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Instant messaging (IM) is one of the most popular communication systems on the Internet, rivaling email in terms of usage. What makes IM such a compelling communication medium? The original intended purpose for instant messaging was chat: synchronous, text-based, one-to-one conversation. However, people are also using IM in other ways, especially to monitor each others' online presence. These uses result in a new medium for connectedness bearing social implications beyond the initial objective of chat.

This research explores how the uses of IM—especially non-text chat uses—create a sense of connectedness. I am focusing on first-year undergraduates, a population who evolve their teenage uses of IM to accommodate for the increased distance with old friends and sudden co-location of new ones. New IM prototypes intentionally designed to foster a sense of connectedness are the expected outcome of this research. Ultimately, I aim to identify design principles that generalize designing for connectedness beyond IM.

# Social Awareness, Presentation, and Connection

## Instant Messaging as a Presence Platform

### RESEARCH

#### Interviews

Eight first-year undergraduate students were interviewed about their communication patterns across a variety of mediums, including instant messaging, email, phone, physical mail, and weblogs and websites. Informal discussions with fellow grad students and other friends gave an older perspective for comparison.

#### Observations

The same undergraduates allowed me to observe as they participated in IM chat sessions, demonstrating functionalities they used within their preferred instant messaging client.

#### Literature Review

Existing research on instant messaging, awareness, presence, social visualization, computer-supported cooperative work, and computer-mediated communication.

### FINDINGS

#### Conversation occurs in several categories

- **Light** – joking around, killing time, small talk
- **Coordination** – making plans and arranging activities
- **Keeping in touch** – catching up, recapping recent events
- **Support communication** – getting or giving support, sharing experiences
- **Relationship building** – discussing interests, getting to know each other

#### Conversations have a typical progression

Initiate → Greet → Exchange → Prolong/Maintain (optional) → End/Excuse

#### Non-chat uses of IM are also important

- **Always on** – College students keep IM on all the time, even if they have no plans to IM, so that they can be easily contacted.
- **Checking who's on** – Students place their Buddy List onscreen so they can frequently see who's on. Checking and seeing someone on rarely leads to sending them an IM—the purpose is simply to know who's on and possibly available.
- **Reading others' away messages** – Students use messages to indicate far more than mere unavailability. Movie quotes, song lyrics, snippets of conversation, activity updates, and various proclamations are all common. Reading others' messages is a daily (even hourly) activity for students—aside from chat, it is the most frequent use of IM.
- **Updating my away message** – Almost all students personalize their away messages. However, students often do not know exactly who reads the messages.
- **Maintaining my Buddy List** – Being on someone's Buddy List may be a sign of affiliation, though it is also often used as an address book: a repository of possibly useful contacts.

#### Primary uses of IM chat change through adolescence

IM use typically peaks in junior high and early high school, drops in later high school, and increases again in college. Junior high students most often use IM for the purpose of getting to know friends and acquaintances as well as exchanging information and gossip, while high school students use IM for making plans and doing homework. Catching up and making plans are most common among undergrads.

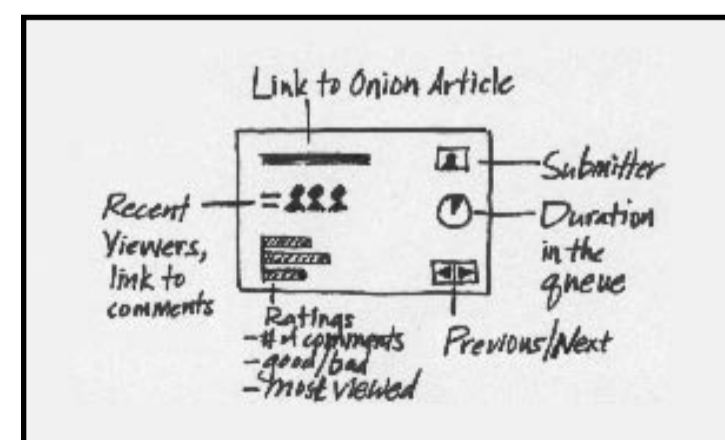
#### Email addresses change, IM screen names don't

IM is the preferred online communication medium for most undergrads and high school students, who expect IM to be their first point-of-contact, rather than email.

### SCENARIO



Jeff reads a funny article online at The Onion. He thinks his friends would like it, so he submits the link to the LinkPool system. Shortly thereafter the link and a "From Jeff" annotation show up on the small LinkPool display on his friends' desktops—the same people who have him on their IM buddy list.



Jeff looking at his entry – an early sketch

Everyone's display is the same, and it shows who's jumping in to read the article. The link disappears 15 seconds later as it rotates through the queue of other recent or popular submissions.

It's a tiny group weblog of sorts, but an ephemeral one: links that aren't read or highly rated based on the collective response die out within an hour or so. Comments are attached to the post, but they too disappear when the link 'dies'.

### INSIGHTS

#### IM builds connectedness through many means

Connectedness results from more than just chat. Staying online, seeing who's on, reading and updating away messages, and maintaining a Buddy List also create a sense of connection. These connection-creating activities may enhance and provide context for direct communication through chat, but also exist without the need for chat.

#### Away messages are adaptively overburdened

What was intended for a one or two word message now displays entire sentences of text. "My away message is the world's smallest weblog", one informant commented. Furthermore, frequent viewing of away messages is difficult in most IM applications which were not designed to read dozens of lengthy away messages.

