SOCIAL INTERACTION

Objectives

The main aims of this chapter are to:

- Explain what is meant by social interaction.
- Describe the social mechanisms that are used by people when communicating and collaborating.
- Discuss how social media have changed the ways in which we keep in touch, make contact, and manage our social and working lives.

Objectives

- Explain what is meant by telepresence.
- Give an overview of shareable technologies and some of the studies showing how they can facilitate collaboration and group participation.

Overview

- Being social
- Face to face conversations
- Remote conversations
- Tele-presence
- Co-presence
- Shareable technologies

Conversational mechanisms

- Various mechanisms and ‘rules’ are followed when holding a conversation, e.g. mutual greetings

A: Hi there
B: Hi!
C: Hi
A: All right?
C: Good, how’s it going?
A: Fine, how are you?
C: OK
B: So-so. How’s life treating you?

Being social

- Are F2F conversations being superseded by our social media interactions?
- How many friends do you have on Facebook, LinkedIn,etc vs real life?
- How much overlap?
- How are the ways we live and interact with one another changing?
- Are the established rules and etiquette still applicable to online and offline?

Conversational rules

- Sacks et al. (1978) work on conversation analysis describe three basic rules:

  Rule 1: the current speaker chooses the next speaker by asking an opinion, question, or request

  Rule 2: another person decides to start speaking

  Rule 3: the current speaker continues talking

Conversational rules

- Turn-taking used to coordinate conversation

  A: Shall we meet at 8?
  B: Um, can we meet a bit later?

  A: Shall we meet at 8?
  B: Wow, look at him?

  A: Yes what a funny hairdo!
  B: Um, can we meet a bit later?

- Back channelling to signal to continue and following

  Uh-uh, umm, ahh

More conversational rules

- Farewell rituals

  Bye then, see you, yer bye, see you later….

- Implicit and explicit cues

e.g. looking at watch, fidgeting with coat and bags

explicitly saying “Oh dear, must go, look at the time, I’m late…”

Breakdowns in conversation

- When someone says something that is misunderstood:

Speaker will repeat with emphasis:

A: “this one?”
B: “no, I meant that one!”

- Also use tokens:

Eh? Quoi? Huh? What?

What happens in social media conversations?

- Do same conversational rules apply?
- Are there more breakdowns?
- How do people repair them for:
  - Phone?
  - email?
  - Instant messaging?
  - texting?
  - Skyping?

BEING SOCIAL

face-to-face conversations

- central to many of our social interactions

Social Media

(texting, emailing, tweeting, Facebooking, Skyping, using Yammer, instant messaging, and so on)

Are the ways we live and interact with one another changing?

Face-to-Face Conversations

Talking is something that is effortless and comes naturally to most people.

- take turns asking questions
- giving replies
- making statements

Face-to-Face Conversations

IMPLICIT CUES - *when a participant looks at his watch, signaling indirectly to the other participants that he wants the conversation to draw to a close*

EXPLICIT CUES – *using farewell rituals*

('Well, I must be off now. Got work to do')

Adjacency Pairs *(Schegloff and Sacks, 1973).*

- Utterances are assumed to come in pairs in which the first part sets up an expectation of what is to come next and directs the way in which what does come next is heard.

A: So shall we meet at 8:00?
B: Um, can we make it a bit later, say 8:30?

Adjacency Pairs *(Schegloff and Sacks, 1973).*

A: So shall we meet at 8:00?
B: Wow, look at him.
A: Yes, what a funny hairdo!
B: Um, can we make it a bit later, say 8:30?

A screenshot of my SnapChat (deleted after 8 seconds when sent to the recipient)

Remote Conversations

Figure 4.3 The Hydra system: Each hydra unit consists of a camera, monitor, and speaker and is meant to act as a surrogate for a person in a different space. The design is intended to preserve the personal space that people have in face-to-face meetings, simulating where they would sit in the physical space if they were physically present

Source: A. Sellen, W. Buxton and J. Arnott: Using Spayial Cues to Improve Videoconferencing. ©1992 Association for Computing Machinery, Inc. Reprinted by permission.

Figure 4.5 A weather warning photo tweeted and retweeted about a severe storm in Hove, UK

Telepresence

ClearBoard
(Ishii et al, 1993).

was designed to enable facial expressions of participants to be made visible to others by using a transparent board that showed their face to the others

Telepresence

HyperMirror,

(Morikawa and Maesako, 1998)

synthesized and projected mirror reflections of people in different places onto a single screen, so that they appeared side by side in the same virtual space

(a)

VideoWindow system (Bellcore, 1989)

- Shared space that allowed people 50 miles apart to carry on a conversation as if in same room drinking coffee together
- 3 x 8 ft ‘picture-window’ between two sites with video and audio
- People did interact via the window but strange things happened (Kraut, 1990)

Telepresence

HyperMirror,

(Morikawa and Maesako, 1998)

synthesized and projected mirror reflections of people in different places onto a single screen, so that they appeared side by side in the same virtual space

Telepresence

(a) a surrogate robot at a meeting ‘sitting’ between two physically present people;
(b) the remote user's view of the meeting while controlling the surrogate;
(c) an early version of the surrogate on the move; and
(d) a second-generation surrogate designed to preserve the height and sitting/standing posture of the user (Jouppi, 2002).

