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In-Person or Via Technology?: Drawing on Psychology to Choose and Design Dispute Resolution Processes

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IN-PERSON OR VIA TECHNOLOGY?: DRAWING ON PSYCHOLOGY TO CHOOSE AND DESIGN DISPUTE RESOLUTION PROCESSES

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INTRODUCTION

COVID-19 fostered a remote technology boom in the world of dispute resolution. Pre-pandemic, adoption of technical innovation in dispute resolution was slow moving. Some attorneys, courts, arbitrators, mediators, and others did use technology, including telephone, e-mail, text, or videoconferences,[3] or more ambitious online dispute resolution (ODR).[4] But, to the chagrin of technology advocates, many people still conducted dispute resolution largely in person.[5] The pan-

1. Michael & Sonja Saltman Professor of Law, University of Nevada Las Vegas Boyd School of Law. We are very grateful for the insights of early readers Noam Ebner, Neal Feigenson, Randall Kiser, Jason Mazzone, Lydia Nussbaum, Nancy Rapoport, and Donna Shestowsky and for the research assistance provided by Wendy Antebi, Zachary Besso, Cody Robison, and Victoria Tokar.

2. Alice Curtis Campbell Professor of Law, Professor of Psychology, and Co-Director Illinois Program on Law, Behavior and Social Science, University of Illinois.

3. *See, e.g.*, IHAB AMRO, ONLINE ARBITRATION IN THEORY AND IN PRACTICE: A COMPARATIVE STUDY OF CROSS-BORDER COMMERCIAL TRANSACTIONS IN COMMON LAW AND CIVIL LAW COUNTRIES (2019); John Barkai & Elizabeth Kent, *Let's Stop Spreading Rumors About Settlement and Litigation: A Comparative Study of Settlement and Litigation in Hawaii Courts*, 29 OHIO ST. J. ON DISP. RESOL. 85, 118 (2014) (finding that Hawaii attorneys negotiated face-to-face, by phone, by letter or fax, and by e-mail); MEGHAN DUNN & REBECCA NORWICK, FED. JUDICIAL CTR., REPORT OF A SURVEY OF VIDEOCONFERENCING IN THE COURT OF APPEALS (2006); Anne Bowen Poulin, *Criminal Justice and Videoconferencing Technology: The Remote Defendant*, 78 TUL. L. REV. 1089, 1095 (2004); Bill R. Wilson, *Judge is a Verb As Well As a Noun*, LITIG., Spring 2005, at 3, 3 (observing that "discovery disputes, and most other pretrial issues, can be decided rather quickly during a telephone conference").

4. *See, e.g.*, Orna Rabinovich-Einy & Ethan Katsh, *The New New Courts*, 67 AM. U. L. REV. 165, 194, 201, 209 (2017) (describing innovative ODR programs in the United States, Canada, England); RICHARD SUSSKIND, ONLINE COURTS AND THE FUTURE OF JUSTICE (2019). We use the term ODR here to describe ambitious programs used by courts and other institutions to shift from in-person traditional dispute resolution to computer-facilitated exchanges. Because we often find the term ODR to be overly broad and thus confusing, see Jean R. Sternlight, *Pouring a Little Psychological Cold Water on Online Dispute Resolution*, 2020 J. DISP. RESOL. 1, 5 (2020), we try to specify particular communication technologies when possible, rather than use that general phrasing. *Id.*

5. *See* Noam Ebner & Elayne E. Greenberg, *Strengthening Online Dispute Resolution Justice*, 63 WASH. U. J. L. & POL'Y 65, 67–68 (2020) (observing that lawyers had previously "largely ignored ODR" and urging that they become more involved in the design, development, and implementation of ODR in order to further the cause of justice).

demic effectively put the emerging technological efforts on steroids.[6] Even the technologically challenged quickly began to replace in-person dispute resolution with videoconferencing, texting, and other technology. Courts throughout the world canceled all or most in-person trials, hearings, conferences, and appeals and began to experiment with using technologically-assisted alternatives.[7] The U.S. Supreme Court held oral arguments using telephone conference calls.[8] Attorneys, mediators, and arbitrators relied far more heavily on phone, e-mail, text, and video.[9] Some courts expanded programs to help disputants obtain information and even resolve their disputes online.[10]

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6. *See, e.g.*, *Federal Courts During the Covid-19 Pandemic: Best Practices, Opportunities for Innovation, and Lessons for the Future: Hearing Before the S. Comm. on Courts, Intellectual Property, and the Internet*, 116th Cong. 1–2 (2020) (statement of Bruce Stern, President, Am. Ass'n for Just.), available at https://judiciary.house.gov/calendar/eventsingle.aspx?EventID=3059 [hereinafter *Federal Courts During the COVID-19 Pandemic*]; JOINT TECHNOLOGY COMMITTEE QUICK RESPONSE BULLETIN, JUDICIAL PERSPECTIVES ON ODR AND OTHER VIRTUAL COURT PROCESSES 8 (2020) [hereinafter JOINT TECHNOLOGY COMMITTEE QUICK RESPONSE BULLETIN] ("Now, out of necessity in response to an unprecedented pandemic, courts are boldly embracing changes that are bringing more court processes into line with available technologies and public expectations."). *See also Federal Courts During the COVID-19 Pandemic*, *supra*, (statement of Jeremy Fogel, Exec. Dir., Berkeley L. Sch.); David Horton, *Forced Remote Arbitration*, 108 CORNELL L. REV. (forthcoming 2022); Amy J. Schmitz, *Arbitration in the Age of COVID: Examining Arbitration's Move Online*, CARDOZO J. CONFLICT RESOL. 245, 245 (2021). This was an international phenomenon. *See, e.g.*, Michael Legg, *The COVID-19 Pandemic, the Courts and Online Hearings: Maintaining Open Justice, Procedural Fairness and Impartiality*, 49 FED. L. REV. 161, 162–63 (2021) (providing Australian perspective on the impact of the COVID-19 pandemic on court processes).

7. *See, e.g.*, Valerie Hans, *Virtual Juries*, 71 DEPAUL L. REV. (forthcoming 2022); *see generally* Tania Sourdin & John Zeleznikow, *Courts, Mediation and COVID-19*, 48 AUST. BUS. L. REV. 138 (2020) (describing worldwide justice system and alternative dispute resolution responses to the pandemic).

8. Press Release, Supreme Court of the United States, Media Advisory Regarding May Teleconference Argument Audio (Apr. 30, 2020), https://www.supremecourt.gov/publicinfo/press/pressreleases/pr_04-30-20; Pete Williams, *Supreme Court Makes History with Oral Arguments by Phone. But It's Business as Usual for Justices*, NBCNEWS.COM (May 4, 2020), https://www.nbcnews.com/politics/supreme-court/supreme-court-makes-history-oral-arguments-phone-it-s-business-n1199446.

9. *See, e.g.*, Joshua Javits, *Virtual v. In-Person Hearings in a COVID World and Beyond*, MEDIATE.COM (Apr. 2021), https://www.mediate.com/articles/virtualvsinpersonhearingsincovid.cfm (observing, in the labor context, that whereas virtual arbitrations and mediations were rarely used pre-pandemic, they are "now the dominant forms").

10. *See, e.g.*, Matt Reynolds, *Courts Attempt to Balance Innovation with Access in Remote Proceedings*, ABA J. (Feb. 1, 2021, 3:30 AM). *See also* David Freeman Engstrom, *Post-COVID Courts*, 64 UCLA L. REV. DISCOURSE 246, 250 (2020) (arguing that the pandemic provided states with the opportunity to rethink the nature of the legal system). For discussion of a New York City initiative to expand ODR for small claims cases "to better meet the justice needs of New Yorkers amid the pandemic and beyond," see Press Release, New York State Unified Court System, NYC Civil Court in Manhattan to Launch Online Dispute Resolution Pilot Program for Small Claims Cases (Jan. 27, 2021), https://www.nycourts.gov///pdfs/PR21_03.pdf. *See also* Stephanie Francis Ward, *Thanks to Chief Justice, the Michigan Supreme Court Pivoted to Remote Proceedings During Covid-19*, ABA J. (Feb. 1, 2021, 1:00 AM), https://www.abajournal.com///-

"Thanks" to the pandemic, the traditionally slow-moving and technology-resistant legal community suddenly embraced many kinds of technology with both arms and more.[11]

This move to technology-mediated dispute resolution was met with greater enthusiasm than many might have anticipated, leading to predictions that we may never return to the world of extensive reliance on in-person dispute resolution.[12] As the pandemic endured, lawyers, neutrals, and court administrators found that practices adopted out of desperation could be worth preserving post-pandemic. Michigan Supreme Court Chief Justice Bridget Mary McCormack, in describing "temporary" pandemic adjustments, noted: "I don't think that things will ever return to the way they were, and I think that is a good thing."[13] Even many who were previously hesitant about or relatively unaware of the possible uses of technology saw the potential for clear benefits. Some judges, mediators, arbitrators, and court administrators observed that the online versions of litigation, mediation, and arbitration could be as good as, or even better than, the in-person versions.[14]

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chief-justice-the-michigan-supreme-court-pivoted-to-remote-proceedings-during-covid-19 (describing expansion of Michigan online programs due to COVID-19).

11. Moving to virtual jury trials has proved to be the most challenging endeavor for many, particularly given U.S. Constitutional constraints, though some have been tried at least in the civil setting. Hans, *supra* note 7.

12. *See, e.g.*, Eric R. Galton, *The Remarkable (and Often Very Surprising) Benefits of Virtual Mediation*, MEDIATE.COM (June 2021), https://www.mediate.com/articles/galton-benefits-virtual.cfm (predicting that virtual mediation "will usher in a virtual renaissance in the modern mediation movement"); Michelle Casady, *Texas Judges See Lasting Benefits From Pandemic Practices*, LAW360 (Mar. 11, 2021, 9:30 AM), https://www.law360.com//1362923?scroll=1&related=1; Cara Salvatore, *Minnesota Judge Calls for More Zoom Trials – Pandemic or Not*, LAW360 (Mar. 30, 2021, 5:49 PM), https://www.law360.com/articles/1370514/minn-judge-calls-for-more-zoom-trials-pandemic-or-not; Scott Dodson et al., *The Zooming of Federal Civil Litigation*, JUDICATURE, Fall 2021, at 12, 14–15 (suggesting that "[s]ome categories of adversarial events . . . are likely to migrate permanently to online platforms," including discovery and status conferences, many oral hearings in district courts, and potentially even many appellate arguments). *See also* Engstrom, *supra* note 10, at 248.

13. JOINT TECHNOLOGY COMMITTEE QUICK RESPONSE BULLETIN, *supra* note 6, at 2. *See also* Nat'l Ctr. for State Courts, *State Court Judges Embrace Virtual Hearings as Part of the 'New Normal'*, https://www.ncsc.org//-emergency// (last visited Jan. 6, 2022); Lyle Moran, *Will the COVID-19 Pandemic Fundamentally Remake the Legal Industry?*, ABA J. (Aug. 1, 2020, 12:00 AM), https://www.abajournal.com///-covid-19-pandemic-fundamentally-remake-the-legal-industry; Javits, *supra* note 9 (observing that arbitrators and mediators are divided regarding extent to which they believe practice will return to primarily in-person).

14. *See, e.g.*, Noam Ebner, *The Human Touch in ODR: Trust, Empathy and Social Intuition in Online Negotiation and Mediation*, *in* DANIEL RAINEY ET AL., ONLINE DISPUTE RESOLUTION: THEORY AND PRACTICE 73 (2d ed. 2021) (noting "sharp, sudden reversal" in attitudes towards workability of ODR); *See generally* Dwight Golann, *"I Sometimes Catch Myself Looking Angry or Tired . . .": The Impact of Mediating by Zoom*, 39 ALTERNATIVES HIGH COST LITIG. 73 (2021); Howard B. Miller, *Mediation in the Time of Coronavirus*, DAILY JOURNAL (Mar. 19, 2020), https://www.jamsadr.com/files/uploads/documents/articles/miller-howard-dj-mediation-in-

Some began to consider new ways to combine processes or to use them differently.[15] Tech advocates saw this as one silver lining of the pandemic, noting that COVID-19 achieved a result that twenty years of tech advocacy could not.[16]

As in-person interactions once again become possible, disputants, lawyers, courts, and neutrals will need to decide[17] whether, and under what circumstances, to conduct interviews, depositions, court proceedings, negotiations, mediations, or arbitrations in person, by phone, via videoconferencing, or in writing of some form. While many hail the potential benefits of using technology, others fear the loss of the human side of dispute resolution, expressing significant skepticism that technology can adequately replace the close contact, credibility assessment, rapport, and interpersonal connection they believe are critically important aspects of dispute resolution.[18] Some tout the possibilities for using technology to facilitate access to justice, but others worry about the ways that technology might impede such access.[19]

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the-time-of-coronavirus-2020-03-19.pdf (noting that "regardless of necessity the advantages of video mediation may lead permanently to its greater use").

15. *See, e.g.*, Dodson et al., *supra* note 12, at 12 ("Some proceedings may lend themselves to hybrid approaches.").

16. JOINT TECHNOLOGY COMMITTEE QUICK RESPONSE BULLETIN, *supra* note 6, at 3.

17. Sometimes decisionmakers will be able to choose whether to handle a dispute in litigation, arbitration, mediation, or negotiation, but often the basic dispute resolution process is chosen by contract, courts, legislation, or constrained by adversaries' choices. Whether or not the fundamental process choice is a given, decisionmakers can often decide whether and how to employ technology for that process. While we are aware of the many debates over which decisions are best made by disputants themselves, rather than by lawyers, courts, or neutrals, we speak here to all potential decisionmakers without taking a normative position on who should be making process or communication technology choices.

18. *See* Mary Banham-Hall, *Online Mediation – Why I Believe in Face-to-Face Mediation*, HUFFINGTONPOSTUK (July 27, 2017, 10:02 AM), https://www.huffingtonpost.co.uk/mary-banham-hall/online-mediation_b_17577438.html ("Digital communication impedes what mediators do, making it impossible to use many mediation techniques."); TAYLOR BENNINGER ET AL., VIRTUAL JUSTICE? A NATIONAL STUDY ANALYZING THE TRANSITION TO REMOTE CRIMINAL COURT 87–92 (2021); Ebner, *supra* note 14; Darin Thompson, *Interacting with Disputants' Emotions in Online Dispute Resolution*, CANLII (2019), https://canlii.ca/t/2fc3; Jenia I. Turner, *Remote Criminal Justice*, 53 TEX. TECH. L. REV. 197, 216–22 (2021).

19. *See, e.g.*, Maximilian A. Bulinski & J.J. Prescott, *Online Case Resolution Systems: Enhancing Access, Fairness, Accuracy, and Efficiency*, 21 MICH. J. RACE & L. 205, 210 (2016); JOINT TECHNOLOGY COMMITTEE QUICK RESPONSE BULLETIN, *supra* note 6; Jason Mazzone & Robin Fretwell Wilson, *As Millions Face Eviction, the Digital Divide Should Not Become a Justice Divide*, THE HILL (Apr. 14, 2021, 10:01 AM), https://thehill.com///547981-as-millions-face-eviction-the-digital-divide-should-not-become-a-justice; Carrie Menkel-Meadow, *Is ODR ADR? Reflections of an ADR Founder from 15th ODR Conference, The Hague, The Netherlands, 22-23 May 2016*, 3 INT. J. ONLINE DISP. RES. 4 (2016); Ayelet Sela, *Streamlining Justice: How Online Courts Can Resolve the Challenges of Pro Se Litigation*, 26 CORNELL J. L. & PUB. POL'Y 331 (2016); Sternlight, *Pouring a Little Psychological Cold Water on Online Dispute Resolution*, *supra* note 4, at 8–30; Victor D. Quintanilla et al., *Digital Inequalities and Access to Justice: Dialing Into Zoom Court Unrepresented*, *in* LEGAL TECHNOLOGY AND THE FUTURE OF CIVIL JUSTICE (David

Psychological science provides a useful lens through which to consider these essential issues. Using different means of communication can influence how participants experience the interaction, and these experiential differences have important implications for dispute resolution. These implications offer valuable lessons for legal actors choosing which modes of communication to use and determining how to communicate well within a particular medium. While it is natural to seek simple answers, the psychological research we explore is nuanced, revealing that no single mode of communication is "best" in all circumstances. In lieu of a simple solution, we provide a multi-dimensional analysis that will help decisionmakers make these critical determinations.[20] Understanding the science will help participants maximize the benefits and minimize the drawbacks of different communication media, enabling them to make informed choices among media, design the chosen media to fit their goals, and adjust their advocacy, judging, negotiation, and other activities to the chosen medium.

