

Recording Inner Life

Developing a physical input system for emotions

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1. Introduction

This thesis concerns the development of a physical input device to create non-verbal emotion expressions that can be stored in a computer based storage system. Furthermore, the thesis includes background research and related work that contributed to determine a focus within the broader topic off “recording inner life”: My aim was to create an input device the user can manipulate and therewith create a non-verbal expression of his emotional state. My main question was: What means of expression are suitable to express emotions? They should allow personal interpretation but are not entirely arbitrarily. In relation to the chosen means, other questions arouse: What kinds of interactions are appropriate to support the user in creating a reflective representation of his emotional state?

Why is it important to reflect about one’s own emotions? In order to answer this question, I want to cite two publications by psychologist James W. Pennebaker whose research focuses on the relations between writing about and coping with traumatic experiences to keep mental health. In his book “Opening Up: The Healing Power of expressing emotions”, he points out at the very beginning: “Like other stressors, inhibition [of emotions, authors note] can affect immune function, the action of the heart and vascular systems, and even the biochemical workings of the brain and nervous systems.” ((Pennebaker, 1997), page 2)

A finding of one of his experiments: *“Overall, writing about both the emotions and facts surrounding a traumatic event was associated with relatively higher blood pressure and negative moods following the essays, but fewer health center visits in the 6 months following the experiment.”* ((Pennebaker, et al., 1986), page 274)

At this point, the need for a device like the proposed one becomes questionable, if simple diary keeping serves the same purpose. The projected device and an ordinary diary differ in two main points: Digital versus (usually) analogue data and non-verbal versus verbal expressions. With regards to the first point, a computer based system provides additional functionalities such as easy search ability,

revisualisation of the collected data and combination of different media. Concerning the second point, verbal emotion expressions are the result of a reflective process the person had to undergo in order to find suitable phrases. This process is very valuable as cited above but includes some difficulties as well. Finding the correct words to describe the own emotional state is difficult, especially for people with emotional disorders like depression. In psychotherapy, these patients are supported by non-verbal means of expression like painting and making music. Also psychological research looks for non-verbal emotion rating systems since verbal based ones are not as objective as it seems to be because of different language use.

However, people without an emotional disorder also have problems with verbalizing their emotions, because it takes time they simply do not have. Although the need for documentation of the own existence becomes apparent when looking at the huge amounts of data, people, that live in a digital environment, create to document their life. Taking digital pictures is just one possibility, the mostly used though. In contrast to the “social life” that is therewith documented (see also section 2.6 Lifelogging) this work is concerned with keeping track of the “inner” part of life. It should enable people to record the most precious thing they have: their affective states, moods, feelings, to sum it up: their emotions.

A quote to finish this introduction:

„Gefühle sind die Nachrichten innerhalb des Organismus über die Auswirkungen von Entscheidungen und Handlungen. Darum kommt der unverstellten Wahrnehmung der eigenen Gefühle eine entscheidende Funktion bei der guten Gestaltung des Lebens zu.“ ((Blankertz, et al., 2005), page 83)

Authors translation: “Feelings are the messages inside the organism about the effects of decisions and actions. This is why the undisguised perception of the own feelings is an essential function for the creation of good ways to live.”