(a)

(b)

(c)

Sketch of VideoWindow

Skype success

- Global household name
- Seeing others on screen enables more intimacy than audio phone
- Enables people to get to know each other better
- Less awkward for young children
- Like “to show, not tell” (Ames et al, 2010)

Facebook and Twitter

- Everyone uses them so what is there to learn?
- Used in emergencies, demos, etc., e.g., users spread up-to-the minute info and retweet about how a wildfire or gas plume is moving but can also start or fuel rumours, by adding news that is old or incorrect more confusing than helpful

Telepresence

- New technologies designed to allow a person to feel as if they were present in the other location projecting their body movements, actions, voice and facial expressions to the other location or person

e.g. superimpose images of the other person on a workspace

The People's Bot attending CHI

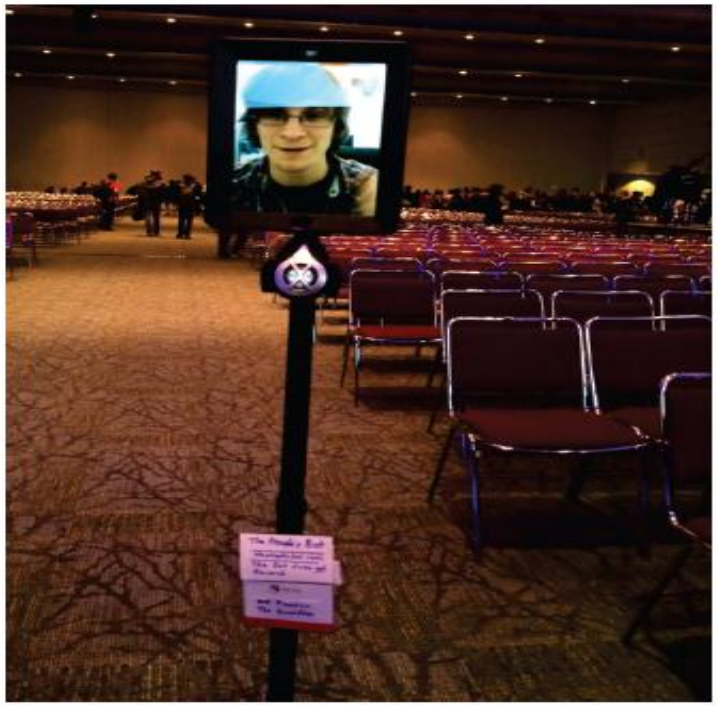

Figure 4.9 The People's Bot attending CHI 2014

A telepresence room

Figure 4.8 A telepresence room

Source: Cisco Systems, Inc with permission.

Figure 4.11 CuteCircuit's Hug Shirt

Source: ©2010 CuteCircuit. Reproduced with permission.

Figure 4.12 Huggy Pajama with mother squeezing the remote device and child being correspondingly squeezed

Figure 4.13 Two girls interacting with the Reactable Experience

Figure 4.14 The Reflect Table

Source: Reproduced with permission from Pierre Dillenbourg.

Figure 4.15 Sococo floor plan of a virtual office, showing who is where and who is meeting with whom https://www.sococo.com/

Source: Courtesy of Leeann Brumby.