In Part II, we draw on psychology to analyze four key characteristics of communication media: (1) the channels that they provide for communication; (2) the degree to which they facilitate synchronous or asynchronous communication; (3) the extent to which they provide

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Engstrom ed., forthcoming 2022) (on file with author). *See also* CAMILLE GOURDET ET AL., COURT APPEARANCES IN CRIMINAL PROCEEDINGS THROUGH TELEPRESENCE: IDENTIFYING RESEARCH AND PRACTICE NEEDS TO PRESERVE FAIRNESS WHILE LEVERAGING NEW TECHNOLOGY 1 (2020), https://www.rand.org/pubs/research_reports/RR3222.html. *See generally* Eric Scigliano, *Can Justice Be Served on Zoom? COVID-19 Has Transformed America's Courts*, THE ATLANTIC (Apr. 13, 2021), https://www.theatlantic.com/magazine/archive/2021/05/can-justice-be-served-on-zoom/618392/. Such determinations will turn, in part, on how one defines both "access" and "justice."

20. We have chosen to examine only those forms of dispute resolution in which technology is used to facilitate human interactions, rather than algorithmic or other processes that put decisions primarily in the hands of computers. *See* Ayelet Sela, *Can Computers Be Fair? How Automated and Human-Powered Online Dispute Resolution Affect Procedural Justice in Mediation and Arbitration*, 33 OHIO ST. J. ON DISP. RESOL. 91, 100 (2018). Those processes are fascinating and raise important psychological questions but exceed the scope of this Article. *See, e.g.*, Tania Sourdin, *Judge v. Robot? Artificial Intelligence and Judicial Decision-Making*, 41 U. NEW S. WALES L.J. 1114, 1115 (2018); Rabinovich-Einy & Katsh, *The New New Courts*, *supra* note 4, at 209 (opining that "the introduction of algorithms can help level the playing field between sophisticated repeat players and one-shotters" as well as "reduce human bias"). *Compare* Cass R. Sunstein, *Algorithms, Correcting Biases*, 86 SOC. RES. 499, 499 (2019) (arguing that well-designed algorithms should be able to avoid cognitive biases of all kinds) *with* Pauline T. Kim, *Auditing Algorithms for Discrimination*, 166 U. PA. L. REV. 189, 190–91 (2017). *See also* Noam Ebner, *The Technology of Negotiation*, *in* 2 THE NEGOTIATOR'S DESK REFERENCE 171, 172 (Chris Honeyman & Andrea Kupfer Schneider eds., 2017) (discussing various algorithmic negotiation tools).

transparency or privacy; and (4) their formality, familiarity, and accessibility.[21]

In Part III, we explore how these characteristics affect participants in dispute resolution. We focus on the impacts of alternative modes of communication in ten areas that are particularly relevant to dispute resolution: (1) focus and fatigue; (2) rapport; (3) emotion; (4) the exchange of information; (5) participant behavior; (6) credibility determinations; (7) persuasion; (8) judgment and decision-making; (9) procedural justice; and (10) public views of justice.[22]

In Part IV, we explore how decisionmakers might incorporate the insights of psychology into their technological choices. We identify three important variables for decisionmakers to consider: (1) the goals the decisionmaker has for the process; (2) the characteristics of the disputants; and (3) the nature of the dispute or task. We explain why these variables are critically important and provide examples of how decisionmakers can draw on psychology to best fulfill their goals in designing and using technology for dispute resolution.[23]

In Part V, we briefly conclude. We reiterate the importance of psychology for all decisionmakers as they choose, design, and engage with different dispute resolution modalities. We recognize the importance of non-psychological concerns as well and point to several areas in which additional research would be particularly useful.[24]

I. Analyzing the Characteristics of Dispute Resolution Technology

Just as decisionmakers must choose which dispute resolution processes to use (e.g., litigation, arbitration, mediation, negotiation), so must they choose communication modalities, such as whether to engage in any of these processes in person, in a videoconference, by telephone, through e-mail, by text messages, or using an ODR platform. Similarly, just as a given dispute can move between and among processes—such as when negotiations occur at various points in a litigation process, or a filed case is ordered to arbitration—it is also possible and indeed common for multiple modes of communication to be used within a given process.

Alternative modes of communication differ with respect to key characteristics that psychologically impact the participants. While rec-

21. *See infra* Part II.
22. *See infra* Part III.
23. *See infra* Part IV.
24. *See infra* Part V.

ognizing that other differences may also be significant, we focus on four fundamental characteristics: (1) the richness of the channels of communication that are available; (2) whether communication is synchronous or asynchronous; (3) the extent to which the medium affords privacy or transparency; and (4) the formality, familiarity, and accessibility of the medium to participants.[25] As we will see, each of these characteristics may present both benefits and drawbacks for a given dispute resolution process.

A. Richness and Leanness of Channels of Communication

Some modes of communication, most notably in-person communication, feature many channels, in that people can reach each other through their words; their tone of voice, inflection, and emphasis; nonverbal means, including body language and facial expressions; touch; and even smell or taste. In-person communication can also include the sharing of documents or visual aids. In addition, physical surroundings can supplement the communication itself. Jurors, judges, neutrals, and opponents, for example, may have a window into the "offstage" behavior of a witness or party before and after the communication or as they move around the space.[26]

By contrast, purely text-based modes of communication, such as e-mail, letters, or text messages, entail fewer channels of communication. They do not generally provide avenues for communication through tone of voice or body language, much less through touch, taste, or smell. While letters, e-mails, and text messages are all primarily text-based, each have their own set of characteristics. E-mail, for example, may better support communication through formatting, attached documents, or other visual aids than does texting.[27]

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25. For a detailed review of the variety of theories that have developed around computer-mediated communication, see Joseph B. Walther, *Theories of Computer-Mediated Communication and Interpersonal Relations*, *in* THE SAGE HANDBOOK OF INTERPERSONAL COMM. 443, 444 (Mark L. Knapp & John A. Daly eds., 4th ed. 2011) [hereinafter Walther, *Theories of Computer-Mediated Communication*].

26. *See, e.g.*, Mary R. Rose & Shari Seidman Diamond, *Offstage Behavior: Real Jurors' Scrutiny of Non-Testimonial Conduct*, 58 DEPAUL L. REV. 311, 313 (2009); Mary R. Rose et al., *Goffman on the Jury: Real Jurors' Attention to the "Offstage" of Trials*, 34 LAW & HUM. BEHAV. 310, 313 (2009). *See generally* Meredith Rossner & David Tait, *Presence and Participation in a Virtual Court*, CRIMINOLOGY & CRIM. JUST. 1 (2021) (finding that mock jurors were better able to see a defendant's offstage expressions and gesture via video versus in person and more able to see a witness' gestures via video than when they testified from a witness box).

27. Noam Ebner, *Negotiating via Text Messaging*, *in* THE NEGOTIATOR'S DESK REFERENCE 133, 139 (Chris Honeyman & Andrea Kupfer Schneider eds., 2017). Letters might be covered in perfume or written in appealing or unappealing handwriting.

Videoconferencing tends to fall in between these poles as participants can see facial expressions and some body language, in addition to hearing the spoken words, and can share access to documents or other visual aids. While in most videoconferences the participants will not be able to see each other's full bodies, they will usually be able to see each other's faces. Indeed, they will often be able to see each other's faces more closely, directly, and continuously than is typically the case in person. Similarly, while participants will not be able to see everything in each other's environments, they will, generally, be able to gain some information from the visible surroundings. Some attorneys have, for example, mined these backgrounds for clues as to the predilections of potential jurors or used them in making connections with interviewees.[28] Video-conferencing software may also provide the ability – for better or worse – for participants to observe themselves on the screen, a channel that is not usually available in other modes of communication. And, of course, the quality of the technology used can have a significant impact on communication in videoconferences as poor-quality equipment or connections may impede one or more of the available channels.

In contrast to video calls, ordinary phone calls do not facilitate visual cues or allow participants to share visuals in real time. But unlike text-based communication modes, phone calls do provide the ability to hear tone of voice and inflection. In addition to the information that these signals may provide, the sound of a human voice also seems to communicate a greater sense of human mindfulness and connection than do the same words communicated in textual form or via a computer voice.[29] During the pandemic when people could not as easily spend time with one another face-to-face, the number of voice phone

28. *See, e.g.*, Allie Reed & Madison Alder, *Virtual Hearings Put Children, Abuse Victims at Ease in Court*, BLOOMBERG LAW (July 23, 2020, 3:45 AM), https://news.bloomberglaw.com/us-law-week/virtual-hearings-put-children-abuse-victims-at-ease-in-court. *See generally* Karen J. Saywitz & Rebecca Nathanson, *Children's Testimony and Their Perceptions of Stress In and Out of the Courtroom*, 17 CHILD ABUSE & NEGLECT 613 (1993).

29. Amit Kumar & Nicholas Epley, *It's Surprisingly Nice to Hear You: Misunderstanding the Impact of Communication Media Can Lead to Suboptimal Choices of How to Connect with Others*, 150 J. EXPERIMENTAL PSYCH. 595, 595 (2021). *See also* Juliana Schroeder et al., *The Humanizing Voice: Speech Reveals, and Text Conceals, a More Thoughtful Mind in the Midst of Disagreement*, 28 PSYCHOL. SCI. 1745, 1746 (2017); Juliana Schroeder & Nicolas Epley, *The Sound of Intellect: Speech Reveals a Thoughtful Mind, Increasing a Job Candidate's Appeal*, 26 PSYCHOL. SCI. 877, 889 (2015). Researchers have also found that the sound of a familiar voice can reduce stress hormones and increase hormones related to positive relationships. *See generally* Leslie J. Seltzer et al., *Instant Messages vs. Speech: Hormones and Why We Still Need to Hear Each Other*, 33 EVOLUTION & HUM. BEHAV. 42 (2012).

calls increased considerably and more so than internet traffic.[30] This may reflect the significance of the human voice.

Modes of communication that provide more channels of information have often been characterized as "rich," as compared to those with fewer channels that are described as more "lean."[31] Importantly, however, the richness or leanness of a particular mode of communication is not a fixed characteristic and may vary according to how the medium is used and received by participants. With experience, communicators tend to adapt to the opportunities provided by a particular mode of communication[32] and to enrich their communications within that medium.[33] Text-based communication, for example, is not simply a transcript of what would have been said in an in-person conversation. Instead, communicators "choose different words, symbols, and statements to express themselves online in a manner that compensates for the nonverbal cues they do not have."[34] Additional richness is added to text-based communication through emoticons,[35] formatting like ALL CAPS and *italics*, colors, pictures, hyperlinks, or tone indicators.[36] Communicators also tend to use more explicit statements and ask more direct questions when communication channels are more limited.[37] Similarly, when communicators are more familiar with each

30. Cecilia Kang, *The Humble Phone Call Has Made a Comeback*, N.Y. TIMES (Apr. 9, 2020), https://www.nytimes.com//04/09/technology/phone-calls-voice-virus.html.

31. *See generally, e.g.*, Richard L. Daft & Robert H. Lengel, *Information Richness: A New Approach to Managerial Behavior and Organizational Design*, *in* 6 RES. ORG. BEHAV. 233 (Barry M. Staw & Larry L. Cummings eds., 1984).

32. Walther, *Theories of Computer-Mediated Communication*, *supra* note 25, at 443–44. *See also* Rick van der Kleij et al., *How Conversations Change Over Time in Face-to-Face and Video-Mediated Communication*, 40 SMALL GROUP RES. 355, 355 (2009).

33. Walther, *Theories of Computer-Mediated Communication*, *supra* note 25, at 457; John R. Carlson & Robert W. Zmud, *Channel Expansion Theory and the Experiential Nature of Media Richness Perceptions*, 42 ACAD. MGMT. J. 153, 167 (1999).

34. Joseph B. Walther et al., *Computer-Mediated Communication Versus Vocal Communication and the Attenuation of Pre-Interaction Impressions*, 13 MEDIA PSYCHOL. 364, 370 (2010).

35. *See, e.g.*, Nerea Aldunate & Roberto González-Ibáñez, *An Integrated Review of Emoticons in Computer-Mediated Communication*, 7 FRONTIERS IN PSYCHOL. 1 (2017); Michele Griessmair & Sabine T. Koeszegi, *Exploring the Cognitive-Emotional Fugue in Electronic Negotiations*, 18 GROUP DECISION & NEGOT. 213, 215 (2009); Shao-Kang Lo, *The Nonverbal Communication Functions of Emoticons in Computer-Mediated Communication*, 11 CYBERPSYCHOL. & BEHAV. 595, 597 (2008); Joseph B. Walther & Kyle P. D'Addario, *The Impacts of Emoticons on Message Interpretation in Computer-Mediated Communication*, 19 SOC. SCI. COMPUTER REV. 324, 341–42 (2001); Masahide Yuasa et al., *Brain Activity When Reading Sentences and Emoticons: An fMRI Study of Verbal and Nonverbal Communication*, 94 ELECTRONICS COMM. JAPAN 17, 22 (2011).

36. *See, e.g.*, Ezra Marcus, *Tone is Hard to Grasp Online. Can Tone Indicators Help?*, N.Y. TIMES (Dec. 9, 2020), https://www.nytimes.com/2020/12/09/style/tone-indicators-online.html.

37. *See, e.g.*, Lisa Collins Tidwell & Joseph B. Walther, *Computer-Mediated Effects on Disclosure, Impressions, and Interpersonal Evaluations: Getting to Know Each Other a Bit at a Time*, 28 HUM. COMM. RES. 317, 342 (2002); Michael Morris et al., *Schmooze or Lose: Social Friction and*

other, they are able to use a given medium in richer ways.[38] As technology develops, the availability of different channels for communication will evolve as well. Tech developers, for example, are exploring the possibility of embedding senses such as touch, taste, or smell into digital communications.[39]

B. Synchrony and Asynchrony

Modes of communication also differ in the degree of synchrony that is possible – the extent to which participants are able to communicate in real time, or instead, leave messages or make statements that are received and responded to sequentially.[40] In-person communications, videoconferences, and phone conversations are typically synchronous, absent technological glitches or the need to play phone-tag. Occasionally, however, participants might decide to use one of these modes of communication asynchronously, such as where a speaker asks the audience to hold their questions or when communicators exchange video messages.[41] Exchanging written letters through the mail or by courier is asynchronous. E-mail and text messaging are generally asynchronous, although they can both be used in a way that is "semi-synchronous," depending on the habits and circumstances of the communicators.[42]

Related to but distinct from synchrony is the degree to which participants can engage in parallel, or simultaneous, communication. When meeting in person, for example, people can nod, gesture, and

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Lubrication in E-Mail Negotiations, 6 GROUP DYNAMICS: THEORY, RES., & PRAC. 89, 91 (2002); Joseph B. Walther et al., *Let Me Count the Ways: The Interchange of Verbal and Nonverbal Cues in Computer-Mediated and Face-to-Face Affinity*, 24 J. LANG. & SOC. PSYCHOL. 36, 57 (2005) [hereinafter Walther et al., *Let Me Count the Ways*].

38. Walther, *Theories of Computer-Mediated Communication*, *supra* note 25, at 457.

39. *See* Caleb T. Carr, *CMC Is Dead, Long Live CMC! Situating Computer-Mediated Communication Scholarship Beyond the Digital Age*, 25 J. COMPUTER-MEDIATED COMM. 9, 12 (2020).

40. *See generally* Donald M. Hilty et al., *A Comparison of In-Person, Synchronous and Asynchronous Telepsychiatry: Skills/Competencies, Teamwork, and Administrative Workflow*, 5 J. TECHNOL. BEHAV. SCI. 273 (2020).

41. A given mode of communication, such as video, will have different characteristics if handled asynchronously or synchronously (live). *See, e.g.*, Aki Myllyneva & Jari K. Hietanen, *There Is More to Eye Contact Than Meets the Eye*, 134 COGNITION 100 (2015) [hereinafter Myllyneva & Hietanen, *There Is More to Eye Contact Than Meets the Eye*]. *See also* Jonne O. Hietanen et al., *Psychophysiological Responses to Eye Contact in a Live Interaction and in Video Call*, 57 PSYCHOPHYSIOLOGY, June 2020, at 1. Typically, synchronous processes can also have asynchronous aspects, as when mediators have disputants work in caucus, rather than in joint session. *See generally* Gary L. Welton et al., *The Role of Caucusing in Community Mediation*, 32 J. CONFLICT RESOL. 181 (1988).

42. *See* Noam Ebner et al., *You've Got Agreement: Negotiating via Email*, in RETHINKING NEGOTIATION TEACHING: INNOVATIONS FOR CONTEXT AND CULTURE 89, 90–92 (Christopher Honeyman et al. eds., 2009).

vocalize responses or encouragement ("um-hum") while the other person is talking. Similarly, synchronous communication raises the possibility that communicators will interrupt each other. Asynchronous communication is less likely to occur in parallel as communicators take turns sending and responding to messages. When parallel communication does occur in asynchronous processes, the result can be messages that cross or otherwise get out of sequence.