#### Away messages are used for expression as well as availability

Teens use away messages in a surprising diversity of ways—most are not generic updates about one's availability, but rather are more personally expressive. This self-presentation through away messages is similar in some ways to writing a weblog or updating a social networking service profile such as Friendster.

#### Buddy Lists are the new address books

Buddy Lists reflect the breadth of a student's social ties. They are the contact list consulted most often on a daily basis.

### IMPLICATIONS

#### Self-presentation might cross mediums

The personal expressiveness of away messages might be combined with other existing means for self-presentation. For example, weblog writers self-present by publicly linking to and commenting on other websites from their weblog. LinkPool (see SCENARIO) explores the space between the publicity and permanence of weblogs and the smaller audience and ephemerality of IM away messages.

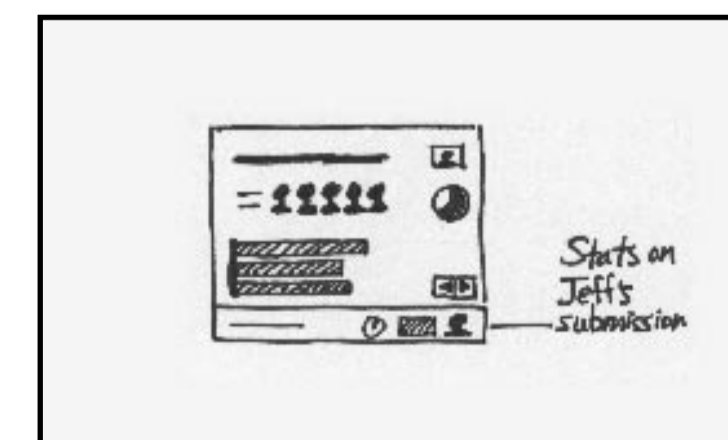
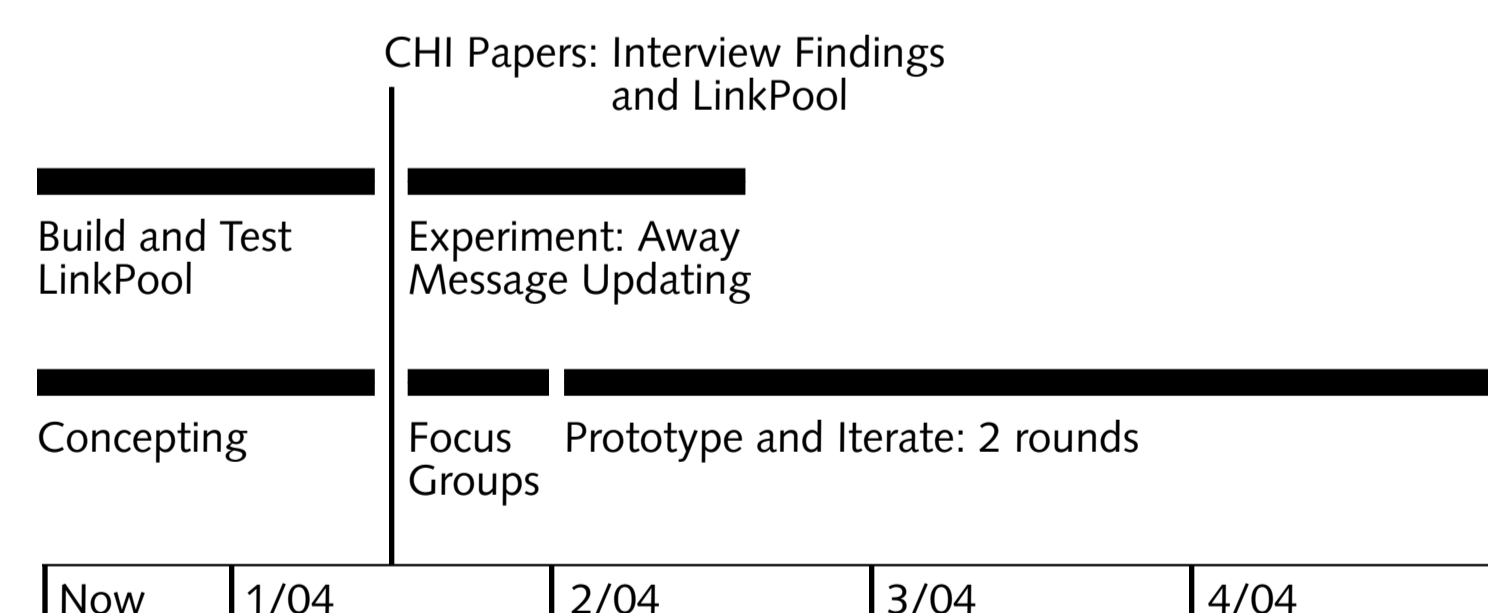
#### Availability of direct communication may matter

IM can foster connection without chatting, but does the option to chat still have an influence on connectedness?

#### How much social awareness is enough?

IM displays the same availability and away message to a person's significant other as their old soccer teammate. What's an appropriate amount of disclosure and self-presentation, and should the same things be seen by everyone?

### NEXT STEPS



Jeff looking at another entry and monitoring his

As Jeff manually advances the queue and reads an article that several friends are currently reading, some of Jeff's other friends check out his submission and post short, witty comments below the link. His submission moves further up the queue and for a few minutes, Jeff feels a tiny swell of fame.