Topic for main area paper of my Qualifying Exam

Stefan Marti, January 2002

Date: Sun, 30 Dec 2001 22:06:41 -0500 (EST) From: Chris Schmandt To: Stefan Marti <stefanm@media.mit.edu> Subject: exam topic

Here's an exam paper topic. I think this actually relates a lot to your former studies though what you write about should be largely motivated by what you have studied for your exam. I am happy to discuss it, and in any case if you can be around early tomorrow afternoon I would like to meet face-to-face. The topic is broad; you can focus it but please tell me how you would like to do so first. I am interested in classifications or groupings; identify themes and similarities rather than simply listing the contribution of each project you have studied.

chris

UI design of mobile devices <--> Social impact of mobile communication

Communication occurs in a social context, both for the recipient as well as the sender (although the sender has more choice as to when to initiate contact). Mobile communication devices support various media in any-time, any-place contact, which further increases the chance of collision between a message or call and one's social environment. This has led to reactions against "noisy cell phone calls in public" or devices beeping or ringing at "inappropriate" times. Yet, with thinning boundaries between "work time" and "personal time", as well as flexible working hours, demand for mobile communication remains on the increase.

You have examined a range of user interfaces for such mobile devices. Classify the interactions between communication attempts (calls, messages) and the social contexts of the participants towards those around them. How does the social relationship between the participants affect this balance?

You have examined a number of user interfaces for mobile devices. How do they enhance or aggravate the social impacts of mobile communication? What directions need improvement in future user interface design, and what can we learn from the interfaces to date. I suggest you add to your reading list R. Hansson et al., Subtle and Public Notification Cues for Mobile Devices, Proceedings of Ubicomp 2001, pp. 240-246, as this covers at least one aspect of the problem well.

Please take a broad view of "communication". Between people may simply be for "awareness" and not require an answer. Some messages may come from computers - stock quote alerts, weather, baby monitor, calendar reminders, etc. Should these be treated differently, in terms of presentation based on social context? How can computers increase their understanding of social context?

Awareness is also a term used by systems such as Live Address Book (AT&T) and Awarenex (Sun) among others. These systems attempt to convey to the originator information about how to best contact the recipient (in essence, publishing some of what a system such as Active Messenger knows); how much of the "social context" problem do these solve?