As with the availability of communication channels, neither synchrony nor asynchrony is always better for effective dispute resolution. Synchronous communication typically involves more frequent, shorter, and quicker back-and-forth turn taking; consumes less time; and leads to faster solutions.[43] The more synchronous the communication, the more communicators may feel a sense that they are present with each other.[44] Synchrony gives communicators the chance to immediately check for and correct misunderstandings and obtain immediate feedback. At the same time, synchrony can also lead to outbursts in the moment or result in conflict or mistakes when people try to communicate over one another or make decisions in a rush.[45] Asynchronous communication, in contrast, gives people the chance to take slower or longer turns; deliberate, collect additional information, or consult with others; exercise more control over the content and timing of each message; and seek additional clarification.

C. *Privacy and Transparency*

The extent to which communications are transparent, private,[46] or even relatively anonymous[47] has significant implications for both the

43. *See, e.g.*, Amira Galin et al., *E-Negotiation Versus Face-to-Face Negotiation: What Has Changed—If Anything?*, 23 COMPUTERS HUM. BEHAV. 787, 793 (2007); Eva-Maria Pesendorfer & Sabine T. Koeszegi, *Hot Versus Cool Behavior Styles in Electronic Negotiations: The Impact of Communication Mode*, 15 GROUP DECISION & NEGOT. 141, 148 (2006).

44. *See, e.g.*, Kathleen L. McGinn & Rachel Croson, *What Do Communication Media Mean for Negotiators? A Question of Social Awareness*, *in* THE HANDBOOK OF NEGOTIATION AND CULTURE 334, 337 (Michele J. Gelfand & Jeanne M. Brett eds., 2004).

45. Ebner et al., *supra* note 42, at 94–96.

46. While we tend to think of both transparency and privacy in positive terms, they are in tension. *See, e.g.*, *Federal Courts During the Covid-19 Pandemic*, *supra* note 6 (discussing courts' desire to balance access and transparency with the privacy interests of parties and witnesses).

47. Privacy and anonymity are not the same, but there are some important connections. If two people have a conversation that they anticipate will be kept private, they are not anonymous to one another. Nonetheless, because the participants to the conversation believe that it is private, they may be willing to communicate things that they would not if there was an audience or if they knew that a record of the communication might be revealed to others. *See infra* Part II.D. *See also* McGinn & Croson, *supra* note 44, at 336 ("Anonymity . . . is not a fixed feature of any given medium—interactions over any medium can involve anonymous partners or known, famil-

communicators themselves and the public and third parties.[48] Participants' expectations of privacy, transparency, and anonymity are also psychologically important. While privacy can likely never be guaranteed, expectations of privacy will be much higher when using some forms of communication than when using others. Similarly, certain modes of communication are more conducive than others to both transparency and producing a record of the communication.

The degree of privacy and transparency afforded by any means of communication depends not only on the mode of communication, but also on how communication is implemented within that medium. For example, in-person interactions that take place in "open court" are generally not private, though members of the public or the press can occasionally be excluded from courtroom proceedings.[49] A transcript will often be made of in-person open court communications as well, in which case there will be a fair degree of transparency. When litigated matters are heard online, disputants and their attorneys may fear that documents may end up being shared even more widely than had they only been exchanged in court. On the other hand, when disputants meet for an in-person mediation, their interaction is generally not recorded or transcribed, and they may expect that their communications will be kept private. Legal doctrines of privilege and confidentiality can be used to support these expectations, though privilege and confidentiality can also be violated. In-person arbitrations are generally more private than courtroom hearings, but a transcript may be made.[50]

The degree of privacy and transparency afforded by videoconferences and phone calls depends on who acquires access and whether a recording is made. If a court hearing is held via videoconference and the link is provided to the public or the hearing is recorded, the videoconference hearing may be more accessible than an in-person hearing would have been. During the COVID-19 outbreak, states like Texas and Michigan moved many hearings online and made access to a broad array of civil and criminal hearings available to the general pub-

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iar partners. Anonymity can be eliminated in any medium by . . . providing identifying information and, in practice, often is.").

48. We discuss public implications in *infra* Part III.J.

49. In practice and due to logistical constraints, most open court proceedings are neither attended by many people nor widely reported. In addition, administrative hearings involving issues such as immigration, unemployment, or workers' compensation are not necessarily open to the public.

50. Sarah Cole, *Should Arbitration Transcripts be Routine?*, INDISPUTABLY (Oct. 15, 2007), http://indisputably.org/2007/10/should-arbitration-transcripts-be-routine/comment-page-1/.

lic with just the click of a mouse.[51] Similarly, the U.S. Supreme Court supported the transparency of its oral arguments during the pandemic by holding them via recorded telephone conference calls.[52] In contrast, if a negotiation or mediation is held via videoconference or over the phone, the video link will typically not be made publicly available as mediations and negotiations are not typically open to the public. While, in theory, participants could agree to record the videoconference or call, this would be unusual. On the other hand, participants might fear that a fellow participant or even a third party could more easily and illicitly record such a mediation or negotiation than they could record an in-person session.[53] Thus, the expectation of privacy may be lower for a videoconference or telephonic communication than for an in-person process.[54]

Written dispute resolution communications, such as texts, e-mails, and letters, are typically less private and more transparent than unrecorded interactions. This is particularly true of text messages and e-mails that automatically make a record that can easily be accessed later by participants and potentially forwarded to others or even secured by law enforcement or members of the public.

The existence of privacy or transparency may also impact participants' feelings of anonymity or invisibility. While those who participate in dispute resolution processes typically know who their counterparts are, meaning that these interactions are not in fact anonymous, some modes of communication may create conditions under which participants feel somewhat anonymous. Communicators may

51. Texas Judicial Branch, Texas Live Streams, http://streams.txcourts.gov (last visited Jan. 27, 2022); Ward, *supra* note 10 (noting that Michigan posts dockets online and nonlitigants are able to access hearings via YouTube). *See also* Dodson et al., *supra* note 12, at 16–17 (discussing steps taken by various courts to record sessions and also upload them to YouTube or other accessible locations and noting that remote technology shows "great promise for improving transparency in civil courtrooms"); United States Court of Appeals for the Federal Circuit, Expanded Availability of Oral Argument Live Audio Streaming, https://cafc.uscourts.gov/home/oral-argument/listen-to-oral-arguments/ (last visited Jan. 27, 2022).

52. *See supra* note 8 and accompanying text.

53. Even when access is not deliberately given, third parties may sometimes find ways to overhear, peek at, or record communications. *See, e.g.*, Noam Ebner & John Zeleznikow, *Fairness, Trust and Security in Online Dispute Resolution*, 36 HAMLINE U. J. PUB. L. & POL'Y 143, 157–59 (2015).

54. *See, e.g.*, Johannes M. Basch et al., *It Takes More Than a Good Camera: Which Factors Contribute to Differences Between Face-to-Face Interviews and Videoconference Interviews Regarding Performance Ratings and Interviewee Perceptions?*, 36 J. BUS. & PSYCHOL. 921, 931–32 (2021) (finding that interviewees had greater privacy concerns about interviews when they were conducted via video as compared to in person).

feel more invisible when they communicate by phone or in writing, media that lack visual channels and the ability to see and be seen.[55]

The extent to which the communication is believed to be public, to create a record, or give rise to feelings of anonymity may influence behavior and perceptions. Communicators who know their communication is public or who believe there will be a record may choose their words or other aspects of their communication more carefully.[56] Knowing this may also influence how their counterparts interpret their interactions. A record of the communication allows participants to process the contents of the communication over a longer period of time and to return to the record in the future.[57] Some records might be published or forwarded to others. The presence or absence of an accessible record may also impact the public's perception of the dispute resolution process and its ability to hold disputants or neutrals accountable for their actions.[58]

D. Accessibility, Formality, and Familiarity

Modes of dispute resolution communication also vary according to their accessibility, formality, and familiarity. At a basic level, technological modes of communication can bridge accessibility challenges posed by long distances or time. Some courts and mediators have found that more participants are able to attend hearings when remote access is possible.[59] On the other hand, the use of technology-mediated communication may preclude or degrade access for those who

55. *See* Noam Lapidot-Lefler & Azy Barak, *The Benign Online Disinhibition Effect: Could Situational Factors Induce Self-Disclosure and Prosocial Behaviors?*, 9 CYBERPSYCHOL. (2015).

56. *See generally* Roy F. Baumeister, *A Self-Presentational View of Social Phenomena*, 91 PSYCHOL. BULL. 3 (1982).

57. The availability of a record also offers an opportunity to shore up faulty memories. At the same time, even when records are made, not all records are created equal, no record will be completely accurate or comprehensive, and records can be subject to interpretation. *See generally* MARY D. FAN, CAMERA POWER: PROOF, POLICING, PRIVACY, AND AUDIOVISUAL BIG DATA (2019); NEAL FEIGENSON & CHRISTINA SPIESEL, LAW ON DISPLAY: THE DIGITAL TRANSFORMATION OF LEGAL PERSUASION AND JUDGMENT (2009).

58. *See infra* Part II.I and accompanying text. *See generally* Jeffrey W. Treem et al., *Computer-Mediated Communication in an Age of Communication Visibility*, 25 J. COMPUTER-MEDIATED COMM. 44 (2020).

59. Ward, *supra* note 10 (Michigan Supreme Court Chief Justice McCormack: "A lot of people just never showed up. But if you can show up just by logging onto your smartphone and seeing what you can do, people are much more likely to try that . . . ."). *See also* JOINT TECHNOLOGY COMMITTEE QUICK RESPONSE BULLETIN, *supra* note 6, at 2 (discussing Arizona courts' experience of increased participation in eviction hearings that were moved online); Alex Sanchez & Paul Embley, *Access Empowers: How ODR Increased Participation and Positive Outcomes in Ohio*, NCSC TRENDS IN STATE COURTS 14, 18 (2020), https://www.ncsc.org/__data/assets/pdf_file/0019/42166/access_empowers_Sanchez-Embley.pdf (reporting that more than a third of defendants accessed the platform outside of traditional business hours); Galton, *supra*

lack the proper equipment, connectivity,[60] experience, or comfort.[61] One study found that disputants in Australia said that they preferred to resolve family issues using the phone rather than videoconferencing, in part because it was easier and more familiar.[62]

The degree of formality or informality offered by a particular mode of dispute resolution communication can also be significant. The formality and solemnity offered by traditional, in-person courtroom proceedings may provide a sense of justice to individual disputants or to the broader community. At the same time, while many lawyers are comfortable with courtroom decorum, some participants may be intimidated by the formal setting and therefore find it difficult to express themselves.[63] Video-conference interviews, trials, hearings, and mediations will often feel less formal and solemn than their in-person equivalents,[64] reducing the tension for some participants.

II. PSYCHOLOGY RELEVANT TO DISPUTE RESOLUTION CHOICES

We have seen that communication media vary significantly in the channels that are available for communication, degree of synchrony, potential for privacy or transparency, and accessibility, formality, or familiarity. These differences impact the ways that disputants, lawyers,

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note 12 (observing that virtual mediations decrease stress due to travel and allow decisionmakers with authority to settle to participate more readily).

60. BENNINGER ET AL., *supra* note 18, at 31, 75–79 (reporting on criminal defendants' access challenges); Bulinski & Prescott, *supra* note 19, at 236; Tarika Daftary-Kapur et al., *COVID-19 Exacerbates Existing System Factors That Disadvantage Defendants: Findings from a National Survey of Defense Attorneys*, 45 LAW & HUM. BEHAV. 81, 96 (2021) (finding that 29% of defense attorneys reported technological barriers); J.J. Prescott, *Improving Access to Justice in State Courts with Platform Technology*, 70 VAND. L. REV. 1993, 2011 (2017); Schmitz, *supra* note 6, at 286.

61. *See, e.g.*, Raymond A. Friedman & Steven C. Currall, *Conflict Escalation: Dispute Exacerbating Elements of E-Mail Communication*, 56 HUM. REL. 1325, 1336 (2003); Ingmar Geiger & Jennifer Parlamis, *Is There More to Email Negotiation than Email? The Role of Email Affinity*, 32 COMPUTERS HUM. BEHAV. 67, 73–74 (2014); Anne-Marie G. Hammond, *How Do You Write "Yes"?: A Study on the Effectiveness of Online Dispute Resolution*, 20 CONFLICT RESOL. Q. 261, 268 (2003); Guido Hertel et al., *Do Shy People Prefer to Send E-mail? Personality Effects of Communication Media Preferences in Threatening and Non-Threatening Situations*, 39 SOC. PSYCHOL. 231, 240–41 (2008); Adam N. Joinson, *Self-Esteem, Interpersonal Risk, and Preference for E-Mail to Face-to-Face Communication*, 7 CYBERPSYCHOL. & BEHAV. 472, 483–84 (2004); Brian H. Spitzberg, *Preliminary Development of a Model and Measure of Computer-Mediated Communication (CMC) Competence*, 11 J. COMP.-MEDIATED COMM. 629, 634 (2006).

62. Suzie Forell et al., *Legal Assistance by Video Conferencing: What is Known?*, 15 JUSTICE ISSUES 1, 2 (2011).

63. Bulinski & Prescott, *supra* note 19, at 219–20 (noting that courtrooms can be emotionally daunting, and litigants may fear arrest or need for immediate payments).

64. Mediations will also typically be less formal than courtroom proceedings, even when they are held in person.

and neutrals experience and participate in dispute resolution processes.

A. Focus and Fatigue

Whether a participant in a dispute resolution process is a client trying to negotiate a solution, a juror seeking to reach a fair verdict, a neutral trying to move parties towards justice, or an attorney hoping to help a client, it is important for them to carefully attend to the matter at hand. Understanding complex evidence, appreciating the sources of conflict, and generating creative solutions all require focus.

But human attention is limited – although we take in quite a lot of information, we also miss a lot. As much as we would like to believe otherwise, multitasking compromises focus,[65] and efforts to focus may cause fatigue or even burnout.[66] When we become fatigued, focus can wane, and the ability to make good judgments and ethical decisions decreases.[67] Too much focus on one thing can mean missing other important aspects of a problem.[68] Fatigue may also decrease our ability to regulate emotions[69] and weaken the ability to resist a proposed settlement or to otherwise say "no."[70]

Some aspects of communication media can enhance attention or minimize fatigue. Asynchronous communication, for example, affords the opportunity to choose when to process and respond to messages, to digest messages at a slower pace, to focus carefully or consult with others before responding, and to decide how much time and attention to devote to the exchange. Lawyers, disputants, or neutrals using asynchronous communications, therefore, may find it easier to pay attention to the minutiae of the communication and tire less than those

65. *See, e.g.*, Sophie Leroy, *Why Is It So Hard to Do My Work? The Challenge of Attention Residue When Switching Between Work Tasks*, 109 ORG. BEHAV. & HUM. DECISION PROCESSES 168 (2009); Melina R. Uncapher & Anthony D. Wagner, *Minds and Brains of Media Multitaskers: Current Findings and Future Directions*, 115 PNAS 9889 (2018).

66. *See* Lydia Nussbaum, *Mediator Burnout*, 34 OHIO ST. J. DISP. RES. 171, 174–75 (2019) (discussing broad variety of factors that may cause mediator burnout as well as cognitive and emotional problems caused by that burnout).

67. *See, e.g.*, Christopher M. Barnes et al., *Lack of Sleep and Unethical Conduct*, 115 ORG. BEHAV. & HUM. DECISION PROCESSES 169, 175 (2011); Shai Danziger et al., *Extraneous Factors in Judicial Decisions*, 108 PNAS 6889 (2011).

68. *See, e.g.*, Daniel J. Simons & Christopher F. Chabris, *Gorillas in Our Midst: Sustained Inattentional Blindness for Dynamic Events*, 28 PERCEPTION 1059 (1999).

69. *See, e.g.*, Mark Muraven et al., *Self-Control as Limited Resource: Regulatory Depletion Patterns*, 74 J. PERSONALITY & SOC. PSYCHOL. 774, 786 (1998).

70. *See* Jim Coben & Lela P. Love, *Trick or Treat? The Ethics of Mediator Manipulation*, DISP. RES. MAG., Fall 2010, at 17, 18 (noting potential for ethical abuse when mediators sometimes use hunger and prolonged negotiation to spur settlement).

who engage in faster-paced synchronous communication.[71] Mediators may be able to pick up on details that allow them to ask more effective questions, do a better job of reframing, or create more tailored proposals.[72]

The presence of fewer channels of communication in some processes can also help to focus attention. The absence of visual and auditory cues in written communication, for example, can mean that communicators are better able to concentrate on the content of the message.[73] Similarly, because telephone users are only focused on the audio and not trying to also consider facial expressions or worry about their own appearance, they may be able to pay better attention to the substance of the conversation.[74] This has led some mediators to prefer phone mediations to video-conference mediations.[75]

Some aspects of communication media will shift attention. A participant in a videoconference, for example, may focus more intently on the faces of the other participants, but necessarily less closely on full bodies or side views.[76] When the participant's own picture is visible, it may draw the participant's attention away from other aspects of the communication.[77] A participant in a phone call will have his attention drawn to vocalizations rather than to absent visual cues.

