

Presence in the Emotional Space

Laura Polazzi, Margot Jacobs*, Kristina Andersen
Interaction Design Institute Ivrea
Via Montenavale 1, 10015 Ivrea(TO), Italy
{margot, laura, kristina}@ifonly.org

Keywords: presence, emotions, communication, affective computing, physiological computing

Summary

FARAWAY is a research project focused on long distance communication, emotions and presence. The aim of the project is to identify new directions and ways of thinking in order to design interactive applications that increase the sense of presence of a loved person over distance. In this abstract we present the theoretical and methodological basis of the project.

1 Introduction

A metaphor that people frequently use to define their emotional relationships is the concept of distance (Kovecses 2000). Positive feelings like love, friendship and intimacy in general are referred to as closeness between two entities.

Yet, the figurative proximity connecting two affectionate persons sometimes contrasts with their actual physical location. Sometimes people that are emotionally close find themselves physically distant from each other for short or long periods of time. This physical distance can be an important limitation in maintaining the sense of closeness. Being far away from lovers, family and friends is commonly perceived as a loss.

In order to reinforce their emotional closeness over distance, loved ones seek alternative means for communicating. A common solution is to use existing media for long distance communication.

Linguistic studies demonstrate that for people in an intimate relationship the very objective of mediated communication is to feel each other's presence. Telecommunication is used by loved ones '*to express a wish to be together*' (Channel 1997: 144) more than for any actual exchange of verbal content. Yet, existing media offers a narrow channel for people who are communicating in order to do affective work.

Are there other ways people communicate presence over distance? Which types of media could better reinforce the emotional proximity between two entities?

*Margot Jacobs, PLAY, Interactive Institute, Hugo Grauers Gata 3, 42196 Göteborg, Göteborg, Sweden, margot.jacobs@interactiveinstitute.se

1. 1 Presence and Absence

Physical presence can be defined in terms of time and space. Being present means being 'now' and 'here'; we refer to someone or something as being literally 'present' when they occupy the same spatial and temporal dimension as we do whereas absence is given by the lack of these two conditions. Someone or something is perceived as absent when she, he, or it is not 'here' and 'now'.

However there are intermediate situations, where only one of the conditions of presence is met. An example is real time telecommunication. In this case the other person is not 'here'; the spatial condition is missing but the simultaneity of the exchange implies presence in time. We and the other person experience a temporal co-presence. On the other hand, traces are physical signs of a past presence. Through a trace we perceive the other person's presence here, but in another temporal span.

We believe that the field between traces and telecommunication offers significant opportunities for interaction designers to experiment with and shape people's feelings of closeness and distance. By investigating the cultural and sensorial elements that currently create 'the sense of presence' in situations of physical or temporal absence it is possible to envision new technological solutions that can enrich connections between people separated by distance.

1. 2 Presence in the Emotional Space

The design framework that FARAWAY adopted to explore these concepts is based on the concept of emotional space.

This proximity experienced by partners in an affective relationship creates a shared immaterial emotional space in which the relationship itself is conducted. Shared personal language, signs, symbolic objects and rituals augment this space. People physically distant but emotionally close can maintain proximity at the emotional level by their affective link and this shared emotional space.

Presence and absence in the physical space and in the emotional space do not necessarily overlap. The emotional space has the special quality of allowing you to be present even if you are physically far away. You are still present for your loved one when you are present in the emotional space that you share. You are emotionally present when you do something for her or him, when you talk about her or him or, simply, when you think of her or him.

We believe that it is conceivable for someone in an affectionate relationship to experience a sense of closeness and presence over physical distance by sensing the other's presence in the shared emotional space.

1. 3 Emotions and Symbols

Both our physical and mental processes provide interesting opportunities for exploring alternative ways to communicate presence and emotional content over

distance. In interpersonal relationships the human body plays a crucial role in both sensing another person's presence and determining the nature of the interaction.

During face-to-face communication, our body acts as a medium that transforms our internal emotional states into these external signals. The main general distinction among body manifestations of emotions is between what can be controlled and what cannot.

