Full Frontal Intimacy – on HCI, Design & Intimacy

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Abstract

The HCI community increasingly expands the borders of what topics are acceptable to explore, discuss and research. Recent workshops and papers on sexuality, intimate facets of the body and other sensitive topics show that intimacy in its widest sense and its impact on people's lives and well-being is relevant to the HCI community. In this paper, we draw on the results of an ongoing literature review on intimacy which shows that the concept is rarely defined, even though it has a variety of meanings. Nonetheless, as the parameters in which intimacy is explored are comparable in many instances, a predominant view prevails on what intimacy means. We share an imaginary abstract that breaks with these conventions and shows potential benefits of expanding the view on intimacy. This provocation therefore urges HCI researchers to rethink their idea of what intimacy is and offers directions of how to do so.

Author Keywords

Intimacy; sexuality; relatedness; relationships; imaginary abstracts; speculative design

CSS Concepts

•Human-centered computing~Human computer interaction (HCI)

"The Boomers are at it again" – Intimate Toys in Elderly Care Setting

Moving into a care home is rarely easy. Here we explore how the process could be facilitated through interactive toys that support making contact and opening up to people around one:

Gentle Brush gently strokes the hair with a soft comb, which can also be used for simple hair dos such as braids, plaids or curls. **Secret Safe** is a tool for communication in which partners can exchange little sketches or notes, providing a space for private, intimate, maybe provocative conversations. **Touch Me** is shaped like a large pebble. Provided with led lights and vibrating motors under its silicone surface, it gives a response to stimuli, e.g. stroking, if touched by two or more people. With this paper we contribute not only artefacts, but also frame the variety of ways in which intimacy is understood, shared and expressed in care homes.

Introduction

When searching for the term "intimacy" in the ACM Digital Library, one gets a satisfactory number of results. Over the last two decades, the topic has seen constant interest by the community. But a deeper look reveals two things: First, the term is widely interpreted, but rarely defined (see also [10] for a critique). Second, intimacy can nonetheless mean many things: Intimacy in social networks from an algorithmic perspective, mediated intimacy between couples or intimate relationships with technology are dominant themes. Third, within each of these perspectives, characteristics are relatively close which implies that – even though not communicated – the communities' view on what intimacy is, is influenced by shared values.

People interact through technology and technology is invading our everyday lives and is introduced into intimate aspects of our lives, such as caring for children or the elderly or addressing questions of self-care and well-being. Can we ignore intimacy as an important part of our lives? In the following, we share an imaginary abstract in which intimacy is facilitated within a wider range of partners, contexts and means of expression.

This paper is structured as follows: First, we outline trends in the current literature on intimacy based on previous work and our review. Second, we present our imaginary abstract that breaks with the current conventions (see sidebar), before discussing where the provocations lie and how these could be translated into directions for future work.

Background

HCI cares about intimate connections as a wide range of papers in this area shows. Our review using the term "intimacy" identified over 100 individual publications that span 22 years. But not all is well, as a number of critical reviews shows. Hassenzahl et al. [10] reviewed papers specifically on technology-mediated intimacy and stated one of the major conclusions that many devices are built without turning to the theoretical literature on the topic and that very few are evaluated. More recently, Li et al. [14] added to the literature on devices in long-distance relationships and confirm these results. These two reviews already show that mediated technologies between couples forms a large part of the literature on intimacy.

Our literature review went beyond technology mediated intimacy, but addressed intimacy in all its facets. Beyond mediated intimacy we currently classify two further types of papers: first those in which intimacy is expressed algorithmically to express closeness in social networks and second those in which intimacy is explored – and often exploited – in our relationship with and acceptance of technologies. Intimacy appears to be dependent on the context and its definition, but it is rarely defined. Nonetheless, within these categories, papers, concepts and prototypes share common traits, showing that intimacy as a concept touches upon shared values.

Here we expand on the criticism expressed in previous reviews by presenting an alternative view in an imaginary abstract [3,15] (see sidebar). An imaginary abstract describes a study that has not been done (yet) or a prototype that does not (yet) exist. It has been
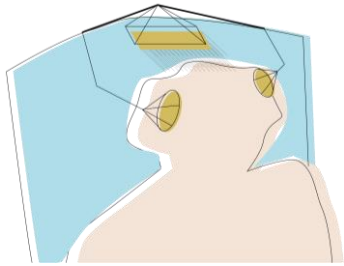
Figure 1: Conceptual Sketch of the **Gentle Brush**. Attached to a comfortable chair, the brush on top combs and arranges the hair, while pads on the side massage and relax.
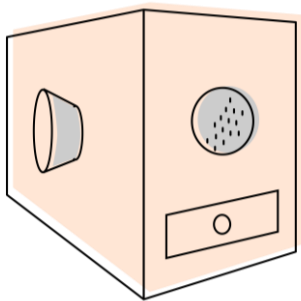

Figure 2: Conceptual sketch of the **Secret Safe**. Users can speak into the tube on the side or throw something in that will be revealed in the drawer once the recipient(s) have verified themselves by talking into the device.

used previously to find alternatives and build common ground.