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71. *See, e.g.*, Lionel P. Robert & Alan R. Dennis, *Paradox of Richness: A Cognitive Model of Media Choice*, 48 IEEE TRANSACTIONS ON PROF. COMM. 10, 18 (2005).

72. Hammond, *supra* note 61, at 275.

73. *See, e.g.*, Vitaly J. Dubrovsky et al., *The Equalization Phenomenon: Status Effects in Computer-Mediated and Face-to-Face Decision-Making Groups*, 6 HUM. COMPUTER INTERACTION 119, 139–40 (1991).

74. *See, e.g.*, Robert & Dennis, *supra* note 71, at 18; Joseph B. Walther, *Computer-Mediated Communication: Impersonal, Interpersonal, and Hyperpersonal Interaction*, 23 COMM. RES. 3, 22 (1996). *See also* Adam M. Samaha, *Opening and Reopening: Dealing with Disability in the Post-Pandemic World*, SLATE (July 6, 2021), https://slate.com/technology/2021/07/pandemic-disability-reopening-essay.html (noting that videoconferencing "helped me direct audiences toward what I intended to communicate, rather than the [involuntary] movements and postures that often distract them.").

75. Kyle Persaud, *Telephone Mediation in an Age of Social Distancing: Does It Work?*, MEDIATE.COM (July 2020), https://www.mediate.com/articles/persaud-telephone-mediation.cfm.

76. Cara Salvatore, *May It Please the Camera: Zoom Trials Demand New Skills*, LAW360 (June 29, 2020, 3:41 PM), https://www.law360.com/articles/1278361/may-it-please-the-camera-zoom-trials-demand-new-skills; Miller, *supra* note 14.

77. *See, e.g.*, Ryan G. Horn & Tara S. Behrend, *Video Killed the Interview Star: Does Picture-In-Picture Affect Interview Performance?*, *in* 3 PERSONNEL ASSESSMENT & DECISIONS 51, 55 (2017). *See also* CAROLYN MCKAY, THE PIXELATED PRISONER: PRISON VIDEO LINKS, COURT "APPEARANCE" AND THE JUSTICE MATRIX 1, 136–42 (2018) (describing the effects of self-view on prisoners who participated in remote video proceedings). Note that some video-conferencing technologies allow the user to hide self-view. *See, e.g.*, Zoom, *Hiding or Showing My Video on My Display*, https://support.zoom.us/hc/en-us/articles/115001077226-Hiding-or-showing-my-video-on-my-display (last updated Mar. 23, 2021).

The characteristics of communication media can also create challenges for focus. Modes of communication with limits on visual channels of communication, for example, can present a particular temptation to multitask. Who has not checked their e-mail, a sports score, or a shopping website while participating in a videoconference or phone call? For this reason, neutrals and lawyers worry that videoconference participants will lose focus on the matters at hand.[78] Texting, too, is susceptible to multitasking as texts are also often fired off in the middle of another activity.

The singular type of attention that is required for videoconferencing may induce distinct fatigue. As many of us have experienced, our ability to pay attention can be particularly challenged when we are asked to stare at computer screens for too long. So-called "Zoom fatigue" is real.[79] While the phenomenon is still being studied, this fatigue appears to reflect several aspects of video communication. For example, there is the difficulty of trying to focus exclusively on a screen as opposed to letting our eyes wander around the room or to varying distances and the inability to move around a meeting space.[80] Videoconferencing typically involves much more close-up and sustained eye gaze and face-to-face views than what communicators would experience in person, and this intensity is present for all participants, even when they are not speaking.[81] Communication can be challenged by camera placement that can make seamless eye contact difficult.[82] When we are limited to focusing on faces, our brains may

78. Stephanie Parker & Jennifer Weizenecker, *Suggestions for Remote "Zoom" Jury Selection*, 5 JURY MATTERS (July 2020). The ready availability of electronic modes of communication can also tempt multitasking during in-person communication. Aparna Krishnan et al., *The Curse of the Smartphone: Electronic Multitasking in Negotiations*, 30 NEGOT. J. 191, 192–93 (2014).

79. Jeremy N. Bailenson, *Nonverbal Overload: A Theoretical Argument for the Causes of Zoom Fatigue*, 2 TECH., MIND, & BEHAV. 1 (2021); Julia Sklar, *"Zoom Fatigue" is Taxing the Brain. Here's Why That Happens*, NAT'L GEOGRAPHIC (Apr. 24, 2020), https://www.nationalgeographic.com/science/article/coronaviruz-zoom-fatigue-is-taxing-the-brain-here-is-why-that-happens; Liz Fosslien & Mollie West Duffy, *How to Combat Zoom Fatigue*, HARV. BUS. REV. (Apr. 29, 2020), https://hbr.org/2020/04/how-to-combat-zoom-fatigue; Libby Sander & Oliver Bauman, *Zoom Fatigue is Real – Here's Why Video Calls are So Draining*, IDEAS.TED.COM (May 19, 2020), https://ideas.ted.com/zoom-fatigue-is-real-heres-why-video-calls-are-so-draining/. It is possible that Zoom fatigue will lessen somewhat "once people learn to navigate the mental tangle video chatting can cause." Sklar, *supra* note 79.

80. Bailenson, *supra* note 79, at 4 (noting that video-conference "users are stuck in a very small physical cone, and most of the time this equates to sitting down and staring straight ahead").

81. *Id.* (noting that "regardless of who is speaking, each person is looking directly at the eyes of the other . . . people for the duration of the meeting (assuming one is looking at the screen).").

82. *See, e.g.*, David T. Nguyen & John Canny, *More Than Face-to-Face: Empathy Effects of Video Framing*, Proceedings of the 27th International Conference on Human Factors in Computing Systems 423, 426 (2009).

struggle as they try to gather data that may not be available.[83] Gallery view "challenges the brain's central vision, forcing it to decode so many people at once that no one comes through meaningfully, not even the speaker."[84] The self-view and self-critique it inspires can be taxing as well as distracting.[85] Communicators may also expend more effort to make sure that they are being seen or heard, to respond more intentionally (head nods, thumbs up) than they otherwise would, and to make themselves look directly at the camera.[86] Time delays and frozen screens add to the effort,[87] as may blue light,[88] the challenges of new or unfamiliar technology, and distracting background scenery or activities. Video-conference participants have surely found it distracting when attorneys, parties, witnesses, or members of a jury venire panel have appeared while lying in bed, exercising on a treadmill, or even from a hospital operating room.[89]

Finally, achieving the right degree of comfort with a given communication option can be important for attention. Discomfort – whether it is physical discomfort from sitting in a hard chair or overheated space in a courtroom, feeling intimidated by the surroundings or the technology, or confusion about how to change a screen view, raise a hand, or behave in court – can thwart attention. On the other hand,

83. Sklar, *supra* note 79. *See also* Ula Cartwright-Finch, *Control, Alt, Judge*, CORTEX CAPITAL (2020), https://www.cortexcapital.org/ (last visited Jan. 27, 2022).

84. Sklar, *supra* note 79. *See* Markus Bindemann et al., *Capacity Limits for Face Processing*, 98 COGNITION 177, 192–93 (2005).

85. Bailenson, *supra* note 79, at 4. In some cases, this self-critique may lead to useful insight into the signals a participant is sending. *See, e.g.*, Golann, *supra* note 14.

86. Bailenson, *supra* note 79, at 3–4. *See also* Emmalyn A. J. Croes et al., *Social Attraction in Video-Mediated Communication: The Role of Nonverbal Affiliative Behavior*, 36 J. SOC. & PERSONAL RELATIONSHIPS 1210, 1214 (2019) (finding that people speak louder in video-mediated communication than they do in person).

87. Sander & Bauman, *supra* note 79.

88. Jin-Xin Tao et al., *Mitochondria as Potential Targets and Initiators of the Blue Light Hazard to the Retina*, 2019 OXIDATIVE MED. & CELLULAR LONGEVITY at 1, 13 (2019); Zhi-Chun Zhao et al., *Research Progress About the Effect and Prevention of Blue Light on Eyes*, 11 INTERNAT'L J. OPHTHALMOL. 1999, 2002 (2018). *See also* Katherine Brooks, *Is Blue Light the Bad Guy?*, RIGHT AS RAIN – UW MED. (Oct. 28, 2019), https://rightasrain.uwmedicine.org/well/health/blue-light.

89. *See, e.g.*, Marie Fazio, *Plastic Surgeon Attends Video Traffic Court from Operating Room*, N.Y. TIMES (Feb. 28, 2021), https://www.nytimes.com/2021/02/28/us/california-surgeon-zoom-traffic-violation-court.html; Jacey Fortin, *When Court Moves Online, Do Dress Codes Still Matter?*, N.Y. TIMES (Apr. 15, 2020), https://www.nytimes.com//04/15/us/coronavirus-lawyers-court-telecommute-dress-code.html; Debra Cassens Weiss, *Lawyers are Dressing Way Too Casual During Zoom Conference Hearings, Judge Says*, ABA J. (Apr. 15, 2020), https://www.abajournal.com/news/article/lawyers-are-dressing-way-too-casual-during-zoom-hearings-judge-says; Andrew Wolfson, *Think a Court Cat Filter Is Weird? Try Virtual Court with Beer, Bikinis and Clients in Bed*, LOUISVILLE COURIER J. (Dec. 18, 2020), https://www.courier-journal.com/story/news/2020/12/18/amid-covid-19-pandemic-remote-court-hearings-bare-naked-truth/3932436001/.

too much comfort might lead some participants to forget the importance of the process and become disengaged—or even fall asleep.[90] Some have found that the remote setting can strike this balance fairly well. One judge who presided over remote jury trials during the pandemic was surprised to observe remote jurors as better able to focus. He posited that the courtroom "is a foreign environment for the jurors, and as a result, their minds might be on other things while in the courtroom (even pre-pandemic); but at home, they are in a place that they find safe."[91]

B. Rapport

Rapport plays a critically important role in communication and dispute resolution. The degree of connection people feel for one another positively impacts trust, persuasion, cooperation, disclosure, and other aspects of their relationship that are relevant to dispute resolution.[92] Negotiators, for example, are more likely to reach collaborative deals with those with whom they have a greater rapport.[93]

Rapport may flow from preexisting relationships[94] or it may develop as communicators get to know one another.[95] Posture and physical orientation such as facing each other, making eye contact, leaning forward, smiling, nodding, and expressing open body language can

90. Even judges have been known to fall asleep at trial. *See, e.g.*, State v. Johnson, 391 P.3d 711, 715 (Kan. App. 2017) (holding that trial judge falling asleep during trial constituted error).

91. Michael Pressman, *Remote Jury Trials: Reporting on Judge Matthew W. Williams's Experiences in King County, Washington*, JURY MATTERS (Feb. 2021), https://civiljuryproject.law.nyu.edu//. *See also* Mitchell A. Chester, *The Dynamic Opportunities and Responsibilities of Virtual Jury Trials*, JURY MATTERS (Oct. 2020), https://civiljuryproject.law.nyu.edu/tters/ (describing attorney who reported that "[t]he remote proceeding helped jurors focus better"); Honorable Philip Pro in California Daily Journal Podcast, at 34:30, https://www.dailyjournal.com//358135-calendars-and-pandemics-challenges-for-courts-justice-and-lawyers (describing an arbitrator and former federal judge who observed that videoconference hearings "force us to focus on what is really essential"). *See also* Hammond, *supra* note 61, at 276.

92. *See generally* JENNIFER K. ROBBENNOLT & JEAN R. STERNLIGHT, PSYCHOLOGY FOR LAWYERS: UNDERSTANDING THE HUMAN FACTORS IN NEGOTIATION, LITIGATION, AND DECISION MAKING (2d ed. 2021). *See also* Gaylen D. Paulson & Charles E. Naquin, *Establishing Trust via Technology: Long Distance Practices and Pitfalls*, 9 INTERNAT'L NEGOT. 229, 230 (2004).

93. *See generally* Morris et al., *supra* note 37. *See also* Jared R. Curhan et al., *What Do People Value When They Negotiate? Mapping the Domain of Subjective Value in Negotiation*, 91 J. PERSONALITY & SOC. PSYCHOL. 493, 495 (2006).

94. Janice Nadler & Donna Shestowsky, *Negotiation, Information Technology and the Problem of the Faceless Other*, *in* NEGOT. THEORY & RES. 145, 154 (Leigh L. Thompson ed., 2006).

95. *See, e.g.*, Don A. Moore et al., *Long and Short Routes to Success in Electronically Mediated Negotiations: Group Affiliations and Good Vibrations*, 77 ORG. BEHAV. & HUM. DECISION PROCESSES 22, 26 (1999); Morris et al., *supra* note 37, at 99.

contribute to developing rapport.[96] Subtle mimicry of the other person's facial expressions, speech patterns, and gestures can also help build rapport.[97]

Given that many of these means of building rapport are nonverbal, the presence of nonverbal communication channels can provide opportunities to foster rapport.[98] Those who meet in person often find it natural to engage in small talk, connect through nonverbal behaviors, make eye contact, and subtly mimic another's expressions and posture.[99] In addition to communicating with words, gestures, and looks, participants can also connect through tone of voice, touch, and even smell and taste. With respect to the sharing of food, experienced commercial mediator Jeremy Lack tells the story of a high-dollar complex business dispute between a publicly traded U.S. corporation and a large privately-owned French company.[100] Although the members of the two teams of negotiators started off poorly, even feuding over the

96. *See generally* DEBRA H. ROTTER & JUDITH A. HALL, DOCTORS TALKING WITH PATIENTS/PATIENTS TALKING WITH DOCTORS: IMPROVING COMMUNICATION IN MEDICAL VISITS (2d ed. 2006); *see also* Linda Tickle-Degnen & Robert Rosenthal, *The Nature of Rapport and its Nonverbal Correlates*, 1 PSYCHOL. INQUIRY 285, 291 (1990).

97. *See* Tanya L. Chartrand & Rick van Baaren, *Human Mimicry*, 41 ADVANCES EXPERIMENTAL SOC. PSYCHOL. 219, 227 (2009); Jessica L. Lakin & Tanya L. Chartrand, *Using Nonconscious Behavioral Mimicry to Create Affiliation and Rapport*, 14 PSYCHOL. SCI. 334, 337 (2003).

98. *See, e.g.*, Debby Damen et al., *The Effect of Perspective-Taking on Trust and Understanding in Online and Face-to-Face Mediations*, 29 GROUP DECISION & NEGOT. 1121, 1131 (2020) (finding that trust and feeling of being understood increased more from beginning to end of in-person interaction as compared to synchronous chat); Amiee L. Drolet & Michael W. Morris, *Rapport in Conflict Resolution: Accounting For How Face-To-Face Contact Fosters Mutual Cooperation in Mixed-Motive Conflicts*, 36 J. EXP. SOC. PSYCH. 26, 48 (2000) (finding that those who had initial conversations face-to-face showed more rapport than those who initially conversed by telephone); Paul W. Paese et al., *Caught Telling the Truth: Effects of Honesty and Communication Media in Distributive Negotiations*, 12 GROUP DECISION & NEGOTIATION 537, 554 (2003) (finding more liking for counterpart in person than in e-mail or phone). *See also* Ryan Davis, *A Tale of Two Zoom Trials*, LAW360 (Mar. 8, 2021), https://www.law360.com///-of-two-zoom-trials (describing an attorney who found it more difficult to build rapport in jury selection via video). On the other hand, the absence of a visual channel can sometimes mean that nonverbal signals that might *undermine* rapport (e.g., looking bored, appearing to have a side conversation, eye rolling) are not transmitted.

99. In a variety of communication, work, and educational settings, people tend to form more positive opinions of others when they connect with them in person. *See, e.g.*, Johannes M. Basch et al., *It Takes More Than a Good Camera: Which Factors Contribute to Differences Between Face-to-Face Interviews and Videoconference Interviews Regarding Performance Ratings and Interviewee Perceptions?*, 36 J. BUS. & PSYCHOL. 921, 921 (2020); Nikki Blacksmith et al., *Technology in the Employment Interview: A Meta-Analysis and Future Research Agenda*, 2 PERSONNEL & ASSESSMENT & DECISION 12, 20 (2016).