Emotional manifestations like actions, expressions, gestures, postures and attitudes, voice intonations, can be controlled and voluntarily used to express, for example, love, closeness and intimacy. In situations of physical co-presence the meaning of these emotional expressions is defined by the relationship, the context, and the language of the people involved in the interaction.

Physiological manifestations such as heart rate, blood pressure, and pupillary responses, are difficult to control and are often only accessible by other people through close physical contact or specific monitoring devices. For these reasons, outside of the medical field, their meaning is not socially codified.

Both controllable and uncontrollable body manifestations of emotions are interesting types of messages to explore in long distance communication, especially in what concerns the processes of meaning attribution and interpretation. What happens when we incorporate the use of gestures, expressions, heartbeat, breath, alpha and beta rhythm information etc. in long-distance communication? What meaning can they convey? What kind of new emotional languages can be created?

When bodily presence is missing, we, human beings, are still able to feel a 'sense of presence' through the use of symbols. Thanks to particular and diverse rules, specific items can become virtual 'traces' of something or someone that is not present, or not present anymore. In other words, objects can become symbolic surrogates of presence in time and space.

The degree of convention of the link relating the object with its meaning varies from the fully codified to the completely open. Religious symbols like the Eucharist have a strictly codified meaning; typical symbols for love and friendship, like wedding rings, bracelets, loquets, etc. are partially culturally codified, however they are always embedded with strong personal and private meaning. The least pre-defined symbols are the ones we call 'souvenirs'. Souvenirs include a variegated and infinite set of tokens that we transform in personal objects of affection. Photographs, postcards, etc. are more 'classical' types of souvenirs. However any kind of object can be included in this category.

Understanding how the symbolic investment occurs and is shared over distance opens interesting possibilities in the design of tools that convey presence.

1. 4 If Only Games

In the context of FARAWAY these concepts of presence and emotions have been explored by investigating the desire and experience of people. The core idea of the

project is to gradually shift from the existing to the new by creating, collecting and interpreting individual experiences.

Our objective is to allow people to go beyond current communication modes to creatively and emotionally imagine and envision new ones. The method we developed for this purpose is based on games.

A game is a way to create another reality and allow people to enter this reality. Similar to a movie demanding the audience to accept seemingly impossible events, or poetry bringing the reader into another universe of meaning, playing a game implies immersion and 'suspension of disbelief' (Murray 1998).

We used games to bring people into the emotional space and actively involve them in different kinds of experiences or exchanges. Our main requirement was to obtain real emotional participation. Furthermore, we wanted to explore the role of objects and artefacts both as mediators and products of these experiences.

The IF ONLY games are split into 3 sets that change gradually from documenting reality-based communication modalities to envisioning new ones.

Our objective for the first set of games was to trigger creative behaviours through existing and low-tech artefacts. We wanted to explore the potential of objects, symbols, controllable and uncontrollable manifestations of emotions to convey a sense of presence and support emotional exchange in situations that are currently possible, although non conventional.

The second set of games was more focused and small-scale. We aimed at testing the qualities of specific media to express and convey emotional content.

The third set of games introduces new artefacts specifically designed to test different models of interaction in the emotional space. The games involve fully functional game pieces called 'beans' that incorporate elements of the other sets as well as simple technology. This third phase is particularly focused on communication models and interaction elements and is intended to complement the previous ones in assessing all the variables that can be used to support distant emotional communication between loved ones.

The games use language, procedures and graphics to create a placebo emotional space that allows players to provide real emotional content in an artificial situation and express their presence to loved ones.

References

Channel, J. (1997): 'I Just Called to Say I Love You': Love and Desire on the Telephone. In: Harvey, K., Shalom, C. (eds.): *Language and Desire*. London: Routledge.

Kovecses, Z. (2000): *Metaphor and Emotion: Language, Culture and Body in Human Feeling*. Cambridge: Cambridge University Press.

Murray, J. (1998). *Hamlet on the Holodeck*. Cambridge, MA: MIT Press.