# Social Computing Capstone

## Day 15: Being On All the Time

CSE 481p | Winter 2024


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# Schedule for today's class

- Share from A4 (Write a dystopia) (10 min)
- Discussion of reading and lecture on always being on (20 min)
- Group work time to prep for user studies on Tuesday! (~50 min)

# Black Mirror writers' room

[Casey Fiesler 2021, tinyurl.com/blackmirrorwritersroom]

Share with the class:

Quickly tell us what your story was about.

- Is this something you could imagine happening today (or soon)?

- What's the underlying social anxiety or ethical issue your story is drawing out?

- How was the experience of writing a dystopia and reflecting on it?

Tools we used in the past three years to collaborate remotely…






What design patterns make them successful?

How do we design tools for effective remote collaboration?

# Common ground

Effective communication take place when users have some level of common ground.

**Common ground** refers to the knowledge that the users have in common (visibility), and the fact that they are aware of what they have it in common (awareness).

Recall we discussed self representation earlier. “We are different people when we are in different spaces.”

HUMAN-COMPUTER INTERACTION, 2000, Volume 15, pp. 139–178


## Distance Matters

**Gary M. Olson** and **Judith S. Olson**
*University of Michigan*

**ABSTRACT**

Giant strides in information technology at the turn of the century may have unleashed unreachable goals. With the invention of groupware, people expect to communicate easily with each other and accomplish difficult work even though they are remotely located or rarely overlap in time. Major corporations launch global teams, expecting that technology will make “virtual collocation” possible. Federal research money encourages global science through the establishment of “collaboratories.” We review over 10 years of field and laboratory investigations of collocated and noncollocated synchronous group collaborations. In particular, we compare collocated work with remote work as it is possible today and comment on the promise of remote work tomorrow. We focus on the sociotechnical conditions required for effective distance work and bring together the results with four key concepts: common ground, coupling of work, collaboration readiness, and collaboration technology readiness. Groups with high common ground and loosely coupled work, with readiness both for collaboration and collaboration technology, have a chance at succeeding with remote work. Deviations from each of these create strain on the relationships among teammates and require changes in the work or processes of collaboration to succeed. Often they do not succeed because distance still matters.

[Olson and Olson, 2000]

# Common ground

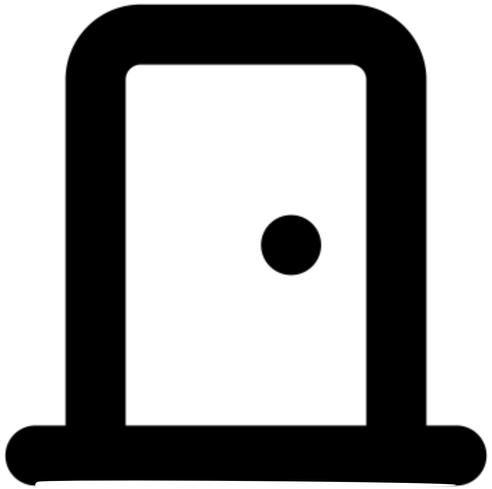
We construct common ground from **cues** (what we previously know about the person, or whatever we know at the moment). The fewer cues we have, the harder the work in constructing it, and the more likely misinterpretation will occur.

Some examples of cues:
- gesture
- facial expression
- tone of voice
- situational context (observing who is doing what, what remains to be done)

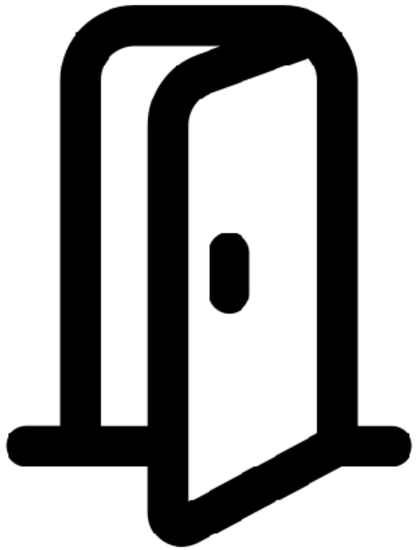
**Can you think of examples of different cues that are supported by different tools?** How does it affect common ground among users?

# Common ground

By sharing cues and establishing common ground,
we are no longer “**socially blind**” [Erickson and Kellogg, 2000] in the online realm, where we cannot see people face-to-face.



Solid doors that are closed



Solid doors that are open

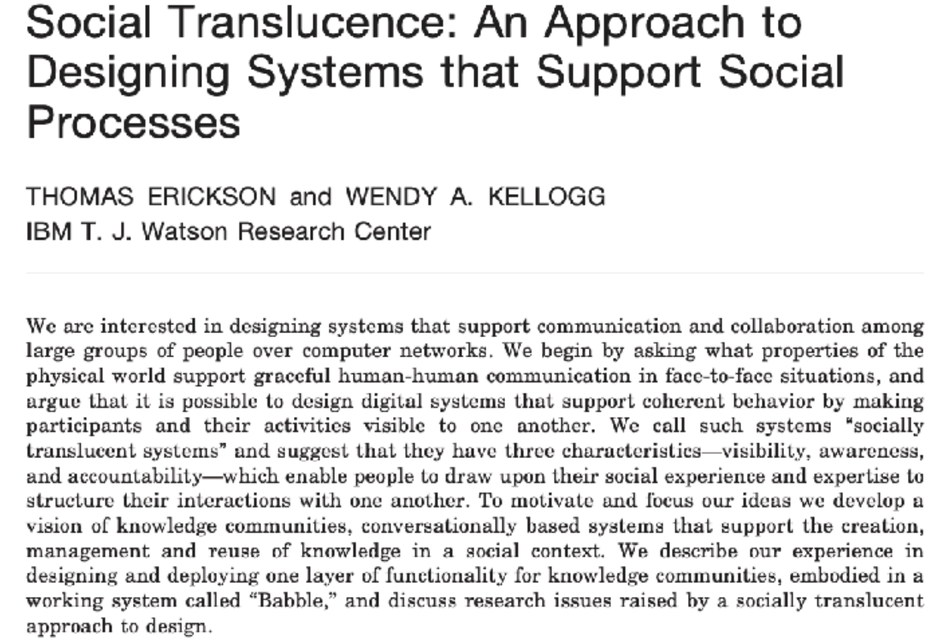
# When we don’t want to share all the cues…