100. Jeremy Lack, *Tower of Babel*, *in* STORIES MEDIATORS TELL: WORLD EDITION 3 (Lela Love & Glen Parker eds., 2017). For additional examples of mediators' insights on the value of sharing food, see, e.g., Stephen P. Lagoy, *Cookies and Compromise: The Role of Food in Mediation*, UTBF.COM (Dec. 12, 2015), https://www.utbf.com/mediation/2015/12/cookies-and-compromise-the-role-of-food-in-mediation/; Scott J. Silverman, *Food for Thought: How Food Might*

language in which the mediation should be conducted, personal connection and the power of "un bon repas" (lunch) brought the disputants together and eventually led to a settlement and a new distributor agreement.[101] A broad range of communication channels can also facilitate a sense of "social presence," the feeling that communication participants are co-present with each other.[102]

Videoconferencing allows for some visual orienting, but when participants can only see each other's faces, it can be harder to establish rapport. First, it can be difficult to determine when each has finished speaking, making interruptions more common. Phone conversations, in contrast, tend to result in more equal speaking turns and greater vocal synchronization, which can lead to better coordination.[103] When many people are present online, informal side conversations are nearly impossible and it can sometimes be difficult to determine who is being spoken to. Rapport can also be hindered if there are technical glitches or delays in video or audio technology.[104] While eye contact can also be difficult to accomplish effectively in a videoconference,[105] researchers have found that the effects of "eye contact" do not de-

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Serve You *at a Mediation*, JAMSADR.COM (Oct. 23, 2018), https://www.jamsadr.com//2018/food-for-thought-how-food-might-serve-you-at-a-mediation.

101. Lack, *supra* note 100, at 12–14.

102. Jihyun Kim et al., *Broadening the Understanding of Social Presence: Implications and Contributions to the Mediated Communication and Online Education*, 65 COMPUTERS IN HUM. BEHAV., Dec. 2016, at 672, 672; McGinn & Croson, *supra* note 44, at 334; Ulrike Schultze & Jo Ann M. Brooks, *An Interactional View of Social Presence: Making the Virtual Other "Real"*, 29 INFO. SYSTEMS J. 707, 708 (2019); *see also* Susie Weller, *Using Internet Video Calls in Qualitative (Longitudinal) Interviews: Some Implications for Rapport*, 20 INTERNAT'L J. SOC. RES. METHODOL. 613, 623 (2017) (finding that feelings of co-presence were what mattered compared to physical presence). *See generally* J. SHORT ET AL., THE SOCIAL PSYCHOLOGY OF TELECOMMUNICATIONS (1976).

103. Maria Tomprou et al., *Speaking Out of Turn: How Video Conferencing Reduce Vocal Synchrony and Collective Intelligence*, 16 PLOS ONE, Feb. 2021, at 1, 10.

104. *See, e.g.*, Namkje Koudenburg et al., *Conversational Flow Promotes Solidarity*, 8 PLOS ONE, Nov. 2013, at 1, 5; Katrin Schoenenberg et al., *Why Are You So Slow? – Misattribution of Transmission Delay to Attributes of the Conversation Partner at the Far-End*, 72 INTERNAT'L J. HUM.-COMPUTER STUD. 477, 486 (2014). *See* BENNINGER ET AL., *supra* note 18, at 27–28 (finding that most of the criminal defense attorneys surveyed experienced technical difficulties of some kind in remote proceedings) and 33, 108–11 (finding that many perceived more difficulty in building relationships with their clients).

105. Our instinct is to look at the other person's face, but because eye contact via video is accomplished by looking at the camera, there can be a disconnect. Technology may eventually be able to correct for this. *See, e.g.*, Chih-Fan Hsu et al., *Look at Me! Correcting Eye Gaze in Live Video Communication*, 15 ACM TRANS. MULTIMEDIA COMPUTING, COMM. & APPLICATIONS 38, 38 (2019). *See generally* Leanne S. Bohannon et al., *Eye Contact and Video-Mediated Communication: A Review*, 34 DISPLAYS 177 (2013).

pend necessarily on the direction or meeting of eye gaze,[106] but also on "whether the observer has an experience of *being seen* by another person."[107] Even without perfect eye contact, then, video participants will still be able to experience mutual attending to the interaction.

Because a sense of responsiveness is central to feelings of rapport, the degree of synchrony can also be very significant. Synchronous communication can promote the smooth flow of exchange, allowing communicators to more readily give each other feedback, provide or seek clarifications, and acknowledge one another in real time.[108] Responsiveness can be more challenging for rapport when communication is asynchronous, particularly if expectations are misaligned. Even when participants know they are communicating asynchronously, their behavior and expectations may be in line with more synchronous communications—a "temporal synchrony bias."[109] If asynchronous communicators expect responses more quickly than is likely, rapport may be harmed.

While mode of communication can impact the development of rapport, rapport can still be developed across platforms, particularly with advance planning and practice, and with good equipment that minimizes glitches. Participants routinely develop relationships via computer-mediated communication media, though this development may evolve more slowly.[110] Indeed, one study found that while communi-

106. Myllyneva & Hietanen, *There Is More to Eye Contact Than Meets the Eye*, *supra* note 41, at 107 (finding that "the visibility of the other person's eyes, in fact, may not be necessary at all in order to observe the 'eye contact effect'").

107. *Id.* at 101 (emphasis added). *See also* Aki Myllyneva & Jari K. Hietanen, *The Dual Nature of Eye Contact: To See and To Be Seen*, 11 SOC. COGNITIVE & AFFECTIVE NEUROSCI. 1089, 1093 (2016). One judge has reported finding during the pandemic that "jurors reported a greater level of empathy for litigants after trial over remote technology than after in-person trials. He also reports that both attorneys and jurors reported a greater connection to each other over remote technology than has been the case in in-person trials." Pressman, *supra* note 91. *See also* Terri R. Kurtzberg et al., *The Effect of Screen Size and E-Communication Richness on Negotiation Performance*, 27 GROUP DECISION NEGOT. 573, 589 (2018).

108. *See, e.g.*, Judee K. Burgoon et al., *Deception and its Detection Under Synchronous and Asynchronous Computer-Mediated Communication*, 19 GROUP DECISION MAKING 345, 361 (2010) (finding that text-based communicators experienced more connection, receptivity, and shared understanding when their communication was synchronous as compared to asynchronous). Of course, it is also true that inept communicators might do more to damage rapport in a synchronous context than they would in an asynchronous setting.

109. Leigh Thompson & Janice Nadler, *Negotiating via Information Technology: Theory and Application*, 58 J. SOC. ISSUES 109, 117 (2002). E-mail and texting, while similar on many dimensions, differ as to expectations about the pace at which communication turn taking will occur. Jeffrey Loewenstein et al., *At a Loss for Words: Dominating the Conversation and the Outcome in Negotiation as a Function of Intricate Arguments and Communication Media*, 98 ORG. BEHAV. & HUM. DECISION PROCESSES 28, 29 (2005).

110. Susan Sprecher, *Initial Interactions Online-Text, Online-Audio, Online-Video, or Face-to-Face: Effects of Modality on Liking, Closeness, and Other Interpersonal Outcomes*, 31 COM-

cators' liking of and feelings of closeness to each other were slower to develop in text-based modes of communication, over time there were no significant differences among in-person, audio, and video-conference communications.[111] Similarly, a study comparing video-conference and in-person attorney-client consultations in the criminal setting found no differences in clients' perceptions of their working relationship with their attorneys, their trust in their attorneys, their sense of procedural justice, or their satisfaction with the interaction.[112] In the trial setting, some lawyers have found that videoconferencing can actually provide a more intimate connection with other participants than in-person interactions. One lawyer described videoconferencing as being "able to create an emotional, face-to-face connection with video participants, in many cases much better than being in a courtroom 15-20 feet away," noting that "Zoom-connected lawyers can see facial expressions and emotions better than in the courtroom," and that "the mental connection has been exponentially improved and is greater than previously thought possible."[113] The development of rapport will also depend on prior relationships and individual differences, including potential differences between attorneys and clients.[114]

PUTERS HUM. BEHAV., Feb. 2014, at 190, 194; Joseph B. Walther et al., *Interpersonal Effects in Computer-Mediated Interaction: A Meta-Analysis of Social and Antisocial Communication*, 21 COMM. RES. 460, 477 (1994); Walther, *Theories of Computer-Mediated Communication*, *supra* note 25, at 458. *See also* Stephanie A. Andel et al., *Do Social Features Help in Video-Centric Online Learning Platforms? A Social Presence Perspective*, 113 COMPUTERS HUM. BEHAV., Dec. 2020, at 1, 2, 7; Ilan Bronstein et al., *Rapport in Negotiation: The Contribution of the Verbal Channel*, 56 J. CONFLICT RESOL. 1089, 1093 (2012).

111. Sprecher, *supra* note 110, at 194–95. *See also* Walther et al., *Let Me Count the Ways*, *supra* note 37, at 57. *See also* Felissa Goldstein & Dehra Glueck, *Developing Rapport and Therapeutic Alliance During Telemental Health Sessions with Children and Adolescents*, 26 J. CHILD & ADOLESCENT PSYCHOPHARMACOL. 204, 204 (2016) (finding that the "emerging evidence base and clinical experience suggest that teleclinicians can, and do, build rapport and establish a therapeutic alliance during telemental health sessions with youth and families").

112. Brendan R. McDonald et al., *The Attorney-Client Working Relationship: A Comparison of In-Person Versus Videoconferencing Modalities*, 22 PSYCHOL., PUB. POL'Y, & L. 200, 206 (2016) (71% happy to consult via video again; 86% thought equivalent to or better than in person; most would recommend). *See also* Robert J. Reese et al., *The Effects of Telepsychology Format on Empathic Accuracy and the Therapeutic Alliance: An Analogue Counselling Session*, 16 COUNSELLING & PSYCHOTHERAPY RES. 256, 256 (2016) (finding no differences in empathic accuracy between in-person and video-conference counseling). *But see* Daftary-Kapur et al., *supra* note 60, at 87 (finding that 20% of defense attorneys reported that technical problems and time constraints associated with remote communication during the pandemic have made it "harder to develop the quality of relationship with clients that contributes to effective representation").

113. Chester, *supra* note 91.

114. *See infra* notes 174–76 and accompanying text.

C. Emotion

Emotions are inevitable in dispute resolution and have the potential to impact both adjudicative and non-adjudicative processes in many ways.[115] Anger may derail productive discussions or affect a jury's evaluation. Fear may give one side an advantage over the other in a mediation. Grief may make it hard for a party to engage in the process. Anxiety may make it difficult for people to express themselves. On the other hand, expressing remorse might help mitigate anger. Hope for a better future might pave the way toward an integrative agreement. Sharing emotions might allow disputants to understand one another better, bring disputing parties together, or help one side persuade the other or a neutral.

These inevitable emotions can be expressed through any mode of communication.[116] Studies of online text-based negotiation, for example, find that negotiators convey both positive and negative emotions and that expressions of emotion influence demands, concessions, cooperation, and the likelihood of impasse.[117] Eighty-two percent of participants in a study of text-based mediation reported "having no difficulty expressing their emotions, and mediators confirmed this."[118] But the communication of emotion will play out somewhat differently across media. Studies of video communication, for example, have found that seeing one's own image can intensify emotion.[119] In addition, smaller images tend to carry less emotional impact than larger

115. *See generally* ROBBENNOLT & STERNLIGHT, *supra* note 92.

116. *See, e.g.*, Daantje Derks et al., *The Role of Emotion in Computer-Mediated Communication*, 24 COMPUTERS HUM. BEHAV. 766 (2008); Michele Griessmair & Sabine T. Koeszegi, *Exploring the Cognitive-Emotional Fugue in Electronic Negotiations*, 18 GROUP DECISION & NEGOT. 213 (2009); Archana Krishnan & Daniel Scot Hunt (2019); *TTYL :-) . . . Nonverbal Cues and Perceptions of Personality and Homophily in Synchronous Mediated Communication*, 24 INFO., COMM. & SOC'Y 85 (2019). *See also* Chun-Ting Hsu et al., *Enhanced Emotional and Motor Responses to Live Versus Videotaped Dynamic Facial Expressions*, 10 SCI. REP. 16825 (2020). *See generally* Jari K. Heitanen, *Affective Eye Contact: An Integrated Review*, 9 FRONTIERS PSYCHOL. 1587 (2018).

117. *See, e.g.*, Liuba Y. Belkin et al., *Emotional Displays in Online Negotiations: When Anger Helps and Happiness Hurts*, ACAD. MGMT. (2012); Ray Friedman et al., *The Positive and Negative Effects of Anger on Dispute Resolution: Evidence from Electronically Mediated Disputes*, 89 J. APPLIED PSYCHOL. 369 (2004); Michael J. Hine et al., *The Role of Emotion and Language in Dyadic E-negotiations*, 18 GROUP DECISION NEGOT. 193 (2009); Gerben A. Van Kleef et al., *The Interpersonal Effects of Emotions in Negotiations: A Motivated Information Processing Approach*, 87 J. PERSONALITY & SOC. PSYCHOL. 510 (2004); Gerben A. Van Kleef et al., *Supplication and Appeasement in Conflict and Negotiation: The Interpersonal Effects of Disappointment, Worry, Guilt, and Regret*, 91 J. PERSONALITY & SOC. PSYCHOL. 124 (2006).

118. Hammond, *supra* note 61, at 277–78.

119. *See, e.g.*, Jurgen Wegge, *Communication via Videoconference: Emotional and Cognitive Consequences of Affective Personality Dispositions, Seeing One's Own Picture, and Disturbing Events*, 21 HUMAN-COMPUTER INTERACTION 273, 279 (2006).

images,[120] making it likely that variations in video setups will impact the communication of emotion.

When communication channels are plentiful, there are necessarily more avenues through which emotions may be conveyed. Parties who communicate in person, for example, might use nonverbal cues to underscore their verbally expressed emotions, intensify or tone down their expression of emotion, reveal unexpressed emotions, or cover an underlying emotional reaction.[121] Nonetheless, when communication channels are more limited, communicators adapt to the nature of the medium.[122] For example, people tend to express their emotions more directly and explicitly when communicating in writing.[123] Recipients make emotional inferences from characteristics of the text.[124] In some textual contexts, people use emoticons and other graphics, text formatting, tone indicators, and other signals to facilitate the communication of emotion.[125] These kinds of enhancements are not yet widely used in legal settings.[126] For some, they may not be sufficient. One study showed that while most participants found online chats similar in effectiveness to face-to-face communication, those who did not felt that "the process seemed artificial, detached, and devoid of emotional interplay."[127]

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120. Maurizio Codispoti & Andrea De Cesarei, *Arousal and Attention: Picture Size and Emotional Reactions*, 44 PSYCHOPHYSIOL. 680, 684–85 (2007); Byron Reeves et al., *The Effects of Screen Size and Message Content on Attention and Arousal*, 1 MEDIA PSYCHOL. 49, 51 (1999). *See also* Wendy Heath & Bruce D. Grannemann, *How Video Image Size Interacts with Evidence Strength, Defendant Emotion, and the Defendant-Victim Relationship to Alter Perceptions of the Defendant*, 32 BEHAV. SCI. & L. 496, 503 (2014).

121. Derks et al., *supra* note 116, at 768.

122. *See supra* notes 32–38.

123. *See, e.g.*, Derks et al., *supra* note 116, at 776; Pesendorfer & Koeszegi, *supra* note 43, at 144.

124. *See, e.g.*, Hayley Blunden & Andrew Brodsky, *Beyond the Emoticon: Are There Unintentional Cues of Emotion in Email?*, 47 PERSONALITY & SOC. PSYCHOL. BULL. 565 (2021) (finding that communication errors such as typos amplify perceived emotion).

125. *See supra* notes 35–36. *See also* Jon Linden, *Face to Face Versus On-Line Facilitation: What to Put at the World Trade Center Site?*, MEDIATE (Oct. 2002), https://www.mediate.com/articles/linden13.cfm (observing that mediation participants were "extremely well able to communicate their feelings" via text). Designers might eventually be able to combine existing technological channels with wearables that give additional cues about the wearer's emotions. *See* Alyson Carrel & Noam Ebner, *Mind the Gap, Bringing Technology to the Mediation Table*, 2019 J. DISP. RES. 1, 31.

126. Ebner et al., *supra* note 42, at 92.

127. Hammond, *supra* note 61, at 275 (perceivers in simulated mediations can discern emotion cues in text). In another study, a minority of mock jurors "perceived [a] loss of emotional intensity" in video testimony. Louise Ellison & Vanessa E. Munro, *A 'Special' Delivery? Exploring the Impact of Screens, Live-Links and Video-Recorded Evidence on Mock Juror Deliberation in Rape Trials*, 23 SOC. & LEGAL STUD. 3, 14–15 (2014).

Even when people believe they have communicated their emotions effectively, the lack of nonverbal and vocal signals in written communication sometimes prevents accurate transmission of emotions. Written messages are not always read with the same inflection, emphasis, pauses, or gestures that the writers hear or see in their heads as they write.[128] Accordingly, attempts to communicate a particular emotion (perhaps sarcasm or humor or anger) may fail and recipients may misinterpret its meaning (perhaps hearing anger where it was not intended).[129] Importantly, the participants are not likely to fully appreciate the disconnect.[130]

The asynchronous nature of most written forms of communication presents both opportunities and challenges for the communication of emotion. Participants, for example, will be able to capitalize on the asynchronous nature of most written communication to take the time to express themselves more articulately.[131] Asynchronous text-based communication, in addition, may heighten the possibility that participants will deliberately convey an emotion – real or not – for strategic purposes.[132] In synchronous communication, however, emotional expression is likely to be more spontaneous and less controlled.