Discussion

In this paper, we present an imaginary abstract on intimacy that breaks with current conventions of how intimacy is framed within HCI. We describe how it differs in the choice of intimate partners, the context in which intimacy is explored, and how intimacy is expressed.

Intimate Partners

Many studies that address intimacy do so in relation to couples, families or the relationship between people and technology. Here we extend the focus to some degree towards people not previously acquainted, as in the example of Touch Me, or even intimate touch as enjoyable for the self (Gentle Brush). Exploring the own body has been addressed in the HCI design literature before (see e.g. [1,9]), but the question of touch and intimate rituals plays less of a role.

Currently, many instances of intimacy take place in the home and are domesticated to some degree (see e.g. [5,17,18]). A few others are mobile, such as [6,12,16]. While this abstract does not necessarily question this approach, it extends the view on what the home is. It further poses the question of who it is that we share the home with. In addition, it presents the concept as fluid and considers how people move between houses, as well as stages in their life and between partners.

Another point that has not received much interest so far is the question how intimate relations between strangers can be facilitated, as indicated by the Touch Me artefact. Some artefacts have been developed to facilitate exchange or contact between strangers (see e.g. [7,20]), but these remain mainly in the realm of art installations. The technologies presented in the abstract, while currently still fictional, thematise intimate encounters in the everyday instead. Whether or not it is morally correct to introduce technology into this sensitive field is a question everyone will have to decide for themselves. The artefacts presented here are meant as an illustration of the tensions, to raise this point in future discussions – at DIS 2020 and beyond.

Context

There seems to be an inherent understanding that intimacy is to be hidden away, kept away from others. Devices that enable intimate communication are often unobtrusive and/or coded (see e.g. [8,13,19]). With our abstract we pose the question whether this has to be true for all types of intimacy or whether some could or should be expressed in public, openly for others to see. To what extend are intimate acts tabooed and could we, should we not make space for gentle types of expressions in our lives? As with the evolution of sex toys that move away from bodily shapes and out of the closets into the design stores [2], is there a space for objects that reveal, maybe even show off our need for intimate touch and communication?

Expression

Intimacy sits somewhere between communication and sexuality – and at the same time is an element of both. Through this imaginary abstract, we tried to capture the fluidity of the term by providing three types of artefacts: Gentle Brush addresses intimate touch (though not in a sexual manner), Secret Safe caters to the intimate – and private – communication between two partners, and Touch Me explores both being
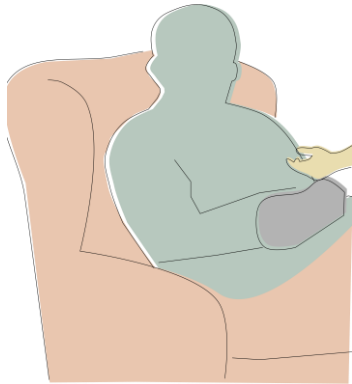
Figure 3: Conceptual sketch of **Touch Me**. A person in an armchair is holding the device in their lap, while another hand is stroking the device – or the person sitting down?

touched and touching others (leaving it deliberately open of whether or not it would be in a sexual manner).

In the sketches accompanying the abstract, we were deliberately vague about the materiality and details of the design. Touch and more generally the manner in which objects arouse our senses is highly individual and we would like to invite the reader to imagine (un)comfortable ways in which these designs could be made reality. Therefore this work stands in contrast to other projects, such as [21] and [22] in which the artists use high detailed photography to explore the materiality of objects, highlighting our intimate relationship with them.

Our concept of intimacy, while fluid, is still grounded in our upbringing with Western values and even more specifically by our upbringing in Germany. With a concept as fluid and culturally influenced as intimacy it is to be expected that whether the ideas presented here are novel, provocative or acceptable. Our ideas are further inspired by our research interests and previous work. This abstract is not meant as a solution but as a "boundary object" to make topics debatable (see e.g. [4]). It is a provocation to be answered by others in the way they would like the work to be taken.

Strengths & Limitations
Informed by a literature review, this paper aims to go beyond a critique of existing approaches, but instead aims to provide alternatives. It uses 'imaginary abstracts' as a generative tool to imagine what the world would look like if the view currently presented could be extended. The abstract deploys humour as a strategy to engage (see also [11]). It aims to tread the fine line between being plausible and leading readers to question whether it is real or not. Whether it achieves this goal and whether the method of presenting it was appropriate is up to the reader to decide and has not been evaluated for this provocation.

Conclusion
In this paper we have presented an imaginary abstract of an artefact not (yet) build, inspired by a literature review that revealed (unconscious) biases in how intimacy is understood. Building on these insights, we crafted an imaginary abstract that breaks with these expectations and therefore provides future directions of where research on intimacy might turn. We offer this provocation not as a solution, but an invitation to engage critically with the topic and expand our understanding of what intimacy is and what it could be.

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