing the common computer in the boy's room, they answered:

M: Practicality.

F: I think the places where the ex-dweller has put the electric wall sockets, it has also affected to some extent.

M: Well, that is, the computer is there because Markus seems to use it most. And that table fits in there.

According to studies of Livingstone (2002), gender differences of children determine partly the location of the computer in the home: "while boys and girls are more or less equally likely to have a computer somewhere in the home, boys are twice as likely to have one in their bedroom". People do not seem to be very aware of how the placement of devices contributes to the atmosphere of home or how it produces gendered practices of use. However, as Livingstone (2002, 138-139) points out, the decisions about placements of devices have implications for the meaning of the media device and its use and for the meaning of the space in which the device is placed.

#### 4.3. DOMESTIC TECHNOLOGY IN SPATIAL ORDERS OF LIVING ROOMS

Technologies are arrayed in certain places and in certain order in domestic environments. Spatial arrangements of media technology are not as evident as one might think at first sight. When an object of media technology is positioned to a certain place, in proximity to other domestic technologies and objects, such as indoor plants, ornaments, textiles and lights, that wholeness can be considered as a meaningful entity (Peteri 2003). On the grounds of our data it appears that locations of media technologies are usually taken as self-evident and stabile. Once the device has been placed in some corner or room dwellers do not usually question its place later. Domestic technologies become typically absorbed into the material fabric of home and contextualised as ordinary, everyday elements of the fitted domestic environment, to be replaced only when broken (Hughes et al. 1998).

The placement of kitchen appliances in the kitchen can be explained through the functionality of the arrangement (e.g. by resorting to a location of a water tap) but it is not so obvious why a stereo set is typically found in proximity to a television and VCR in the living room. When explaining their associations related to the animal stickers the 40-year-old couple indicated that they were clearly aware that their (biggest and most expensive) television, VCR and stereos were accumulated to the same corner of the living room but they did not question at all the location of that device entity. Moreover, it was clear for them that some day they will acquire a digital set-top box that will be

situated in the same corner. The question was not why to buy or where to situate the device but how to fit it in the technological “anthill” (Figure 4).

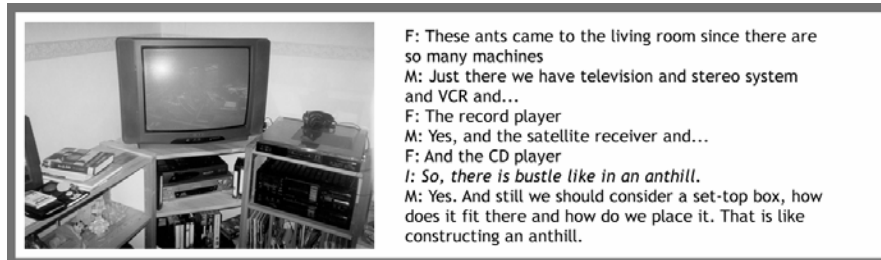


Figure 4. A photo taken by a participant accompanied by a discussion quote concerning the picture and the related floor plan

That kind of technology focused array can relate to the spatial order where people create domestic spaces that are free of all the technology and other spaces that are dedicated to the use of media technology (cf. Peteri 2003).

Typically Finnish living rooms have the most central media technologies of the home while they are free from most of the other domestic appliances. Meanings and perceptions related to various domestic technologies include hierarchies that prioritize some devices over others. In our interviews media technologies were typically brought out as “proper” technology (or as electronics) at home, while electronic devices in the bathroom (a curling iron, an electric razor, a washing machine) and in the kitchen (a coffee maker, a toaster) were not so clearly perceived to belong to domestic technology. It seemed that they were understood more as fittings of these spaces as movable devices. One explanation could be that people don’t associate kitchen and bathroom devices with domestic technology because technologies in those rooms are fairly effortless and simple to use compared to information and communication technologies. Moreover, many domestic appliances have been culturally constructed as feminine because women have traditionally been their main users. Probably this is another reason why they are not perceived as “proper” technology. In any case, although technologies may be gendered in product development and marketing they are still capable of being subverted through their creative appropriation by users (Lally 2002, 157-158).

An interesting piece of furniture in the living room is a bookshelf. It is a place of storage not only for books but for many kinds of ornaments, memorabilia, family photos, board games, spirits, china and crystal. In addition, on the grounds of our data, Finnish bookshelves are central sites of placements for media texts (books, comics, video cassettes, DVDs, CDs) and media technologies (television, VCR, DVD, sound-reproducing equipment). It appears that one important function of bookshelves is to file media texts and through them display the interests of household members. The objects chosen for display provide interesting clues about interpersonal dynamics within a household and its social networks (Riggins 1994, 107). The objects of the bookshelf construct the identity of the family or household and its members’ status as certain kinds of consumers and representatives of different communities. Choice and preservation of bookshelf’s objects and stories related to them has been argued to be

traditionally women's task (Young 1997). However, it seems that through the media text archive the content of the bookshelf has become more eclectic because it represents preferences of the whole household.