Asynchrony also impacts the management of emotions. On the one hand, reducing feelings of social awareness may be beneficial in tamping down emotions in "emotionally charged" disputes.[133] When communication is slower, people may be better able to control their emotions, think them through, and manage them as necessary.[134] In one study of simulated text-based mediations, participants "observed that having the time to respond meant they could control the urge to respond in anger and could make more considered contributions."[135] Reduced feelings of social awareness, however, may also make it eas-

128. Justin Kruger et al., *Egocentrism over Email: Can We Communicate As Well As We Think?*, 89 J. PERSONALITY & SOC. PSYCHOL. 925, 926 (2005). *See also* Terri R. Kurtzberg et al., *Humor as a Relationship-Building Tool in Online Negotiations*, 20 INT'L J. CONFLICT MGMT. 377, 379–80 (2009); Emily Pronin et al., *Understanding Misunderstanding: Social Psychological Perspectives*, *in* HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT 636, 644 (Thomas Gilovich et al. eds., 2002) (describing "tapping" study).

129. Kruger et al., *supra* note 128, at 926.

130. *Id.*

131. Derks et al., *supra* note 116, at 771.

132. *Id.* at 779.

133. McGinn & Croson, *supra* note 44, at 344.

134. Even when mediators handle in-person mediations, many prefer to work primarily or exclusively in caucus precisely in order to avoid emotional confrontations and to allow disputants to think through their responses to the other sides' offers, rather than reacting immediately and emotionally. *See* Welton, *supra* note 41, at 184. ROBBENNOLT & STERNLIGHT, *supra* note 92, at 71–76 (discussing the management of emotions).

135. Hammond, *supra* note 61, at 277.

ier to express negative emotions as the communicator may feel less empathy towards the other person.[136]

In light of these dynamics, some suggest that emotions may be better handled in remote negotiation and mediation contexts.[137] Some judges have also expressed enthusiasm for online hearings, as compared to in-person hearings, in part because they can better keep the hearing "on track" and avoid participants' emotional outbursts.[138] On the other hand, some commentators, neutrals, and attorneys believe that the disputants must work through their emotions together in order to reach a lasting resolution of the dispute.[139]

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136. Pesendorfer & Koeszegi, *supra* note 43, at 144. *See generally* Susan A. Bandes & Neal Feigenson, *Empathy and Remote Legal Proceedings*, 51 SW. L. REV. 20 (2021).

137. *See, e.g.*, Ebner et al., *supra* note 42, at 431 (observing that "[e]mail negotiators rely more heavily on logical argumentation and the presentation of facts, rather than emotional or personal appeals"). *See also* Galton, *supra* note 12 (reporting that participants, parties, and counsel are noticeably calmer in virtual mediations as compared to in-person mediations); Colin Rule, *New Mediator Capabilities in Online Dispute Resolution*, MEDIATE.COM (Dec. 2000), https://www.mediate.com/articles/rule.cfm (expressing the view that asynchronous interactions may help parties control their emotions more effectively).

138. Honorable Paula L. Feroleto, a state court judge in New York, observed that remote attorneys did not talk over each other as often as they do in live hearings. *ABA: Trials and Hearings in the COVID-19 Pandemic Era: Virtual or In-Person*, ABA, https://www.americanbar.org/events-cle/ecd/ondemand/402754834/ (last visited Jan. 27, 2022). Judges may also hope to use the "mute" function to cut off emotional outbursts they find unproductive. Joe Patrice, *Fun with Mute Buttons: Civil Rights Violation Edition*, ABOVE THE LAW (July 21, 2020, 3:01 PM), https://abovethelaw.com/2020/07/fun-with-mute-buttons-civil-rights-violation-edition/; Emma Rowden & Anne Wallace, *Remote Judging: The Impact of Video Links on the Image and the Role of the Judge*, 14 INTERNAT'L J. L. IN CONTEXT 504, 518 (2018) (observing that judicial muting may not make for an ideal process of justice). On judges and emotion, see generally, SHARYN ROACH ANLEU & KATHY MACK, JUDGING AND EMOTION: A SOCIO-LEGAL ANALYSIS (2021).

139. Family lawyer and mediator Mary Banham-Hall explains:

> Frequently people think they are arguing about a specific issue or point of law. More often the root of the problem is emotional, fear and mistrust . . . . So when it is important to sort something out – why ask your mediator to try and do it with one arm tied behind their back and a patch over one eye, if not both? It's like going to the gym and sitting in the changing room with your coat on, refusing to meet your coach except via a screen. Why would you?

Banham-Hall, *supra* note 18. JAMS Mediator Jay Gandhi, a former federal magistrate judge who specializes in major complex commercial disputes, believes the online approach can work well for disputes that lend themselves to risk analysis between key decisionmakers. But when the emotional temperatures in the case are high, he recommends in-person mediations because "you need that X-factor" – where the mediator can use their presence to build trust and rapport. *Remote Mediation: The Good, the Bad, and the Practical: An Interview with JAMS Neutral Judge Jay C. Gandhi (Ret.)*, JAMS (Aug. 14, 2020), https://www.jamsadr.com/blog/2020/podcast-remote-mediation-the-good-the-bad-and-the-practical-an-interview-with-jams-neutral-judge-jay-c-gandhi-ret.

D. Disclosure of Information

Disclosing and obtaining information is central to dispute resolution. Advocates provide information to try to convince the factfinder to issue a decision in their favor, to persuade their counterparts of their position, or to sway another to agree to their terms. They seek information from opponents to support their own positions. Advocates and the court rely on prospective jurors to disclose information in voir dire, and attorneys and disputants expect neutrals to disclose information about potential conflicts of interest.[140] Negotiators may also exchange information in an effort to work together to try to find common ground or collaborative solutions. In any setting, participants may choose not to disclose certain information, perhaps fearing that the disclosure would be harmful to their interests. While all communication methods allow for the exchange of information, differences in media may impact the quantity and quality of that information.

It may seem tautological that using more channels of communication allows for greater exchange of information. Communicators can use body language, facial expressions, tone of voice, and even touch to convey information and meaning.[141] As we have already seen, it can be easier to accurately convey and detect emotions using multiple channels of communication.[142] Audio can be an efficient way to exchange information because people tend to "talk faster than they write."[143]

It is overly simplistic, however, to say that more channels of communication always lead to better disclosure.[144] Participants with preexisting positive relationships may be able to more effectively use fewer channels to exchange a great deal of information.[145] Communicators also adapt to using modes of communication with fewer chan-

140. Such disclosures may be required by pertinent codes of conduct. *See, e.g.*, Judicial Code of Conduct for United States Judges, Canon 3.

141. An early study by Albert Mehrabian is often miscited to support the idea that 93% of communication is nonverbal – that is an overstatement. *See, e.g.*, David Lapakko, *Communication is 93% Nonverbal: An Urban Legend Proliferates*, 34 COMMUN. & THEATER ASSOC. OF MINN. J., Summer 2007, at 7, 7–8. It is certainly true, however, that a great deal of information can be provided through nonverbal channels.

142. *See supra* Part II.C.

143. Thompson & Nadler, *supra* note 109, at 112. This is so even though people also tend to engage in more "non-task-related communication" in in-person interactions. *Id.* at 115. *See also* Ingmar Geiger, *Communication Media and Negotiation: A Review*, *in* HANDBOOK OF GROUP DECISION & NEGOTIATION (D.M. Kilgour & C. Eden eds., 2019) [hereinafter Geiger, *Communication Media and Negotiation*] (reviewing studies and concluding that audio channels convey more).

144. *See* Dodson et al., *supra* note 12, at 15 (suggesting that remote technology may be just as effective as in-person meetings for many communication purposes).

145. Nadler & Shestowsky, *supra* note 94, at 155–61.

nels by asking more direct questions to make up for cues that might otherwise be missed.[146] At times, the added richness of a communication medium can even be a distraction. If the goal is to communicate purely factual objective information, it can be beneficial to use a simple text-based method that is less likely to get bogged down in emotion or by tangents.[147] Reliance on leaner media may also increase information exchange by encouraging more equal participation by lower-status individuals.[148]

Synchrony can also either boost or curb the effective exchange of information. On the one hand, synchronous communication allows for quicker corrections and follow-up, particularly when communicators are able to "read" each other's reactions. If a statement is misunderstood or received badly, the communicator has an opportunity to immediately clarify or make repairs, rather than risk having a misconception linger.[149] Asynchronous processes, on the other hand, offer participants the opportunity to think through their communication in more detail, allowing for clearer and more thoughtful responses. Asynchrony makes it both more likely that responses will include information that otherwise might have been neglected in the moment and less likely that communicators will inadvertently disclose information.[150] One study found that e-mail negotiators were much more likely than in-person negotiators to make offers that included multiple issues.[151] On the other hand, one study found that the asynchronous e-mail process tended to cause negotiators to use the process merely to persuade, rather than to learn about their counterpart's perspective on a joint problem.[152]

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146. *See, e.g.*, Pesendorfer & Koeszegi, *supra* note 43, at 153; Tidwell & Walther, *supra* note 37, at 331–38.

147. *See, e.g.*, Amira Galin et al., *E-Negotiation Versus Face-to-Face Negotiation: What Has Changed – If Anything?*, 23 COMPUTERS IN HUM. BEHAV. 787, 789 (2007).

148. Sara Kiesler & Lee Sproull, *Group Decision Making and Communication Technology*, 52 ORG. BEHAV. & HUM. DECISION PROCESSES 96, 109 (1992) (finding more equal distribution of participation via e-mail). This is consistent with the experiences of some judges and mediators. *See, e.g.*, Golann, *supra* note 14, at 84–85 (reporting that mediators have experienced greater party participation in video mediation); Ward, *supra* note 10 (Michigan Supreme Court Chief Justice Bridget Mary McCormack: "everybody's Zoom boxes are kind of the same size. There's something equalizing about that."). *See also* Anita D. Bhappu et al., *Media Effects and Communication Bias in Diverse Groups*, 70 ORG. BEHAV. & HUM. DECISION PROCESSES 199, 204 (1997).

149. Loewenstein et al., *supra* note 109, at 35–36; Thompson & Nadler, *supra* note 109, at 117.

150. *See, e.g.*, Ebner et al., *supra* note 42, at 101.

151. Morris et al., *supra* note 37, at 91. Asynchronous discussions of complex proposals, however, may increase the likelihood that one or more points will get dropped somewhere in the chain of communications. Friedman & Currall, *supra* note 61, at 1338.

152. Anne Marie Bülow, *The Double Monologue Principle: Argumentation in Email Negotiation*, SSRN (July 31, 2011), http://ssrn.com/=1899225 (manuscript at 2).

The degree to which communicators believe a process to be private, formal, or familiar can impact the extent to which they seek or disclose information. The perception of privacy, for example, can convince disputants to share information that they might otherwise keep to themselves.[153] Similarly, feelings of anonymity or invisibility may induce some people to disclose more information than they would if they had to make the disclosure in a more public or co-present posture.[154] Such disclosures can be particularly important in the context of negotiation or mediation, where disputants often need to exchange sensitive information with one another to reach creative solutions. By contrast, when communicators fear that a seemingly private setting (such as a video-conference breakout room) may not really be private, they may fail to provide information that could have been helpful. These feelings of privacy can be even more important for information disclosure than the medium of communication that is employed. One study compared communication via video, in person in a private setting, and in person in a public setting. The video and private in-person communications facilitated similar levels of disclosure, and both resulted in more disclosure than communication that occurred in person in a public place.[155] On the other hand, in some instances, participants may *want* publicity or transparency – to have their voices heard, to make a particular point, or to clear their name. In such situations, they may want to use communication media that prioritize transparency.[156]

People may also be more forthcoming with sensitive information when they feel more comfortable. There is evidence that both adults and children tend to be equally or more comfortable in remote inter-

153. *See, e.g.*, Nancy E. Frye & Michele M. Dornisch, *When Is Trust Not Enough? The Role of Perceived Privacy of Communication Tools in Comfort with Self-Disclosure*, 26 COMPUTERS HUM. BEHAV. 1120, 1121, 1125 (2010); Charles J. Holahan & Karl A. Slaikeu, *Effects of Contrasting Degrees of Privacy on Client Self-Disclosure in a Counseling Setting*, 24 J. COUNSELING PSYCHOL. 55, 58 (1977); Adam N. Joinson & Carina B. Paine, *Self-Disclosure, Privacy, and the Internet*, *in* OXFORD HANDBOOK OF INTERNET PSYCHOLOGY 237, 241 (Adam N. Joinson et al. eds., 2007).

154. Cathlin V. Clark-Gordon et al., *Anonymity and Online Self-Disclosure: A Meta-Analysis*, 32 COMMUNICATION REP. 98, 99 (2019); Adam N. Joinson, *Self-Disclosure in Computer-Mediated Communication: The Role of Self-Awareness and Visual Anonymity*, 31 EUR. J. SOC. PSYCHOL. 177, 188 (2001). *See also* John Suler, *The Online Disinhibition Effect*, 7 CYBERPSYCHOL. & BEHAV. 321, 322 (2004).

155. Brandy M. Jenner & Kit C. Myers, *Intimacy, Rapport, and Exceptional Disclosure: A Comparison of In-Person and Mediated Interview Contexts*, 22 INT'L J. SOC. RES. METHODOL. 165, 169 (2019).

156. Similar concerns may influence participants' decisions about whether to choose more transparent litigation or less transparent arbitration or more transparent trial over less transparent private settlement.

views as compared to in-person interviews.[157] Anecdotally, judges, mediators, and jury consultants have observed people to reveal more information in online settings where they felt more comfortable.[158] In contrast, discomfort with technology or with a formal setting might inhibit willingness to engage, hinder disclosure, or interfere with a communicator's ability to convey information articulately.[159]

E. Participants' Positive and Negative Behaviors

Many have wondered how changes in communication media may impact the likelihood that participants will behave cooperatively, adversarially, or honestly with one another and whether conflicts are likely to evolve, escalate, or de-escalate differently via different modes of communication.[160] The research reveals complex answers to these questions.

As an initial matter, some research suggests that certain technology-mediated communication may be more likely to result in feelings of social distance or lack of social presence; induce greater feelings of anonymity, facelessness, or invisibility; or weaken perceptions of so-

157. Dierdre Brown et al., *Tele-Forensic Interviewing to Elicit Children's Evidence—Benefits, Risks, and Practical Considerations*, 27 PSYCHOL., PUB. POL'Y, & L. 17, 19, 22 (2021); Weller, *supra* note 102, at 618 (finding that video-conference interviews are "less daunting" and intrusive for participants). The courtroom experience can be particularly intimidating for children. *See generally* Saywitz & Nathanson, *supra* note 28. *See also* Milfred D. Dale & Desiree Smith, *Making the Case for Videoconferencing and Remote Child Custody Evaluations (RCCES): The Empirical, Ethical, and Evidentiary Arguments for Accepting New Technology*, 27 PSYCHOL., PUB. POL'Y, & L. 30, 37 (2021) (reviewing studies).

158. *See, e.g.*, Davis, *supra* note 98 (citing litigation consult who reported that remote jurors felt more comfortable and were therefore "more candid . . . during jury selection"); Linden, *supra* note 125 (noting that people who participated in online discussions arising out of the World Trade Towers disaster from the comfort and privacy of their own homes achieved a degree of "virtual intimate privacy" and comfort that facilitated open discussion); Pressman, *supra* note 91 (describing a judge who opined that remote potential jurors shared more in voir dire than they would have in-person because they felt more comfortable); Allie Reed & Madison Alder, *Virtual Hearings Put Children, Abuse Victims at Ease in Court*, BLOOMBERG LAW (July 23, 2020, 3:45 AM), https://news.bloomberglaw.com/daily-tax-report/virtual-hearings-put-children-abuse-victims-at-ease-in-court?context=search&index=3 (describing how an eight year old girl was comfortable enough during a remote interview that she showed off her outfit, danced and sang for the interviewer, and talked openly about her family situation); Ward, *supra* note 10 (reporting Michigan Chief Justice Bridget Mary McCormack as noting that "[w]hen you are in the comfort of your own home, where you feel safe and secure, it's easier to feel confident in letting the court know what's on your mind."). *See also* BECKY HAMLYN ET AL., HOME OFFICE U.K., ARE SPECIAL MEASURES WORKING? EVIDENCE FROM SURVEYS OF VULNERABLE AND INTIMIDATED WITNESSES 112 (2004) (finding that measures, including video, enabled witnesses to provide testimony that they otherwise would not have been able or willing to provide).

159. *See, e.g.*, Frye & Dornisch, *supra* note 153, at 1124.

