Computer Mediated Communication (CMC) & Dispute Resolution

Are you coming to bed?

I can't. This is important.

What?

Someone is wrong on the internet.

• Is computer mediated dispute resolution better or worse than face to face? Studies provide a clear answer:
  • It depends …
  • Challenges arise with regard to the quality of communication (particularly socio-emotional content)
  • Asynchronous communication and DSS can aid information processing and decision making
  • A new role for the arbitrator / mediator?

Characteristics of CMC

“Cues Filtered Out” vs. “Cues Filtered In”

| Verbal Cues | Para-Verbal Cues (e.g., tone of voice, uh-huhs, etc.) | Non-Verbal Cues (e.g., eye contact, facial expressions, postures, gestures, etc.) | Inter-Personal Cues (e.g., attractiveness, race, sex, etc.) |

• Most forms of Computer Mediated Communication have a lower “social bandwidth”, i.e. a restricted number of cues that can be used for communication
  • lack of physical presence, visibility and physical proximity
  • devoid of para-, non-, and inter-personal cues
  • devoid of social-context and social-presence cues

• This results in …
  • … reduced awareness of the other
  • … diminished appreciation of the inter-personal aspects of the interaction
  • … increased social distance
  • … encoding and decoding (emotional) communication becomes more difficult
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- Accordingly, early research (Kiesler et al. 1984; Siegel et al. 1986; Sproull and Kiesler 1986; McGuire et al. 1987; Rice and Love 1987) reported that compared to f2f communication CMC is
  - less friendly,
  - more depersonalized
  - more hostile
  - more task-oriented

The early days …

“Cues Filtered Out” vs. “Cues Filtered In”

- Early theories postulated that CMC should not be used for complex tasks and tasks with higher interpersonal demands.
  - lack of social context cues theory (Sproull and Kiesler 1986),
  - social presence theory (Short et al. 1976)
  - media richness theory (Daft and Lengel 1984; Daft and Lengel 1986; Daft et al. 1987)

Example—Media Richness Theory:
- The richness of the medium should be matched to the (social) demands of the task.
  - The more complex the task and the higher the interpersonal demands, the richer the medium has to be.

- Dispute Resolution: non-routine, highly complex & high interpersonal demands.

DON’T USE CMC!!!
“Cues Filtered Out” vs. “Cues Filtered In”

- Media Richness Theory & Co assume: conveying emotional and relational information in an interaction is bound to the ability of a channel to transmit specific cues
- But ....
  - ... the communication channel is but one factor affecting the degree to which relational information can be conveyed and recognized
  - ... individuals adapt to and expand a specific channel in order to filter cues back in (Walther 1996; Carlson and Zmud 1999)
- Individuals use alternative means to communicate relational content
- Communication channels do not differ with regard to the “amount of social information” but the “rate of social information” that can be exchanged (Walther 1996, p. 10)
  - CMC “forces both task-related and social information into a single verbal/linguistic channel” (Walther 1994, p. 476)
  - It requires more “real time” and/or media specific communication strategies to convey relational information
- Note on early studies: Anonymous individuals with time constraints

Although the medium may impose certain constraints to the interaction process, it is the way people make use of the electronic dispute resolution table that primarily shapes the interaction.

CMC vs. Face-to-Face

Although the medium may impose certain constraints to the interaction process, it is the way people make use of the electronic dispute resolution table that primarily shapes the interaction.

<table>
<thead>
<tr>
<th>Interpersonal: Quality of Communication</th>
<th>Intrapersonal: Information Processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) co-presence within the same surroundings</td>
<td>(i) reviewability</td>
</tr>
<tr>
<td>(ii) visibility of the other negotiator</td>
<td>(ii) revisability</td>
</tr>
<tr>
<td>(iii) audibility of the other negotiator</td>
<td>(iii) Decision Support Systems</td>
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<tr>
<td>(iv) co-temporality of expressed communication utterances</td>
<td></td>
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<td>(v) simultaneity of sent and received messages</td>
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<tr>
<td>(vi) sequentiality of turn-taking</td>
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• Face-to-face communication has a clear advantage over CMC.
• But: The drawbacks can be minimized.

