

# MEDIATING INTIMACY: DIGITAL KISSES AND CUT AND PASTE HUGS

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## ABSTRACT

Interest in personal and domestic technology is growing rapidly. In this paper, we explore what it means to understand and support the most personal of human acts – maintaining intimacy between family members. Intimate acts are different to other domestic behaviours; are challenging to study; and, we speculate, provide opportunities for technologies quite different in form and purpose to those appropriate for other aspects of home life.

## Keywords

Domestic technology; Personal Appliances; Strong-Tie Relations, Intimacy.

## 1. WHAT IS INTIMACY?

Since Debbie Hindus' seminal paper [8], the domestic space has come under the full gaze of technologists. Interesting research ranges from understanding and supporting the instrumental activities involved in coordinating and scheduling family behaviour [7], rich studies of the multiple meaning attached to domestic routines [4], empirical and technical explorations of fun and leisure [11] and proposals to aid family members in 'staying in touch' [9]. This work is vital because little of the extensive work on technology in the home [e.g. 13], whilst important and interesting from a sociological perspective, provides sufficient traction for innovative design.

The 'Mediating Intimacy' project focuses on the most personal of domestic acts – supporting intimates (i.e. life partners, parents and younger children, adult offspring with dependent parents etc) when they are co-present or separated by distance. An extensive body of writing examines the relationship between IT and the establishment and maintenance of relationships in loose knit friendship networks [14], but little is known about how IT is used by people to support their close, personal strong tie relationships. Intimate acts are different to many of the domestic behaviours typically addressed in the literature [7]. Intimate acts are distinctive as they [1, 2, 12]:

- Involve a degree of self-disclosure: intimates show something of themselves that may make them feel vulnerable.
- Communicate emotion: whilst not 'fact free', intimate communication often has more in common with 'stroking and patting', rather than verbal conversation. Intimate acts are information poor, but meaning and emotion rich. They are also often 'unspoken' and hence only partly satisfactorily mediated using a conventional media (telephone and email).
- Involve a strong sense of 'presence in absence': a feeling that the other is present, even though they may be on the other side of the world.
- Are often ambiguous and incomplete [6], suggesting and hinting rather than explicating in detail. Intimate acts occur in the context of a rich, shared and often idiosyncratic view of the world.
- Intimate acts are private: they are often constructed, by their participants, to be hidden from the view of others.
- Involve strong mutuality: a commitment to reciprocate in both content and form.

In the next section, we examine the problems and prospects for studying intimacy. In section 3, we present some initial findings and in section 4 speculate on future technologies,

and in so doing scope the space for the coming ‘intimate technologies’.

## 2. PROBING INTIMATE ACTS

Perhaps more so than the majority of domestic acts, intimacies display fragility when under examination. Unlike instrumental tasks (e.g. family coordination) or leisure activities (e.g. games) there is no generally accepted language for describing and discussing intimate acts; they occur in the doing and then vanish from view.

Our approach to the study of intimacy stresses the need to empower the participants, by providing a means for them to record intimacies during or soon after the acts themselves, and a means to describe intimacy in their own words. We stress the importance of hearing the ‘voice of the intimates’ given our current lack of understanding.

Our approach also aims to be playful; we legitimise the participants’ exploration of possible futures, rather than strictly limiting the analysis to current practice.

Further, our approach is multi-method and multi-resource, relying on interpretive triangulation. We try to maximise the communication bandwidth between the participants and the researchers.

Our approach extends the work of Gaver [5] and the Equator team [3] by combining cultural probes, interviews, focus groups and scenario-based acting out sessions [10].

Our probe packs (see figure 1) included:

- Scrapbooks, provide a open format for creative exploration of both practice and future technologies.
- Diaries, useful for describing the temporal flow and routine nature of domestic life. Each partner in the relationship was given a diary.
- Digital camera and printer, allows participants to capture, print and edit still images instantaneously in and large volumes, for the scrapbook when desired.
- Catchphrases, e.g., “I feel lonely when...” or “I really love it when you...” provoke reflection. Catchphrases were printed onto sticky labels. Participants were invited to complete the phrase and return in the scrapbooks.
- Various consumables, including stamped addressed envelopes, Post-It™ notes, pens, crayons and scissors for use with the scrapbooks.
- Participants also had access to landline, email and short message service (SMS) means of contacting researchers.



Figure 1: Probe Pack Materials

Participants worked with the probe packs over a seven-week period. After an initial interview and probe drop (when the probe packs were described to the participants) follow-up interviews took place every couple of weeks, which provided an opportunity to supplement the probe data with in-depth interviews, and guide the next two or three weeks of probe activity.

Our research is still in progress and we intend to use the materials gathered from these interviews and cultural probes to inform subsequent focus groups and scenario-based, acting out sessions.

## 3. THE NATURE OF INTIMACY

The participants in our study are six couples in married or long term relationships. All partners in each couple cohabitate, although work-related travel occasionally requires periods of absence. The participants are aged between late 20’s and early 50’s. Three pairs have a child or children, ranging in age from 18 months to 10 years of age. In this paper, for illustrative purposes, we discuss data from two couples only.

### *Couple 1*

Are a husband (~50 years old) and wife (~40) with two children aged 7 and 9 years old. They are middle income and both work in professional occupations. They are both university educated.

Family routine is anchored by the children and work demands. School days are highly routinised, to the extent that the mother described holidays as “lovely changing floppy days”.