160. *See generally, e.g.*, Andrea Kupfer Schneider & Sean A. McCarthy, *Choosing Among Modes of Communication*, *in* NEGOTIATION ESSENTIALS FOR LAWYERS (Andrea Kupfer Schneider & Chris Honeyman eds., 2019).

cial cues or the salience of social norms.[161] These effects, in turn, may free participants to behave in more antisocial ways:[162] to make more sinister attributions about others,[163] cooperate less,[164] engage in more hard bargaining,[165] make more inappropriate comments or engage in "flaming,"[166] and lie to each other.[167] Participants may be more likely to "burn bridges" and test one another via e-mail – "[i]f I don't hear from you in 1 hour, then I am going to assume that you don't want to reach an agreement."[168]

Many spontaneous lies may flow from the quick back-and-forth of synchronous communication.[169] Asynchronous communication, in

161. *See* Nadler & Shestowsky, *supra* note 94, at 152. Video communications are less likely to create feelings of anonymity than might texting or e-mail.

162. *See generally* Kiesler & Sproull, *supra* note 148; *see also* Alice F. Stuhlmacher & Maryalice Citera, *Hostile Behavior and Profit in Virtual Negotiation: A Meta-Analysis*, 20 J. BUS. & PSYCHOL. 69, 71–72 (2005).

163. *See, e.g.*, Thompson & Nadler, *supra* note 109, at 1124.

164. *See, e.g.*, Drolet & Morris, *supra* note 98; Morris et al., *supra* note 37.

165. Geiger, *Communication Media and Negotiation*, *supra* note 143, at 11. *See also* Zoe I. Barsness & Anita D. Bhappu, *At the Crossroads of Culture and Technology: Social Influence and Information-Sharing Processes During Negotiation*, *in* THE HANDBOOK OF NEGOTIATION AND CULTURE 350, 363 (Michele J. Gelfand & Jeanne M. Brett eds., 2004) ("The use of hard tactics is significantly more frequent in e-negotiation, while the use of both soft and authority-related tactics is more frequent in face-to-face negotiation."). Greater perceived distance might also license negotiators to more freely discontinue negotiations. Taketoshi Hatta & Ohbuchi Kenichi, *Effects of Visual Cue and Spatial Distance on Exitability in Electronic Negotiation*, 24 COMPUTERS HUM. BEHAV. 1542, 1548 (2008).

166. Kiesler & Sproull, *supra* note 148, at 103–04 (finding that the lack of social cues in written communications may encourage more "flaming," i.e., insulting comments).

167. *See, e.g.*, Bella M. DePaulo et al., *Lying in Everyday Life*, 70 J. PERSONALITY & SOC. PSYCH. 979, 985, 992 (1996) (finding lying more common in phone calls than in person or by e-mail); Jeffery T. Hancock et al., *Deception and Design: The Impact of Communication Technology on Lying Behavior*, 6 CHI 129, 132 (2004) (finding lying more common in phone calls and less common via e-mail than in person); Kevin W. Rockmann & Gregory B. Northcraft, *To Be or Not to Be Trusted: The Influence of Media Richness on Defection and Deception*, 107 ORG. BEHAV. & HUM. DECISION PROCESSES 106, 118–19 (2008); Lyn M. Van Swol et al., *Deception, Detection, Demeanor, and Truth Bias in Face-to-Face and Computer-Mediated Communication*, 42 COMM. RES. 1116, 1136 (2015) (finding no difference in overall deception rates in text-based chat or in-person communication but finding that lies of commission were potentially more likely in chat and lies of omission were more common in in-person communication). *Cf.* Monica T. Whitty & Siobhan E. Carville, *Would I Lie to You? Self-Serving Lies and Other-Oriented Lies Told Across Different Media*, 24 COMPUTERS HUM. BEHAV. 1021, 1025–26 (2008) (finding that participants predicted they would tell the most lies via e-mail, then by phone, with the fewest in person). Participants may also *believe* that others will lie more often in technology-mediated communication which may lead them to behave more skeptically. *See, e.g.*, Catalina L. Toma et al., *Lies in the Eye of the Beholder: Asymmetric Beliefs About One's Own and Other's Deceptiveness in Mediated and Face-to-Face Communication*, 45 COMM. RES.1167, 1168 (2018).

168. Thompson & Nadler, *supra* note 109, at 118.

169. Many lies are spontaneous. DePaulo et al., *supra* note 167, at 991.

contrast, affords the chance to craft more honest responses.[170] But asynchronous communication can also foster more deliberate lies by providing time for planning.[171]

In addition, the degree of privacy or transparency that a process is perceived to provide is also likely to influence participants' inclinations toward or away from bad behavior. Transparency and written records may disincline participants to behave badly.[172] More privacy, by contrast, might be less constraining. Online media may also offer more opportunity for participants to look at notes or seek help from other sources, even when inappropriate.[173]

While these general tendencies are interesting and important to keep in mind, the behavioral effects of using a particular mode of interacting may depend significantly on how the characteristics of the chosen medium interact with the parties' orientations toward how to approach the conflict.[174] For participants who enter into the interaction with a cooperative mindset or who have a positive existing relationship, for example, the communication modality that they use may not have much of an influence on their interactions.[175] Such participants have an existing rapport or are likely to make concrete efforts to build a relationship regardless of how they are communicating, and their cooperative orientation inclines them to think well of each other. For participants with a neutral orientation, modes of communication that foster a richer and synchronous exchange may be particularly beneficial in helping them build rapport and trust relatively quickly.[176]

But for participants who enter the process with a negative relationship or an uncooperative stance, real-time multi-channel interaction may intensify the conflict and increase the potential for bad behav-

170. *See* Jeffrey T. Hancock & Jamie Guillory, *Deception With Technology*, *in* THE HANDBOOK OF THE PSYCHOLOGY OF COMMUNICATION TECHNOLOGY 270, 276 (Shyam Sundar ed., 2015).

171. *See* Hancock et al., *supra* note 167, at 133 (finding that e-mail lies tend to be more planned than face-to-face lies).

172. *See, e.g.*, Hancock & Guillory, *supra* note 170, at 275–78.

173. Ula Cartwright-Finch, *When Good Witnesses Do Bad Things*, CORTEX CAPITAL (Mar. 2021), https://9e04526d-bb9a-4e71-ac6a-486a9d684115.filesusr.com/ugd/4ebf15_3fcaea7b4dd1440d91997b967f1aaeab.pdf (observing that witnesses may not even see such behavior as dishonest).

174. Roderick I. Swaab et al., *The Communication Orientation Model: Explaining the Diverse Effects of Sight, Sound, and Synchronicity on Negotiation and Group Decision-Making Outcomes*, 16 PERSONALITY & SOC. PSYCHOL. REV. 25, 25 (2012) (reporting meta-analysis and finding that visual and audio channels and synchrony "(a) increased outcome quality for negotiators with a neutral orientation, (b) did not affect outcome quality for negotiators with a cooperative orientation, and (c) decreased outcome quality for negotiators with a noncooperative orientation.").

175. *Id.* at 31.

176. *Id.* at 32.

ior.[177] Limiting the available channels and the ability to respond in real time may help to moderate reactions and de-intensify the conflict.[178] In this vein, judges and commentators have noted that videoconference hearings have a less argumentative feel than in-person proceedings: "Hearings really seem to be less adversarial and the parties were, in some ways, more respectful . . . it seems like being at a distance might . . . make it a little bit less confrontational . . . ."[179]

The characteristics of communication media can also start and then sustain spirals of behavior. Errors of interpretation made in the absence of vocal and nonverbal signals;[180] cues that are difficult to interpret when the other person looks, reaches, or appears to speak to someone off-camera;[181] and difficulty building rapport may trigger negative responses.[182] The explicit relational or emotional statements that are more common in textual communication[183] may prompt constructive or damaging reactions. Knowing that counterparts in asynchronous communication have time to revise their messages might make us assume that what they said was carefully thought out.[184] Asynchrony may allow misunderstanding to linger and influence subsequent interactions and make hard tactics more damaging[185] but may also allow time for cooling-off.[186] The reviewability of a written record can mean that negative messages may continue to undermine cooperation or that positive messages may continue to have a constructive influence over a longer period of time.[187]

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177. *Id.* at 27 ("In these cases when enmity already sits on the doorstep of impending negotiations, seeing and hearing each other may only intensify the antagonism and competitive spirit.").

178. *Id. See also* Ebner et al., *supra* note 42, at 95.

179. *Webinar: Lights, Cameras, Motion!: Act II*, NAT'L CTR. FOR STATE COURTS (Apr. 15, 2020), https://vimeo.com/408411009 (remarks of Serpil Ergun, Chief Magistrate Judge Cuyahoga County Domestic Relations Court, comment at 47:56).

180. Kruger et al., *supra* note 128, at 927.

181. *See* So Yeon Park & Mark E. Whiting, *Beyond Zooming There: Understanding Nonverbal Interaction Online* (Aug. 2020), https://www.microsoft.com/en-us/research/publication/beyond-zooming-there-understanding-nonverbal-interaction-online/.

182. *See supra* Part II.B.

183. *See supra* note 37 and accompanying text.

184. Friedman & Currall, *supra* note 61, at 1340.

185. Morris et al., *supra* note 37, at 92–93 (finding that threats, ultimatum offers, and reminding others of their obligations were more damaging to relationships in e-mail negotiation than in face-to-face negotiation). *See also* Ingmar Geiger & Christoph Laubert, *Situational Strategic Versus Personal Influences on Negotiation Medium Choice: Media Synchronicity Theory and Affect for Communication Channel*, 29 INTERNAT'L J. CONFLICT MGMT. 398, 401–02 (2018).

186. *See supra* notes 134–35.

187. Ingmar Geiger, *Media Effects on the Formation of Negotiator Satisfaction: The Example of Face-to-Face and Text Based Electronically Mediated Negotiations*, 23 GROUP DECISION MAKING 735, 742, 758 (2014).

F. Assessing Credibility

In the United States, we value trials generally and jury trials in particular, in part because many believe that viewing in-person testimony is a good way to determine whether witnesses are telling the truth.[188] Indeed, one article notes that "[i]t is an . . . article of faith that access to demeanor helps decisionmakers assess witnesses' credibility and thus advances the core value of accurate judgment."[189] As trials, mediations, arbitrations, and negotiations have moved online, one commonly expressed concern is that the computer-mediated environment will interfere with participants' ability to assess veracity.[190] People often view credibility determination or lie detection as quite important to dispute resolution.[191] A contrasting view suggests that because videoconferencing allows a closer and more direct view of the speaker's face,[192] it may allow for better credibility determinations

188. The Supreme Court has emphasized the importance of face-to-face credibility determinations, stating that this method of observation "often proves the most accurate method of ascertaining the truth." United States v. Or. State Med. Soc'y, 343 U.S. 326, 339 (1952) (quoting Boyd v. Boyd, 169 N.E. 632, 634 (N.Y. 1930)) (internal quotation marks omitted). *See also* Anderson v. City of Bessamer, 470 U.S. 564, 575 (1985) ("[O]nly the [factfinder] can be aware of the variations in demeanor and tone of voice that bear so heavily on the listener's understanding of and belief in what is said."). *See generally* George Fisher, *The Jury's Rise as Lie Detector*, 107 YALE L.J. 576 (1997) (discussing history of reliance on the jury to make credibility determinations). Some courts have expressed skepticism about confrontation via video: "The simple truth is that confrontation through a video monitor is not the same as physical face-to-face confrontation." United States v. Yates, 391 F.3d 1182 (11th Cir. 2005), rev'd en banc, 438 F.3d 1307, 1315 (11th Cir. 2006) (finding that allowing witnesses to testify and be cross examined via videoconference violated defendant's Confrontation Clause Rights, absent special circumstances). *But see* United States v. Baker, 45 F.3d 837, 845 (4th Cir. 1995) (rejecting argument that person being considered for involuntary commitment should have constitutional or statutory right to appear in person rather than by video). *See also* State v. Sweidan, 461 P.3d 378, 390–91 (Wash. 2020) (encouraging trial courts to "verify on the record the structure and the mechanics of the video conference presentation" including camera angles; the number, size, and location of screens; and that the jury, defendant, and witness all see each other).

189. Susan A. Bandes & Neal Feigenson, *Virtual Trials: Necessity, Invention, and the Evolution of the Courtroom*, 68 BUFF. L. REV. 1275, 1283 (2020). The authors observe that some in the Anglo-American system even see demeanor evidence as a window into "the heart and mind of the offender." *Id.* at 1284 (quoting Riggins v. Nevada, 504 U.S. 127, 142 (1992)) (Kennedy, J., concurring).

190. BENNINGER ET AL., *supra* note 18, at 95–98 (reporting criminal defense attorneys' perceptions that remote proceedings interfere with credibility assessment); Dodson et al., *supra* note 12, at 3, 6–7 (suggesting in-person meetings may be superior to remote technology meetings when someone's credibility is suspect).

191. *See, e.g.*, Bandes & Feigenson, *supra* note 189, at 1283 (discussing "belief that personal observation is essential to the ability to evaluate demeanor, and . . . belief in the importance of demeanor in the assessment of credibility and character").

192. In particular, jurors and judges often get only a side-view of witnesses in in-person trials, whereas video-conference trials allow jurors and judges to gaze directly at the face of a witness.

than an in-person encounter.[193] Both of these perspectives, however, fly in the face of psychological research showing that people are quite poor at detecting deception and that nonverbal cues are largely uninformative.[194]

While conventional wisdom teaches that we can use facial expressions and other nonverbal signals to tell whether someone is lying, cues like eye gaze and fidgeting do not turn out to be good predictors of deception.[195] These sorts of nonverbal indicators can also be occasioned by factors other than lying—such as stress or embarrassment. In addition, assessments of demeanor can be influenced by stereotypes and expectations about the look and behavior of honest and dishonest people.[196]

Video-based communication may make credibility assessment difficult precisely because we focus unduly on nonverbal cues. Because averted gaze tends to make communicators seem less credible but is not actually an effective indicator of lying,[197] the difficulties in making

193. *See, e.g.*, Legg, *supra* note 6, at 174 (quoting judge as noting that in some ways it was easier to observe witnesses through technology than in person); California Daily Journal Podcast, *supra* note 91, at 24:30–26:28 (mediator and former chief judge Philip Pro expressing a similar view).

194. Charles F. Bond Jr. & Bella M. DePaulo, *Accuracy of Deception Judgments*, 10 PERSONALITY & SOC. PSYCHOL. REV. 214, 215 (2006); Aldert Vrij et al., *Reading Lies: Nonverbal Communication and Deception*, 70 ANN. REV. PSYCHOL. 295, 301–02 (2019). *See also* Bandes & Feigenson, *supra* note 189, at 1286 ("[T]he overwhelming weight of social science research debunks the common-sense belief that demeanor is a reliable cue to credibility"); Mark Bennett, *The Changing Science of Memory and Demeanor – And What it Means for Trial Judges*, 101 JUDICATURE 60, 62 (2017). Even those we might expect to be the most expert, such as law enforcement officers, are quite poor at making these determinations. Bella M. DePaulo & Roger L. Pfeifer, *On-the-Job Experience and Skill at Detecting Deception*, 16 J. APPLIED SOC. PSYCHOL. 249 (1986); Saul M. Kassin et al., *"I'd Know a False Confession if I Saw One": A Comparative Study of College Students and Police Investigators*, 29 LAW & HUM. BEHAV. 211, 212 (2005). *See also* United States v. Wells, 154 F.3d 412, 414 (7th Cir. 1998) ("Judges fool themselves if they think they can infer sincerity from rhetoric and demeanor."). *Cf.* Nancy Gertner, *Videoconferencing: Learning Through Screens*, 12 WM. & MARY BILL RTS. J. 769, 785 (2004) (expressing doubt in this social science about inability to assess credibility, at least as applied to judges).

195. Bella M. DePaulo et al., *Cues to Deception*, 129 PSYCHOL. BULL. 74, 106 (2003). When visual channels are available, either in-person or via video, the focus of any visual assessment should be on inconsistencies between words and body language or changes in behavior, rather than looking for popular "tells."

196. *See, e.g.*, Leslie A. Zebrowitz et al., *"Wide-Eyed" and "Crooked-Faced": Determinants of Perceived and Real Honesty Across the Life Span*, 22 PERSONALITY & SOC. PSYCHOL. BULL. 1258, 1258 (1996). *See also* Eve Hanan, *Remorse Bias*, 83 MO. L. REV. 301, 331 (2018); Julia Simon-Kerr, *Unmasking Demeanor*, 88 GEO. WASH. L. REV. ARGUENDO 158, 161, 170 (2020) ("'[R]eading' demeanor is often largely an exercise in drawing comparisons between the reader's expectations about how a forthright or honest person should look, sound or otherwise appear" and often "reward[s] methods of communicating that are largely white and male").