• CMC potentially has an information processing advantage compared to face-to-face communication.
Interpersonal – Communication Quality

(Relational) Cues are filtered back in but …

• … primary carrier of (relational) information is missing in CMC
• … more subtle and implicit ways of communicating relational content also result in more ambiguity

Steven Seagal says „It's a nice offer!“

One of the individuals below says „It's a nice offer!“ with an expression of anger, fear, disgust, surprise, happiness, or sadness.

Interpersonal – Communication Quality

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Individuals diverge greatly regarding their emotional perceptions or interpretations of e-mails (Byron and Baldridge 2005).

Individuals also tend to be overly optimistic regarding their abilities to judge and interpret the emotional tone of e-mails (Kruger et al. 2005).

Emotionally positive messages tend to be perceived as more neutral than intended by the composer (Byron 2008).

Emotionally negative messages tend to be perceived as more intensely negative than intended (Byron 2008).
Interpersonal – Communication Quality

(Relational) Cues are filtered back in but ...

- … a message contains not only a single meaning but consists of several communicative layers that are conveyed simultaneously.

<table>
<thead>
<tr>
<th>1) Matter (What I inform about):</th>
<th>“You, the traffic lights are green!”</th>
<th>“Your offer is simply unacceptable!”</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fact that the traffic lights are green.</td>
<td>The fact that you can’t accept the offer.</td>
<td></td>
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</table>

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<tr>
<th>2) Appeal (What I want to make you do):</th>
<th></th>
</tr>
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<tr>
<td>Come on, drive (a command)!</td>
<td>Make a new offer.</td>
</tr>
<tr>
<td>Don’t let the other drivers wait.</td>
<td>Take the negotiation seriously.</td>
</tr>
<tr>
<td>Etc.</td>
<td>Start making reasonable offers.</td>
</tr>
</tbody>
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<th>3) Relationship (What I think about you and how we get along):</th>
<th></th>
</tr>
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<tr>
<td>I am a better driver than you.</td>
<td>You have crossed the line.</td>
</tr>
<tr>
<td>I don’t like your driving style.</td>
<td>We are not going along well.</td>
</tr>
<tr>
<td>I want to help you.</td>
<td>We have reached a critical point and you have to change your behavior.</td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
</tr>
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<th>4) Self-disclosure (What I reveal about myself):</th>
<th></th>
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<td>I am in a hurry.</td>
<td>I am angry.</td>
</tr>
<tr>
<td>I am an impatient person.</td>
<td>I am a tough negotiator.</td>
</tr>
<tr>
<td>Etc.</td>
<td>I am willing to terminate the negotiation.</td>
</tr>
</tbody>
</table>

- Due to lack of non- and para-verbal cues, decoding the meanings of a massage is more difficult in CMC
- More context information—meaning that otherwise could be communicated with a smile—has to be given verbally and explicitly

Interpersonal – Communication Quality

Language Choice becomes More Important

Direct Expressions
- **Illusion of Transparency**: Individuals tend to overestimate the transparency of their objectives and the meaning they want to communicate.
- Explanations, paraphrasing, explicit emotional & relational statements, etc. are important in face-to-face communication—even more so in CMC.

Framing:
- People imply more information in a proposition than the surface form denotes.
- Statements contain a socio-emotional layer, even though it is not expressed directly.
- Lexical & syntactical choices change the (perceived) meaning of a message although substantive content is the same.

Not Sleeping = Awake
But
Different Connotation

I was not sleeping during your presentation!
I was awake during your presentation!
Interpersonal – Communication Quality

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**Promise = Threat**

But

Different Connotation

If X then Y: „If you make a final concession, we will have an agreement!“

If Not-X then Not-Y: „If you don’t make a final concession, we won’t have an agreement!“

Interpersonal – Communication Quality

Negotiation Strategies & Tactics on a Language Level

• Integrative and distributive strategies and tactics exhibit specific language properties that frame the economic aspect of the messages.
• Equivalent economic/substantive content is perceived differently and causes different behavioral reactions when embedded in an integrative vs. a distributive message.