Certain cues are more appropriate in some context, but not the others…

- Whether you want everyone to see your edit history

- Whether you want to share all screens with all meeting participants

- Whether you want to others in the Slack workspace to see that you are chatting with someone privately



Social Translucence: An Approach to Designing Systems that Support Social Processes

THOMAS ERICKSON and WENDY A. KELLOGG
IBM T. J. Watson Research Center

We are interested in designing systems that support communication and collaboration among large groups of people over computer networks. We begin by asking what properties of the physical world support graceful human-human communication in face-to-face situations, and argue that it is possible to design digital systems that support coherent behavior by making participants and their activities visible to one another. We call such systems “socially translucent systems” and suggest that they have three characteristics—visibility, awareness, and accountability—which enable people to draw upon their social experience and expertise to structure their interactions with one another. To motivate and focus our ideas we develop a vision of knowledge communities, conversationally based systems that support the creation, management and reuse of knowledge in a social context. We describe our experience in designing and deploying one layer of functionality for knowledge communities, embodied in a working system called “Babble,” and discuss research issues raised by a socially translucent approach to design.

This is called **social translucence**.

# Socially translucent systems instead of socially **transparent** systems

We want to build tools that create **windowed doors** between users so that social rules and cues come into play smoothly.

Example:
Opaque systems: individual word document
Translucent systems: Amy is editing
Transparent systems: Amy is switching between tabs
and she is messaging others at the same time

Translucence gives us some **control** over surveillance so we can be "back-stage" sometimes. Surveillance is exhausting!

**Can you think of other examples of socially translucent systems?**

# “Beyond Being There”

Highly influential paper from CHI ’92

They argue that instead of trying to recreate face-to-face all the time, we should instead realize the unique properties of digital communication and design for them.

Consider known issues like “Zoom fatigue” and why it’s helpful to have greater translucence compared to face-to-face.



**BEYOND BEING THERE**

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**ABSTRACT**

A belief in the efficacy of imitating face-to-face communication is an unquestioned presupposition of most current work on supporting communications in electronic media. In this paper we highlight problems with this presupposition and present an alternative proposal for grounding and motivating research and development that frames the issue in terms of needs, media, and mechanisms. To help elaborate the proposal we sketch a series of example projects and respond to potential criticisms.

**Keywords:** Telecommunications, CSCW.

**INTRODUCTION**

Face-to-face conversation provides a richness of interaction seemingly unmatched by any other means of communication. It is also apparent that living and working near others, whether that be in the same house, adjacent offices, or the same city, affords certain opportunities for interaction that are unavailable to those not co-located.

Research has clarified and substantiated both of these comto only work when face-to-face, while others can work over the phone, and still others through written correspondence [12,3,14].

This research supports the idea that we as humans have developed a broad range of mechanisms for social interaction, which seem to meet well our needs for initiating and maintaining friendships and working relationships, for discussing, negotiating, planning, and all other types of social interactions. These are known to be complex processes, and ones which physical proximity facilitates.

Many of us in the telecommunications field would like to create systems that allows the same richness and variety of interaction, but with distance no longer an issue. Ideally, these systems should work so well that those at a distance should be at no disadvantage to those who are physical present. This in large measure is the telecommunication problem. But how best to accomplish it?

**BEING THERE**

*If, as it is said to be not unlikely in the near future, the principle of sight is applied to the telephone as well as that of sound, earth will be in truth a paradise, and dis-*

# Remote & AI presents new issues with communication

**Signalling theory:**

Expensive signals carry more weight because they are more likely to be honest signals (e.g., peacocks with giant useless feathers showing their mating potential).

What happens when our signals on the internet become diluted and everything is fake-able?

Cat-and-mouse game with each side (bosses, interviewers vs. employees, interviewees) deploying more expensive tools to determine honest signals. We're learning that trustworthy relationships take things like time, offline interaction, and emotional bonding to develop.

# Summary

Collaboration and communication requires some level of common ground.

Common ground can be established by sharing social cues.

We want to design socially translucent systems, but not socially transparent systems.

We should design for the unique properties of digital mediums, not try to recreate face-to-face for everything.

Surveillance tools can’t take the place of real relationship building to develop trust.

# Discussion

Are Slack and Zoom socially translucent systems? Do they support appropriate levels of transparency?

How might our common ground change in hybrid collaborations? What might be some new challenges in hybrid collaborations?

Is the blurred boundary of work and rise of “bossware” a culture problem or a technology problem? Or both?

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