

AI-Mediated Communication: Definition, Research Agenda, and Ethical Considerations

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AI-Mediated Communication

Definition given by the authors:

“mediated communication between people in which a computational agent operates on behalf of a communicator by modifying, augmenting, or generating messages to accomplish communication or interpersonal goals.”

This definition includes current tools we already use, such as auto correct, predictive text, grammar correction, and auto-responses.

Have a great time!

Glad to hear it!

Nice!

↩ Reply

➡ Forward

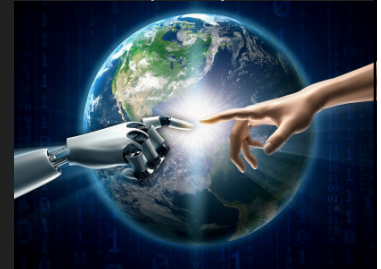
Categorizing AI-Mediated Communication

This paper does not include AIs that do not represent another human agent, such as Siri or Alexa, as AI-Mediated Communication.

Dimension	Definition	Examples
<i>magnitude</i>	The extent of the changes that AI enacts on messages	Correcting spelling errors vs. generating entirely new messages
<i>media type</i>	The media in which AI operates (e.g., text, audio, video)	Suggesting text replies vs. modifying one's appearance in video
<i>optimization goal</i>	The goal for which AI is optimizing the messages	To appear attractive, trustworthy, humorous, dominant, etc.
<i>autonomy</i>	The degree to which AI can operate on messages without the sender's supervision	Sender chooses between AI suggested messages vs. AI engages in conversation with minimal input from the sender
<i>role orientation</i>	The role that the AI is operating on behalf of (e.g., sender vs. receiver)	Sender: offering messages to enhance reply efficiency vs. Receiver: assessing whether sender is potentially lying

Why Understanding AI-Mediated Communication is important

- AI-MC could have large sweeping effects on social heuristics
- Potential to reshape language
- Possible impacts of the technology on individuals
- Potentially radical social and ethical implications
- Will require re-examining previous conclusions drawn about CMC (computer mediated communication)



Impacts on Language

- AI-MC may emphasize trends
 - Certain phrases or tones may be overemphasized by the model, increasing the natural occurrence in users and indirectly in non-users
- AI mediated communication may homogenize language
 - Increased accessibility and auto-generated text may make certain speech more common
 - Conversely, AI mediated communication could *balkanize* language



Questions of Agency

- Will errors and faux pas be attributed to the system, or the user?
 - Spelling errors that slip by are considered to be a user error, will this be the same for AI responses?
- What will affect the perception of agency?
 - How will use case affect this perception?
- How will we decide if AI-MC is a filter on communication, or a separate agent, or somewhere inbetween?

Perception

- How will tendencies to change the tone of users affect how they are perceived?
- Will this affective self-perception? i.e. would a user with messages generated to be positive start to see themselves as a more positive person?

Impacts on Society

- Much like with language, AI mediated communication can increase social biases, in potentially dangerous ways
- AI mediated communication may reduce certain inter-personal biases
- AI involvement in writing can lower the perceived trustworthiness of the writing, such as a profile for an AirBNB seeming to be AI-generated
- Should AI-MC become indistinguishable from all forms of CMC could lead to a larger degradation in trust, such as all important conversations needing to be face to face.

Discussion

- How much agency should be taken by AI-MC tools?
- How might society react to the widespread proliferation and use of this technology? Should the government play a role?