<table>
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<tr>
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<th>Integrative</th>
<th>Distributive</th>
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<tr>
<td>Mutuality</td>
<td>• Mutuality, suggesting compromise, preference statements, etc.</td>
<td>• Insisting on own position, referring to bottom line, conditional language, etc.</td>
</tr>
<tr>
<td></td>
<td>&quot;If we can <strong>meet</strong> at a price of $120 I previously suggested, we can <strong>agree</strong> on 6 months warranty.&quot;</td>
<td>&quot;I can <strong>only offer</strong> you 6 months of warranty, if the price of $120 remains the same.&quot;</td>
</tr>
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<td></td>
<td>&quot;Price is the <strong>most important issue</strong> to my company. However, we can <strong>come closer</strong> to you and offer a price of $120 if you could come closer and offer 6 months of warranty and 7 months of service.&quot;</td>
<td>&quot;I can give you $120 per phone but this is my <strong>bottom line</strong>. I can pay that price only if we get at least 6 months of warranty and 7 months of service.&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;With a bit more effort we can <strong>reach an agreement</strong> (and both make a gain).&quot;</td>
<td>&quot;If you don’t make an effort we won’t reach an agreement (and both of us make a loss).&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;I can pay a price of $120 and you could concede on something else so that we both benefit.&quot;</td>
<td>I can pay a price of $120 <strong>but only if you give me something in exchange</strong></td>
</tr>
<tr>
<td></td>
<td>&quot;I can accept a price of $120 but we should find <strong>trade-offs</strong> to increase the <strong>gain</strong> for both of us.&quot;</td>
<td>&quot;I can accept a price of $120 <strong>but only if I get something in return</strong>&quot;</td>
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Intrapersonal - Information Processing

AC and DSS results in better (economic) outcomes …

Asynchronous Communication

• Slower turn-taking tempo “allows negotiators as much time between messages as they need to calculate the values of various outcomes and to consider the best counteroffers, and complete transcript of the communication allows for more careful information acquisition”

(Foroughi et al. 1995; Delaney et al. 1997; Lim & Yang 2007; Carnevale et al. 1993; Druckman 1994; De Dreu et al. 2003; Koeszegi et al. 2006; Schoop et al. 2014, etc.)

Decision Support Systems

• Systems designed to aid decision making (storing, retrieving, and processing information).

• E.g., evaluating the utility of issues and suggesting trade-offs and Pareto optimal solutions based on the evaluation.

Using DSS and/or asynchronous communication results in …

• higher joint (integrative) outcomes
• more balanced (fairer) outcomes
• higher post-negotiation satisfaction
• more (integrative) package-offers
• more infrequent usage of hard tactics
• more positive affective behavior
• less reliance on stereotypes
• etc.

(Foroughi et al. 1995; Delaney et al. 1997; Lim & Yang 2007; Carnevale et al. 1993; Druckman 1994; De Dreu et al. 2003; Koeszegi et al. 2006; Schoop et al. 2014, etc.)

… but usage and acceptance is low

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Usage and acceptance

• most systems are designed by and for scientists
• complex & time consuming
• users wonder “what is going on in the background”
• acceptance of suggestions is comparably low (e.g., a considerable proportion refuse Pareto optimal suggestions)
• rely on disclosure of information (e.g., utility elicitation)
• focus on economic & rational behavior
Conclusion

• Is computer mediated dispute resolution better or worse than face to face? Studies provide a clear answer:
  • It depends …
  • Challenges arise with regard to the quality of communication (particularly socio-emotional content)
    • Can be overcome if individuals are made aware of it and taught to adapt their communication style accordingly
  • Asynchronous communication and DSS can aid information processing and decision making
    • Comparably low acceptance and usage of DSS in dispute resolution.
  • A new role for the arbitrator / mediator?
    • DSS as a “tool” for mediators / arbitrators not a substitute?
    • Including “socio-emotional” support in DSS additional to the “economic / rational” support?