Time for intimacy is scarce, and is planned into, or discovered within, busy days. Children, being so much the focus of the parents’ attention, are also the vehicle for intimate exchange between the parents; instrumental communication, for example related to managing the

children, is accompanied by ‘I love you’ gestures or messages.

The family maintain a very extensive and rich family history, using video and stills photography. The history is reviewed, most frequently by the mother and children, and used as resources in the children’s homework projects.

An elderly grandmother lives within a few miles. The grandmother calls every morning on a landline, ringing three times and then hanging up. The call is expected and its meaning is threefold: ‘I’m OK’; ‘I love you’; and ‘Have a good day’.

Some evidence of gifting [9] is present with the grandmother saving a text message from her granddaughter, “look grandma, my tooth fell out”.

Their key needs include support for ‘hot’ coordination (i.e. ad hoc, immediate, and urgent), often related to the children but without involving them directly in the negotiations, and family reminiscing.

#### Couple 2

These are husband and wife, both in their early to mid 30’s, and without children. They are currently on a single income as the male partner has returned to university for postgraduate study. The female partner works full time in a professional occupation. They are both university educated.

Their daily routine revolves around work and study, and weekly rhythms around religious observance. Life is predictable, to such an extent that both partners are aware of communication that is outside their sense of routine, e.g. “I’d respond quickly if the call came at a time he does not normally call”.

Time for intimacy is abundant and used enthusiastically. As with the couple 1, intimacy is mediated; by children in the first case and by a shared interest in political issues and religious celebration in this case. Instrumental exchanges, e.g. of political articles by email, is accompanied by loving addendums. During periods of physical separation, electronic communication is anchored by the rhythms of religious observance.

This couple have a rich repertoire of intimate behaviour, and are active users of a range of communication mechanisms, to such an extent that during a week of holiday, spent together at home, they continued to exchange email between their two computers, which are housed in adjoining rooms.

Gifting is again in evidence, in both electronic and its more conventional forms (flowers, books etc).

Their key needs include the ability to facilitate intimate exchange with external sources (e.g. newspaper articles); a one-to-one open channel (e.g. push to talk, but extended to include ‘push to feel’); the exchange of non-spoken communication, equivalent to tactile exchanges across distance; ‘anything to anything’ exchanges (e.g. SMS to haptic transcoding); and coordinating and documenting

family rhythms, especially as they relate to the regularities of religious life.

## 4. SUPPORTING INTIMACY

We believe the key ingredients of the intimate behaviours described above distinguish them from other domestic activity. Intimate acts require support that:

- Allows self disclosure, and therefore privacy is of concern;
- Communicates emotion, not necessarily with words or text, but in ‘unspoken’ ways;
- Transmits a feeling of presence in absence, through peripheral awareness mechanisms;
- Plays with ambiguity and incompleteness yet allows for nuanced exchanges;
- Allows intimate acts to be aligned with instrumental exchanges, seizing the opportunity to express love in mundane every days acts;
- Makes use of received meaning and the private languages that evolve within rich ongoing relationships;
- Allows mutuality, without requiring symmetry or equivalence in the media used for responding.

Lets us illustrate some of these requirements with a few of examples influenced by the cultural probes.

### The Digital Kiss

Imagine a device, smaller than a phone, that could communicate feelings without getting bogged down in words; that knew about our special codes and allowed them to be felt; where you could send kisses or thumbprints, or silly squiggles (figure 2).

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*“She pulls out her Lip Zone and writes a love message in symbols that have been handwritten and programmed by her, making them very personal. She places her lips onto the screen in a kiss. The machine scans her lips with dimension and depth. Her message is sealed with a kiss!”*



Figure 2: Example Future Oriented Intimate Device

### Cut and Paste Hugs

Imagine a device that allowed partners to capture images, articles, sounds, video clips and then annotate them with their personal commentary, perhaps adding the symbols particular to their intimate dynamic. The device would

allow 'digital hugs and kisses' to be layered over instrumental communication, these intimate gifts could be stored, reviewed and reused in an ongoing intimate dance.

#### *Living Diary*

Imagine a device that provides a shared schedule of the day's hectic activities (e.g. working, studying and ferrying children). The device not only offers coordinated support for family routine, but allows activities to be annotated with distinctive symbols, sounds and images. Opportunities for shared (and scarce) moments of intimacy are highlighted during the day; or more likely, at the end of the day, when the children are asleep and the question "How was your day?" is asked, the answer will be "Here I'll show you".

#### *Wearable Touch*

Imagine a matching pair of wearable devices akin to wrist watches that allow instant, one-to-one communicative exchanges between wearers. Exchanges could occur through, short, whispered conversation or, even more discreetly, through sending and receiving the warmth of haptic 'touch'. The back and forth murmur of talk and touch weaving the wearers together in a distal yet close embrace.

### **5. CONCLUDING COMMENTS**

The Mediating Intimacy Project is exploring the nature of intimacy, and the potential of interactive technologies to support intimate acts. Our project aims to gain a better understanding of how people use existing interactive technologies in their intimate relationships, and to envision possibilities for future technologies supportive of intimate acts. Though our project is an example of the growing attention the domestic space is receiving from the HCI community, little of the literature appearing to date has taken such a personal view of domestic life. We hope that this work will encourage others to scratch beneath family life, and explore the most human and personal of exchanges.

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