Abstract
The interLiving project is an attempt to let families themselves influence and shape the design of communication technologies they will use. Families, and the individuals within them, represent a new user group for the researchers in interLiving. We are experimenting with different methods, to see which can be used successfully and which work less well.

Aesthetics are very important to the families in our study, probably more so at home than in the workplace. The things in your home or the stuff you wear is used more to reveal your choices, tastes, desired identity, etc.

We believe that it is important to take aesthetic considerations into account early in the research. But since this field is rather new we would like to discuss in what ways this could best be achieved.

Keywords
Participatory design, aesthetics, families, domestic, sign, design, artifact, process

interLiving
The goal of the interLiving project is to, together with families, study and develop technologies and artifacts for communication between generations.

This means that we also need to investigate and develop methods for how to work with participatory design concerning domestic environments.

interLiving is a cooperative project between researchers from different scientific disciplines. To our help we participate with three extended, three-generation, families in Sweden and three in France.

The focus is on finding and understanding the needs and desires of the individuals within those extended families. We look at this with a wide perspective, i.e. we do not only include basic “communication” in the categories needs and desires. We definitely also include how the users perceive artifacts, what meaning the artifacts have for the users.

We aim to develop artifacts for long-term use. Therefore we believe that we have to look for a whole picture of the future artifact right from the beginning.

“Design concerns itself with the meanings artifacts can acquire by their users.” (Krippendorff)

Even though we are clearly aware that design certainly is much more than appearance the following will focus mostly on appearance. We feel that the aesthetic aspects are not considered enough in the field of the disappearing computer.

Findings (selected)
In the interLiving project we gave all the participants disposable cameras and diaries. They were also interviewed. One of the assignments was to take photos of things that they find neat or ugly in their household.

We have found that family members in several ways clearly express how important appearance is.

“...This is not beautiful, but close to ugly...”
Comment on the back of a probe photo taken by one of our participating family members.

On the “neat” side some people express how nice it is to have a mobile phone that you like the appearance of. Most grown-ups also think it is important to
furnish and arrange their homes in certain ways with things that they have chosen themselves. Many of the things people have are used to remember people, places and events. All these collection of things clearly show big individual differences among the households.

On the “ugly” side we have had remarks on most “technical artifacts” in the homes, light switches, telephones, TV sets, fluorescent lamps, etc. And people actually swear over cords and battery eliminators.

It seems that most technical artifacts don’t fit into the homes of our participating families. They claim that there is not enough variety to choose from.

**Why are things considered nice or ugly?**

“one can argue that the home contains the most special objects: those that were selected by the person to attend to regularly or to have close at hand, that create permanence in the intimate life of a person, and therefore that are most involved in making up his or her identity.”

(Csikszentmihaly)

All this seems to indicate that it is important what artifacts signify in the domestic environment. We believe that this is due to several factors.

One is the notion of “dirt”, i.e. “things in the wrong place”. Mud is OK in the ditch but not on the kitchen table. (Douglas) Cords and computers are OK in the workplace but not at home. The home is historically seen as a place that is separated from a work, a place for rest (Forty, Nippert-Eng). That is still the case for many people. Most home electronics, computers and computer applications signify “work”.

Another is the notion of style. One of the households that we studied is furnished with things from the 50’s. There is no easy way that they can get a computer to fit into their home. The ones sold today will definitely pop out with regard to the expression and the ones built in the 50’s are of course out of the question both regarding size and capacity.

Still another is the variety within a style. One middle aged woman clearly expresses how important it is that she has a mobile phone “that is neat”. She also chooses to buy an iMac because of its appearance. And she has exchanged a technically working portable phone for one that “looks nicer”.

**Signs and signification**

The different signs on a product may signify different meanings to different people. Products can be seen as texts that have to be interpreted in order to be understood.

Often products get “loaded” with signs from the designers’ world. They tend to develop their “taste” in a way that might lead them to like things that are more and more extreme in some sense. From a marketing perspective products normally have to signify the brand. The connection between production volume and price make it difficult to take personal consideration. Products tend to have a more general smoothend approach.

But in interLiving we don’t have to take marketing or production into consideration. We want to “load” the artifacts with signs from the users world. So we need to get to know that world in order to find the signs that are relevant to the user.

In other words we want the professional experience of the designers as well as the experience and preferences of the users to influence the final design.

**Design approaches**

The normal design approaches for acquiring information or inspiration about “users” aesthetic preferences is mostly done through prototypes. Sometimes image boards are used as well. The later is sometimes criticized because you may only get “too obvious” answers. This is following the argument that users aren’t that good at envisioning future products.

**SUMMARY**

The aesthetics of artifacts in the home are very important. By using a participatory design approach, we hope to involve family members actively in the design of new artifacts, not just from a technological perspective, but as aesthetically-pleasing objects in their own right.

**REFERENCES (some)**


More information about the European Union financed interLiving project is available at: http://interliving.kth.se