

# Social Computing Capstone

## Day 12: Being On All the Time

CSE 481p | Winter 2022

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# Schedule for today's class

- Lecture on today's topic (15 min)
- Go over G5 (midterm presentation next Tue) (2 min)
- Group working time (60 min)

Tools we used in the past two 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 in Lecture 6. “We are different people when we are in different spaces.”

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

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

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### 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.

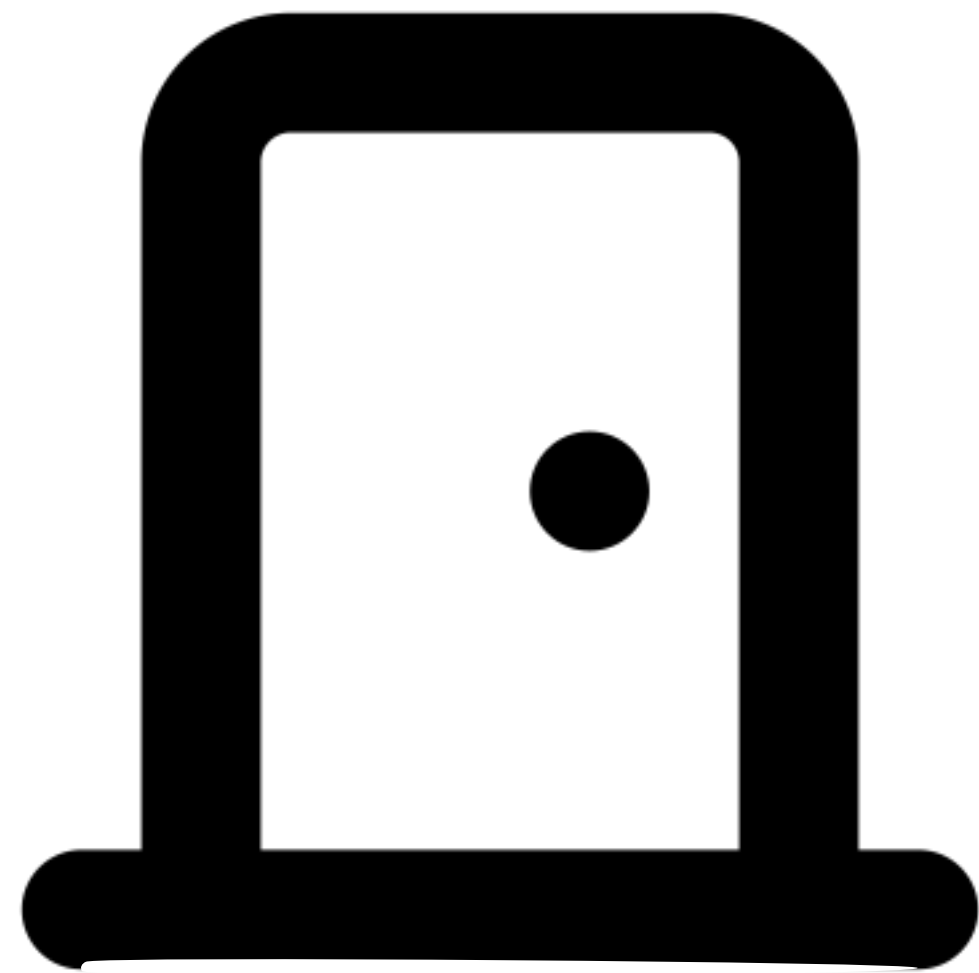
Some examples of cues:

- gesture
- facial expression
- mood
- micro context (who is doing what, what remains to be done)

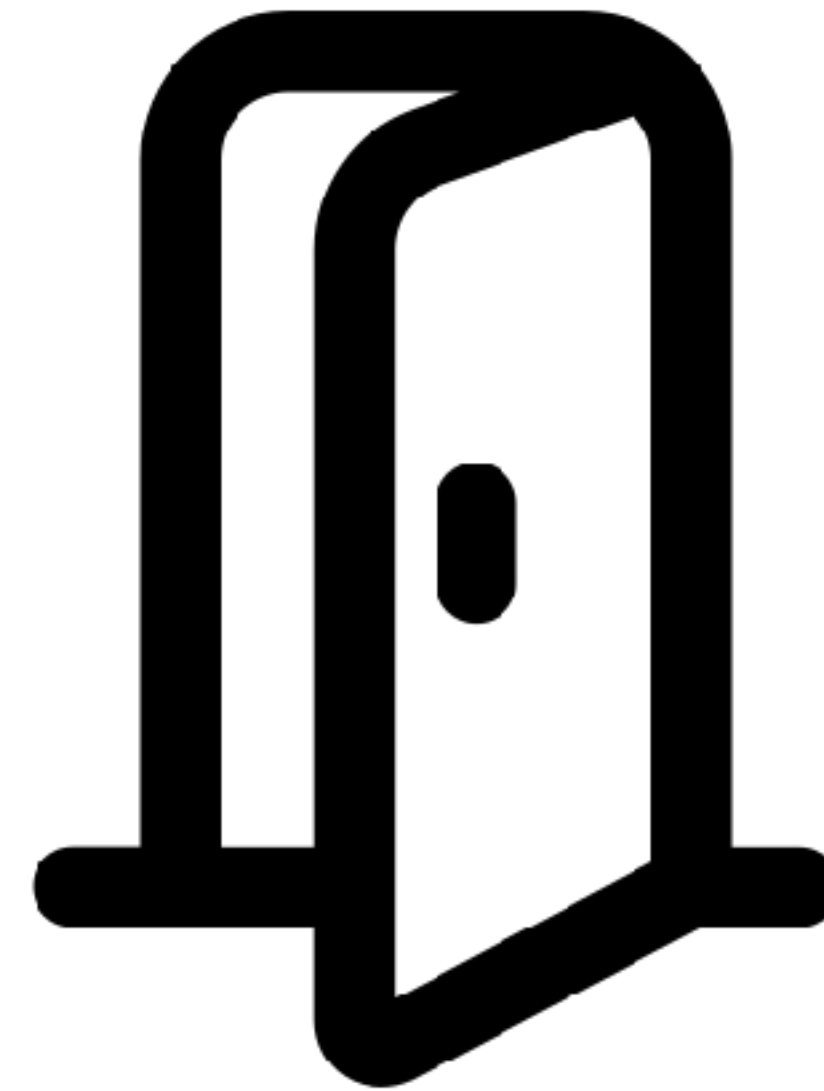
**Can you think of examples of different cues that are supported by different tools?** How does it affect the common ground among users?

# Common ground

By sharing cues and establishing common ground,  
we are no longer “**socially blind**.” [Erickson and Kellogg, 2000]



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



# 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: Ruotong is editing

Transparent systems: Ruotong is switching between tabs  
and she is messaging others at the same time



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

# 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.

# 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 a culture problem or a technology problem? Or both?

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# Assignment G5: Midterm Presentation (next Tue)

Each group will have 5 minutes to present and 5 minutes for Q&A.

You should cover:

- a pitch of your project
- your current progress and proposed timeline
- any feedback you would like to get from the class. Remember, if you want feedback on something specific, ASK!