Construction of the child as a user

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ABSTRACT
We describe thoughts on three different parties, the child, the designer and the researcher, involved in child computer interaction and how they perceive the child as a user. Their perception is part of their construction of the child. The project's goal is to study how these constructions relate to and affect each other.

Keywords
Constructivism, children, everyday, design, research.

INTRODUCTION
Today most research that involves children talks loudly about the importance of a constructivistic approach to children and childhood. Well-known theorists such as Piaget and Vygotsky have influenced much of the work that has been done in the area [1]. The child is perceived to actively participate in the construction of both childhood and society at large. They are perceived as autonomous from adults and adult interests.

The research project described here aims to study how three different parties construct the child as a user. Foremost it is the child itself who is interesting. How does it perceive itself within the context of everyday use of computers? The everyday context is planned to be studied since construction is thought to take place all the time. The focus is on the home where both social and individual interaction appears and where the everyday is continuously present and constructed.

The second party of interest is the designer. How and with what kind of information does the designer formulate a mental model of the child as a user? A lot of the educational and edutainment applications have based their design on constructivistic theories. How does that apply to how they perceive the child? How about other designs that are based on other theories? What is the result from different constructions of the child? How does it relate to the child's own self-perception?

Finally, the third party of interest is the researcher that takes interest in child computer interaction. How do researchers construct their mental representation of the child? How does that construction influence the researcher's own theories? Well-known researchers such as Druin and Papert not only believe in constructivism but also try to apply it in practice when they argue and present applications with strong emphasis on the child's opportunity to express itself through the application [1, 2, 3].

These different constructions of the child interact with each other in intricate ways [4], and they are all present in the design of applications for children. They affect that design as well as the use of the application, see figure 1.

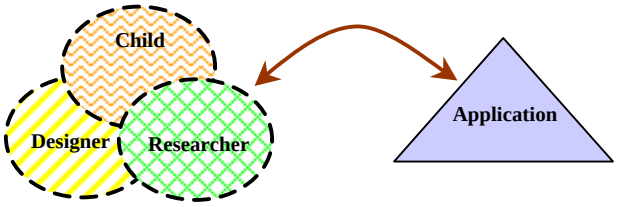

Figure 1: Parties involved in the construction of a child as a user.

The project's goal is to study how the constructions relate to and affect each other, and how they are present in the child computer interaction.

FUTURE WORK
To study the constructions presented above the following studies are planned to be performed:

- Interviews and participatory observations of children and their everyday usage of computers in their home environment.
- Interviews and observations of designers that design applications for children.
- Interviews and participatory observations of researchers that study child computer interaction.

The studies are at a planning stage, we hope to conduct them between the fall of 2003 and the spring of 2006.

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