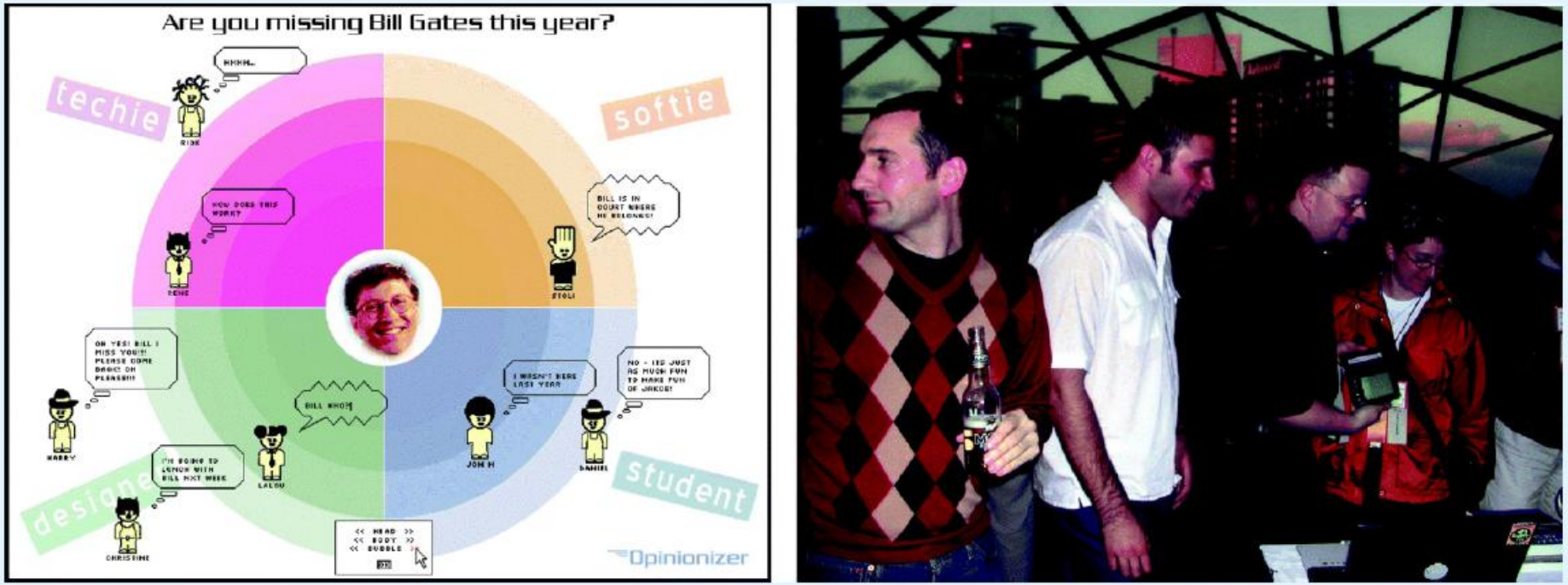

Figure 4.16 The Opinionizer interface and a photo of it being used at a book launch party

Figure 4.17 The Dynamo system in use at a sixth form college in the UK. The student with the spiky blond hair is showing various media he has created to the girl sitting next to him. Others sitting around the display are drawn into his show and subsequently hold a conversation about it

Source: H. Brignull, S. Izadi, G. Fitzpatrick, Y. Rogers and T. Rodden: The introduction of a shared interface surface into a communal space. In: *Proceedings of the Conference on Computer Supported Cooperative Work, CSCW '04*, ACM Press, New York, pp. 49–58 ©2004 Association for Computing Machinery, Inc. Reprinted with permission.

Figure 4.18 A family all in their own digital bubbles, including the dog!

Coordination mechanisms

- When a group of people act or interact together they need to coordinate themselves

  e.g., playing football, navigating a ship

They use:

- verbal and non-verbal communication
- schedules, rules, and conventions
- shared external representations

Co-presence

- Technologies that enable co-located groups to collaborate more effectively when working, learning and socializing

Examples: Smartboards, Surfaces, Wii and Kinect

F2F coordinating mechanisms

- Talk is central
- Non-verbal also used to emphasize and as substitute

  e.g. nods, shakes, winks, glances, gestures and hand-raising

- Formal meetings

explicit structures such as agendas, memos, and minutes are employed to coordinate the activity

Designing technologies to support awareness

- Provide awareness of others who are in different locations
- Workspace awareness: “the up-to-the-moment understanding of another person’s interaction with the shared workspace” (Gutwin and Greenberg, 2002)
- Examples: ReacTable and Reflect Table

The Reactable experience

Figure 4.13 Two girls interacting with the Reactable Experience

Source: Courtesy of Yamaguchi Center for Arts and Media [YCAM]. Photo by Ryuichi Maruo [YCAM].

The Reflect Table

Figure 4.14 The Reflect Table

Source: Reproduced with permission from Pierre Dillenbourg.

Sococo – shows who is where and who

Figure 4.15 Sococo floor plan of a virtual office, showing who is where and who is meeting with whom https://www.sococo.com/

Source: Courtesy of Leeann Brumby.

What next?

- Besides perpetual sharing and broadcasting of information, knowledge, and personal content?
- Lifelogging
- recording everything in one’s life and sharing
- Micro-chatting
- beyond twitter and snapchat?

Summary

- Social mechanisms, like turn-taking, conventions, etc., enable us to collaborate and coordinate our activities
- Keeping aware of what others are doing and letting others know what you are doing are important aspects of collaborative working and socialising
- Many technologies systems have been built to support telepresence and co-presence

Mindless versus mindful interaction

1.

How do you start and end a conversation when (i) talking on a phone and (ii) chatting online?

2.

How do people repair breakdowns in conversations when using a phone or email?

3.

How do you represent yourself online? What image and names do you use?

4.

What would you expect the most retweeted selfie to be? Why do we send so many selfies?

5.

What do you think happens when one person in a close-knit team does not see or hear something, or misunderstands what has been said, while the others in the group assume that person has seen, heard, or understood what has been said?