ABSTRACT

The interactive installation Reaction Machine [1] by Jonas Hielscher and Klaas Jan Mollema plays with the intimate field of tension between the people. Balance of power, personal input and connecting old and new technology are all part of this experience. Reaction Machine is an open system, in which the visitor's reaction determines the art work.

Keywords
Installation, intimate connectedness, interaction, open system, combining technologies

PROJECT CONTEXT

The Reaction Machine is developed within the context of the 2nd semester project of the masters program Media Technology (Leiden University, The Netherlands) [2].

Concept Background

The project was based on the given theme 'intimate connectedness'. Within this theme the following aspects interested us, interaction between strangers, sharing ideas and movement, direct contact and the use of physical objects. Out of these aspects we developed our final concept. It is based on a simple children's game. In that game you create a story together by writing down a sentence, folding the paper so that only the last sentence is visible and passing the paper to the next person in line. In the end the paper is unfolded and provides an unpredictable story.

PROJECT DESCRIPTION

In the Reaction Machine different kinds of technologies are combined in one object, a television screen is combined with a old rusty gear wheel and a handle, all together connected to a computer with a web cam, microphone and speakers. The object looks unfamiliar, but the interface is clear: a chair in front of it to sit, a television screen to watch and a handle to turn. When a curios visitor sits down and starts to explore the use of the machine, he will discover that the machine is not about the wired use of its technologies. It's about people that are using it and all used technologies and materials are only there to enable this interaction. So when a visitor sits down, he will see himself and somebody else looking at each other on the television screen. His head is filmed live by a web cam and combined with a recording of somebody else. As soon as he starts to turn the handle the video recording of the other person starts to be plaid. After watching the video the visitor is asked to record himself. If he now keeps turning the wheel, he will be recorded. In the end of his recording his movie will be mirrored and the next visitor can watch and react on his recording. In this way people can play with the machine, discover its function, react on each other, sometimes in a direct and expressive way, sometimes in an intimate and exploratory way and sometimes in a way telling each other stories, like in the old children's game.

Figure 1. Reaction Machine

DISCUSSION
In this installation old and new technology are combined. It refers to different times in the development of technology, that are merged in one object. By using familiar objects in this new context, it causes recognition and at the same time creates curiosity in the function and interaction possibilities. To stimulate the interaction, the interface is simple and self explaining: a chair to sit, a handle to turn and a television screen to look at. Nevertheless the user has a lot of freedom in expressing himself in front of the camera, after understanding the rules of the system. In the design we focused only on the essential elements necessary for interaction, without limiting the visitors need of self expression.

In our installation, *expanding boundaries in participatory design* means to create an open system, that a user can easily discover and learn, in order to express himself playfully and interact with others. In this way the installation should promote interaction to the fearless confrontation and contact with strangers and create a reflective view on one self, others and technology.

PREVIOUS EXHIBITIONS
08-11 December 2005  
Profile Intermedia Design Conference  
Powerhouse/energieleidzentrale Speicher XI, Bemen (GER)  
http://www.profile-intermedia.de

05-09 September 2005  
Exposition Media Technology Projects  
Leids Universitair Medisch Centrum, Leiden (NL)  
http://www.lumc.nl

REFERENCES
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   Niels Bohrweg 1, 2333 CA Leiden  
   http://mediatechnology.liacs.nl/