A repeated theme in the data was a desire to get rid of the electric wires. Although the appearance of media technologies and domestic appliances was accepted as a matter of course, the wires were found annoying especially in the living room. The fact that many participants had tried to hide the wires suggests that their visibility was found to disturb homely atmosphere. Further, many domestic technologies, such as television, radio, record player and landline telephone represented devices that most of the participants wanted to use around the house instead of a fixed place restricted by plug points.

### **5. Methodological discussion**

The project was a valuable lesson also in terms of methodology. As mentioned earlier, we did not feel the need to emphasize the 'provocateur' aspect of the original cultural probes approach very strongly. Even so, our version of the approach did not neutrally document the daily household events but forced the participants to consider their everyday environments from new perspectives.

Thus, there is an obvious difference when compared to ethnographic ideal of unobtrusive "fly-on-the-wall" observation. Since our presence at people's homes was limited to delivering materials and making interviews we were mostly able to avoid the debate whether the presence of the researcher affected the actions of our participants. However, the materials obviously include a variety of meaningful selection performed by the participants. For example the photos taken by participants always produce a more or less idealized and manipulated picture of their homes. Floors can be cleaned and dishes can be washed before the pictures are taken or otherwise they can be cropped away from the photos. At least doors and drawers have to be opened beforehand if the contents are supposed to be photographed. Furthermore, people are prone to elicit some objects that they think are morally acceptable or suitable for constructing a desirable self-image while they fall silent with others. In any case, photos can reveal some unintentional matters that can turn out to be valuable findings afterwards. The visual material also obviously makes the material more memorable.

Often the group interview situation has undeniable consequences on the course of discussion. Participants can get ideas from each other and contemplate complex matters together. Especially among family members it is difficult to construct untruthful self-images since other participants are eager to expose the inconsistencies. On the other hand the group may also limit the variety of opinions. The discussion can reflect existing power relations among the group by emphasizing some dominant discursive practices and silencing others. In our case filling individual workbooks seemed to prepare the participants well to the interviews. The photos were an easy way to articulate personal notions and a single interviewee was not able to dominate the discussion.

The participants' attitude to the task of pasting animal stickers was both favorable and bemused. Although the task may have been unusual, for the most part finding the suitable animal figures proved to be fairly easy. It was interesting to notice that

although a few of the participants had chosen the same animal for symbolizing the same device, their explanations could differ a lot. For example a fox chosen for its cunning to represent a microwave oven got two significantly different explanations.

“Why did I choose the fox? It was such..., it was that kind of fairly unnoticeable device in the home but somehow cunningly nice. With it you can get the work done quickly and it is such a quiet device, it does not make noise but it is useful, and it is a handy helping hand.” (Female, 25)

”It is, it is a fox because it is so cunning that you don’t recognize it, you can think it’s a safe deposit box. /.../ It is bought because of the appearance and not because of the functionality. If you heat something with it the result is always unsatisfactory but it [the device] exists.” (Female, 60)

Sometimes the explanations were also surprising. Typically in the interviews a tortoise was told to symbolize slowness. However, instead of slowness one of our participants referred to the tortoise’s ability to hide inside its shell. When discussing her problems with computer she explained that the computer interface concealed the programs just like a shell conceals a tortoise.

In comparing the methodological capabilities of probes and observations Mattelmäki and Jääskö (2003) suggest that probes are a good technique to draw a big picture on different research areas. In studying a hospital setting they found probes material particularly useful in mapping subjective thoughts, motivations and feelings related to work situations. Although our subject of study is clearly different we do mostly agree with this. In conclusion, we feel that approaches like cultural probes can bring out issues that are difficult to reveal through traditional methods. Still, probes function most efficiently when complemented with informal interviews.

## 6. Conclusions

As a lived environment home is to be perceived as an intersection where ideals and practices of architecture, industry, housing policy, advertising and media texts come together with private activities and interpretations of dwellers. Use of domestic space is also strongly social and dynamic in nature. It is determined, among others, by common activities of dwellers, shared use of objects, communicating with intimates and visiting people.

Our analysis suggests that material and spatial aspects of home affect in many ways the daily activities in domestic environments. Domestic technologies form an integral part of the fabric of interior domestic environment but their presence is to some extent taken for granted. Placement of some domestic objects can be result of many negotiations while placement of other objects is not so reflected. Many domestic technologies seem to become a self-evident and unquestionable part of the daily domestic environment. However, spatial orders of domestic technologies have a great influence on use of devices and use of rooms.

In terms of methodology, self-documentation packages with relatively open tasks can encourage participants to be creative and can also help them to perceive new dimensions of the lived everyday environment. Self-documentation tasks also ‘tune in’ participants to the themes for research and help them to articulate their notions in the

interviews. Combined with interviews the self-documentation tasks offer a rich perspective on the users and use contexts of domestic technologies.

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