

# Heimlichkeit des Berührens: Exploring the Correlation of Perception and Intimacy

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**Abstract:** *Heimlichkeit des Berührens* is a sound installation that invites visitors to experience the intimacy of touch. A space is split into four separate areas, each of which is accessible to visitors in a way that seeing each other is inhibited, whereas in a centered invisible shared area touching is the only enabled form to communicate. The exploration, the contact and movements of touches, are captured by a specifically designed sound instrument (Müller-Rakow 2012). Below we briefly present the concept behind the practical work and outline setup and interaction methods of the installation.

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Computation Communication Aesthetics and X. Bergamo, Italy. [xcoax.org](http://xcoax.org)

## 1. Introduction

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Mostly it is the conscious model of human behavior that underlies the development and design of embodied interfaces to control (social) interaction. The diversity of expressions in human social interaction includes all human senses and always is conducted by unconscious actions.

In their introduction to the work *Room#81*, d'Alessandro et al. refer to the unconscious parts of communication e.g. small gestures as the “foundation for emotional commitment” (d'Alessandro et al. 2011). With *Heimlichkeit des Berührens* we firstly turn our and the visitor's attention to the sense of touch due to that fact that the sense (and act) of touch — in western philosophy — is the most intimate and exclusive perception in human interaction (Benthien 2002). On the other hand we address the sense of hearing with an individually assigned role for manipulating the sound in order to provoke and encourage the act of touch and additionally the experimentation with the correlations of intimacy, touch and sound.

With this interactive exhibit we seek to bridge the gap between the practice-based research in the field of interaction design for everyday life communication technologies, and arts with its potential for provocation, reflection and experimentation in order to excite personal intimate exploration.

The technical setup of the installation was presented before (Müller-Rakow 2012) and tries to be in line with outstanding works that advanced the development of skin-based instruments and installations (e.g. by Waisvisz 2004; Jaimovich 2011; Brinkmann<sup>1</sup>). However, the concept of the installation marks a new approach in our research bringing the exhibition context, the composition and its mapping into main focus.

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1. <http://www.daanbrinkmann.com> (accessed 05-Jan-2013).

## 2. Concept

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The installation consists of four perpendicularly arranged walls that split a room into four areas. Visitors can only access in a way that seeing each other is inhibited, whereas skin contact establishes the unique form to communicate in between each other in a common space that connects the four areas. Visitors — becoming participants — make nonverbal contact with each other and begin a tactile communication that redraws the line of interpersonal intimacy and privacy. How may one touch an unknown and invisible person, to what extent does the interaction feel pleasant to oneself, and how does the soundscape react to the manipulations of the electronically enhanced bodies?

Occurring within the shared space, contacted movements and gestures are captured by a specifically designed device that measures electrical resistance on the participant's skin. Their bodies act as a constituent of a specific electrical circuit. In doing so each affiliated participant assumes a specific role in the joint (invisible) performance. The action of one touching another, influences the sound synthesis by varying in intensity, the duration of contact and the movement speed.

The measured values are sent to a PC where the mapping and sound synthesis proceeds using MAX/MSP.



Fig. 1. A shared but invisible space for collaborative skin-based sound control.

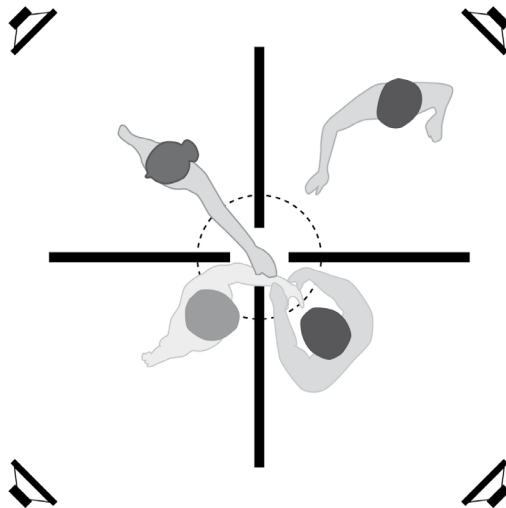


Fig. 2. Sketch of setup.

### 3. Equipment

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The installation requires the following equipment: 4 walls (size 3 x 2 meter), 4 tripods, 4 loudspeakers and the central box, accessible from each of the 4 areas, where the touching takes place. We would like to ask conference organizers to provide us with a separate, dark room, the tripods and the loudspeakers. Material, arrangement and alignment of the walls will be discussed individually.

### 4. Video Demonstration

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Testing the mode of operation with a first prototype at XX: <http://www.vimeo.com/37367946>.

## References

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- d'Alessandro, Nicolas et al.** *ROOM#81 — Agent-Based Instrument for Experiencing Architectural and Vocal Cues*. Proceedings of the 2011 Conference on New Interfaces for Musical Expression (NIME 2011), Oslo, Norway, 2011
- Benthien, Claudia.** *Skin — on the cultural border between self and the world*. Columbia University Press, 2002
- Jaimovich, Javier.** *Ground me! An Interactive Sound Art Installation*. Proceedings of the 2010 Conference on New Interfaces for Musical Expression (NIME 2010), Sydney, Australia, 2010
- Müller-Rakow, Alexander and Fuchs, Jochen.** *The Human Skin as an Interface for Musical Expression*. In Proceedings of the 12th International Conference on New Interfaces for Musical Expression (NIME 2012), Ann Arbor, Michigan, USA, 2012
- Waisvisz, Michel.** *Crackle History*, [www.crackle.org/CrackleBox.html](http://www.crackle.org/CrackleBox.html), 2004, (accessed 05-Jan-2013)