197. DePaulo et al., *supra* note 195; Gordon D. Hemsley & Anthony N. Doob, *The Effect of Looking Behavior on Perceptions of a Communicator's Credibility*, 8 J. APPLIED SOC. PSYCHOL. 136, 143 (1978).

eye contact via video[198] may lead to erroneous suspicion of deception. Discomfort with sitting at a screen for long periods or uncertainty about whether others are paying attention may affect the behavior of speakers in ways that interfere with assessment of their credibility.[199] Any nervousness related to the presence of the camera could also influence communicator behavior in ways that might be mistaken for duplicity.[200]

Because body language and other visual cues are not usually helpful for detecting deception, moving away from in-person and video dispute resolution is not likely to hurt efforts to detect lying.[201] Minimizing the use of visual channels that cause us to over rely on popular, but misleading, nonverbal cues might instead help by encouraging us to focus on other more accurate means of detecting deception.[202]

In contrast to relatively uninformative nonverbal cues, the content of a communication is typically much more helpful as an indicator of whether someone is lying.[203] Media channels that focus attention on the words of the communication, such as written text, or even phone calls, therefore, may be able to help communicators more effectively

198. Nguyen & Canny, *supra* note 82, at 424, 431.

199. Bandes & Feigenson, *supra* note 189, at 1296.

200. Molly Treadway Johnson & Elizabeth C. Wiggins, *Videoconferencing in Criminal Proceedings: Legal and Empirical Issues and Directions for Research*, 28 LAW & POL'Y 211, 216 (2006).

201. *See, e.g.*, Scott E. Culhane et al., *Are Two Heads Better Than One? Assessing the Influence of Collaborative Judgments and Presentation Mode on Deception Detection for Real and Mock Transgressions*, 12 J. INVESTIGATIVE PSYCHOL. & OFFENDER PROFILING 158, 167 (2015); Sara Landström et al., *Witnesses Appearing Live versus on Video: Effects on Observers' Perception, Veracity Assessments, and Memory*, 19 APPLIED COGNITIVE PSYCHOL. 913 (2005) (finding that neither video nor live mock jurors were better than chance at assessing veracity and that neither group was better than the other); Charlotte D. Sweeney & Stephen J. Ceci, *Deception Detection, Transmission, and Modality in Age and Sex*, 5 FRONTIERS PSYCHOL. 1, 2 (2014); Van Swol et al., *supra* note 167, at 1128. *See also* Holly K. Orcutt et al., *Detecting Deception in Children's Testimony: Factfinders' Ability to Reach the Truth in Open Court and Closed-Circuit Trials*, 25 LAW & HUM. BEHAV. 339, 366–67 (2001).

202. Studies find that communicators with access to only visual channels do the worst. Charles F. Bond, Jr. & Bella M. DePaulo, *Accuracy of Deception Judgments*, 10 PERSONALITY & SOC. PSYCHOL. REV. 214, 230–31 (2006). Courtroom mask requirements provide an interesting experiment. Simon-Kerr, *supra* note 196, at 161 (2020) (mask wearing as an opportunity to reassess "demeanor doctrine's false promise of accuracy"). *See also* Amy-May Leach et al., *Less is More? Detecting Lies in Veiled Witnesses*, 40 LAW & HUM. BEHAV. 401, 408 (2016).

203. *See generally* Shuyuan Mary Ho & Jeffrey T. Hancock, *Context in a Bottle: Language-Action Cues in Spontaneous Computer-Mediated Deception*, 91 COMPUTERS HUM. BEHAV. 33 (2019). Researchers are working to develop computer-based methods for detecting deception in text. *See, e.g.*, Lina Zhou et al., *A Comparison of Classification Methods for Predicting Deception in Computer-Mediated Communication*, 20 J. MGMT. INFO. SYS. 139, 161–62 (2004); Lina Zhou & Dongsong Zhang, *Following Linguistic Footprints: Automatic Deception Detection in Online Communication*, 51 COMM. ACM 119, 120 (2008) (identifying linguistic cues in text-based deception).

address dissembling by drawing attention to the content of the message. Without the distraction of tempting nonverbal signals, communicators can concentrate on scrutinizing the substance of the communication[204] and on observing inconsistencies between the speaker's account and other statements by the speaker, relevant documents, or accounts given by others, or noting that the speaker's account lacks verifiable details.[205] These sorts of cues can indicate that further investigation into the speaker's veracity is warranted. Communication media that permit the sharing of documents, photographs, and other records can also be very helpful in verifying or challenging statements and assertions.

Other aspects of the communication modality have implications for assessing credibility as well. Asynchronous communication, for example, may make it easier to assess credibility by providing additional time to cross-check accuracy. Similarly, communication modalities that create a record may be quite useful in verifying the veracity of messages.

G. Persuasion

Persuading decisionmakers of the merits of a position or persuading counterparts to agree to a beneficial settlement is central to an attorney's role in dispute resolution. While some may find the idea strange or uncomfortable, persuasiveness can also be important to neutrals. Mediators can be seen as trying to persuade disputants to view the dispute in a particular way,[206] and the persuasiveness of judges and arbitrators may enhance their ability to issue decisions that are seen as fair and just.[207] Lawyers and disputants may also seek to minimize the persuasive power of their opponents.[208]

Successful persuasion will depend not only on the substance and merits of a position or argument, but also on the communication medium. Channels that allow for visual exchange, for example, can facili-

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204. *See, e.g.*, J. Pete Blair et al., *Content in Context Improves Deception Detection Accuracy*, 36 HUM. COMM. RES. 423, 426 (2010); DePaulo et al., *supra* note 195, at 78–79; Ho & Hancock, *supra* note 203, at 34; Brianna L. Verigin et al., *The Interaction of Truthful and Deceptive Information*, 26 PSYCHOL. CRIME & L. 367, 374–75 (2020).

205. . *See generally* Nicola Palena et al., *The Verifiability Approach: A Meta-Analysis*, 10 J. APPLIED RES. MEMORY & COGNITION 155 (2020); Hee Sun Park et al., *How People Really Detect Lies*, 69 COMM. MONOGRAPHS 144 (2002).

206. James H. Stark & Douglas N. Frenkel, *Changing Minds: The Work of Mediators and Empirical Studies of Persuasion*, 28 OHIO ST. J. ON DISP. RESOL. 263, 273 (2013).

207. *See infra* Part II.I. on procedural justice.

208. *See* Peter Reilly, *Resistance Is Not Futile: Harnessing the Power of Counter-Offensive Tactics in Legal Persuasion*, 64 HASTINGS L.J. 1171, 1177 (2013).

tate persuasion through pictures.[209] Because more easily processed messages tend to be more believable, are more memorable, and are given more weight,[210] media that are less subject to technical glitches or delays that interfere with fluent communication can enable persuasion. Attention to aspects of communication that are important for persuasion across media — such as brevity, clarity, organization, and concreteness[211]— may be even more important when communicating via videoconference given the potential challenges to fluency and the possibility of Zoom fatigue.[212]

Greater synchrony can allow communicators to adapt their persuasive approaches in response to real-time cues or to pressure another to make a snap decision.[213] The more rapid turn-taking pace of synchrony may allow negotiators to dominate their counterparts with intricate arguments.[214] Asynchrony, on the other hand, allows communicators time to verify information, deliberate about and reflect on arguments made, and plan and rehearse their own arguments.[215] The opportunity to think through arguments and responses in more detail may make them clearer and more convincing. Asynchronous communication may also help participants who feel disempowered, or who otherwise might be too inclined to say "yes" to a proposal initiated by the other side, to resist persuasion.

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209. E. Vance Wilson, *Persuasive Effects of System Features in Computer-Mediated Communication*, 15 J. ORG. COMPUTING & ELECTRONIC COM. 161, 165 (2005).

210. *See, e.g.*, Daniel M. Oppenheimer, *The Secret Life of Fluency*, 12 TRENDS IN COGNITIVE SCI. 237, 237 (2008). *See also* Adam L. Alter & Daniel M. Oppenheimer, *Uniting the Tribes of Fluency to Form a Metacognitive Nation*, 13 PERSONALITY & SOC. PSYCHOL. REV. 219, 228 (2009). *See generally* Alice H. Eagly, *Comprehensibility of Persuasive Arguments as a Determinant of Opinion Change*, 29 J. PERSONALITY & SOC. PSYCHOL. 758 (1974); Gerald R. Miller & Murray A. Hewgill, *The Effect of Variations in Nonfluency on Audience Ratings of Source Credibility*, 50 Q. J. SPEECH 36, 43 (1964); Rolf Reber & Norbert Schwarz, *Effects of Perceptual Fluency on Judgments of Truth*, 8 CONSCIOUSNESS & COGNITION 338, 342 (1999).

211. *See* ROBBENNOLT & STERNLIGHT, *supra* note 92, at 151–52.

212. *See* M. Mahdi Roghanizad & Vanessa K. Bohns, *Ask in Person: You're Less Persuasive Than You Think Over Email*, 69 J. EXPERIMENTAL SOC. PSYCHOL. 223, 224 (2017) (finding that strangers were more likely to comply with a request made face-to-face than when the request was made via e-mail).

213. Andrew Harrison & Jaime B. Windeler, *Framing Communication: How Agenda Alignment and Media Capabilities Shape Partially Cooperative Communication*, 44 MIS Q. 771, 777 (2020). *See also* Emma Rowden & Anne Wallace, *Performing Expertise: The Design of Audiovisual Links and the Construction of the Remote Expert Witness in Court*, 28 SOC. & LEGAL STUDS. 698, 708 (2019) (describing the potential for reduced audience feedback and the difficulties that it creates for expert witnesses, but also noting technological fixes).

214. Loewenstein et al., *supra* note 109, at 30.

215. *Id. See also* Paola Di Blasio & Luca Milani, *Computer-Mediated Communication and Persuasion: Peripheral vs. Central Route to Opinion Shift*, 24 COMPUTERS HUM. BEHAV. 798, 803 (2008).

Modes of communication without visual channels will tend to focus more attention on the content of the message and less on peripheral cues.[216] This means that a communicator whose substantive argument is strong may do better in a leaner mode of communication but that communicators whose arguments are weak might prefer to present their arguments in a richer setting.[217] This is reminiscent of a line purportedly stated by humorist Carl Sandburg: "If the facts are against you, argue the law. If the law is against you, argue the facts. If the law and the facts are against you, pound the table and yell like hell."[218]

Sometimes there will be aspects of an argument that could be bolstered (or hindered) by physical presence. A female prisoner who:

> [W]as a very small, young woman who looked as if she belonged in a juvenile justice rather than adult prison . . . expressed a preference for using video link for 'minor charges' but preferred to go to court for 'something serious'. . . . 'The judge can see you, like the size of me, makes a big difference. I don't look old enough to be here.'[219]

In contrast, a prisoner who looks more intimidating might prefer to avoid an in-person appearance, hoping to look less menacing via video or to avoid appearances altogether by using phone or a text-based medium.

The potential for stereotypes based on appearance to influence persuasion will vary depending on what cues the communication medium conveys.[220] To take a different example, consider that victims who display emotion that is incongruent with stereotypical expectations of how a victim should feel are evaluated more negatively and found to

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216. *See supra* note 73 and accompanying text. For example, nonvisual communicators may focus less on each other's status. *See* Kiesler & Sproull, *supra* note 148, at 101–03. Communicators might also choose to use the available channels in ways that minimize distractions from the substantive message, e.g., using fewer formatting features in e-mail. *See* E. Vance Wilson & Ilze Zigurs, *Interpersonal Influence Goals and Computer-Mediated Communication*, 11 J. ORG. COMPUTING & ELECTRONIC COM. 59, 64, 73 (2001).

217. Nadler & Shestowsky, *supra* note 94, at 153. *See also* J. Marie Hicks & Steven E. Clark, *Persuasiveness and Sensitivity to Witnessing Conditions Depend on How Testimony is Presented*, 35 APPLIED COGNITIVE PSYCHOL. 52, 52–53, 55 (2021); Di Blasio & Milani, *supra* note 215, at 800.

218. Joseph L. Smith, *Law Fact and the Threat of Reversal from Above*, 42 AM. POL. RES. 226, 226 (2013). Along these lines it is often said that Soviet leader Nikita Khruschev banged his shoe on the table at a meeting at the United Nations in 1960, but there is some doubt whether he actually banged it or merely threatened to do so. William Taubman, *Did He Bang It?: Nikita Khrushchev and the Shoe*, N.Y. TIMES (July 26, 2003), https://www.nytimes.com/2003/07/26/opinion/IHT-did-he-bang-it-nikita-khrushchev-and-the-shoe.html.

219. MCKAY, *supra* note 77, at 105.

220. See additional discussion of the different potential for bias across media, *infra* notes Part II.H.

be less persuasive.[221] One study compared reactions to a victim's testimony delivered with different emotional expressions with the same testimony presented in written form with no cues to emotion. The written testimony was found to be more credible than live testimony that was delivered with either neutral emotion or emotion that was inconsistent with expectations and similarly credible to testimony that was delivered with congruent emotion.[222]

Because communicators who are trusted, perceived to be credible, and liked will also tend to be more persuasive,[223] differences among media that impact how participants build rapport, develop trust, and communicate[224] will also affect persuasion.[225] Studies of credibility in negotiation have found that it can be harder and take longer to build trust via computer-aided communication channels.[226] E-mail negotiators, for example, tend to find each other less credible than do in-person negotiators.[227] Technology-related lags or poor audio may

221. *See, e.g.*, Geir Kaufmann et al., *The Importance of Being Earnest: Displayed Emotions and Witness Credibility*, 17 APPLIED COGNITIVE PSYCHOL. 21, 30 (2003); Mary R. Rose et al., *Appropriately Upset? Emotion Norms and Perceptions of Crime Victims*, 30 LAW & HUM. BEHAV. 203, 204 (2006).

222. *See generally* Kaufmann et al., *supra* note 221.

223. *See* Carl I. Hovland & Walter Weiss, *The Influence of Source Credibility on Communication Effectiveness*, 15 PUB. OPINION Q. 635, 650 (1952).

224. *See supra* Part II.B.

225. One judge has observed that "an attorney's aggression doesn't play well over zoom," noting that the "distance and space in a courtroom 'diffuses or absorbs' aggression or 'sharpness.' However, in a remote trial, the lawyer is '3 feet' from the jurors. It just feels more intense." Pressman, *supra* note 91. A recent study found that mock jurors perceived a criminal defendant to have a better rapport with his attorney and found the prosecution's case to be weaker when attorney and client appeared together—either at the defense table or together on the screen. Rossner & Tait, *supra* note 26, at 16.

226. *See, e.g.*, Nathan Bos et al., *Effects of Four Computer-Mediated Channels on Trust Development*, 4 CHI 135, 138 (2002) (trust may take longer via chat and there may be some delay for telephone and video as well). On the other hand, studies have found no differences in trust between in-person and telepresent mediators or between in-person and video negotiators. Susan Nauss Exon & Soomi Lee, *Building Trust Online: The Realities of Telepresence for Mediators Engaged in Online Dispute Resolution*, 49 STETSON L. REV. 109, 137 (2019); Dominik Sondern & Guido Hertel, *Negotiation in the Digital Age—Effects of Communication Media and Information Reprocessability on Negotiator Trust*, 33rd Annual Conference of the International Association for Conflict Management (2020) (manuscript at 17) (on file with authors). Research suggests that when groups interact virtually, trust among group members is more important for group effectiveness than it is when they interact in person. Christina Breuer et al., *Does Trust Matter More in Virtual Teams? A Meta-Analysis of Trust and Team Effectiveness Considering Virtuality and Documentation as Moderators*, 101 J. APPLIED PSYCHOL. 1151, 1156 (2016).

227. Maryalice Citera et al., *An Experimental Study of Credibility in E-negotiations*, 22 PSYCHOL. & MARKETING 163, 167 (2005) (reporting that e-negotiation pairs found each other less credible than in-person negotiation pairs); Paul W. Paese et al., *Caught Telling the Truth: Effects of Honesty and Communication Media in Distributive Negotiations*, 12 GROUP DECISION & NEGOT. 537, 551 (2003) (finding less trust of other negotiator in e-mail negotiation than in in-person negotiation); Charles E. Naquin & Gaylen D. Paulsen, *Online Bargaining and Interper-*

make speakers seem less credible.[228] Or the difficulties people experience in making eye contact via video[229] may lead them to be perceived as less credible and thus less persuasive, even though averted gaze is not a reliable indicator of lying.

A number of experimental studies have found that children testifying via video or closed-circuit television (CCTV) are perceived to be less credible than children who testify live in the courtroom.[230] Many of these same studies, however, find no ultimate differences in verdicts rendered, particularly once jurors have deliberated.[231] Fewer experiments have examined adult witnesses, but they also tend to show that witnesses who testify via video or CCTV are perceived to be somewhat less credible.[232] A mock-jury experiment that compared re-

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sonal Trust, 88 J. APPLIED PSYCHOL. 113, 116 (2003) (finding that pre- and post-negotiation trust was lower for e-mail negotiation than in-person negotiation).

228. *See* Elena Bild et al., *Sound and Credibility in the Virtual Court: Low Audio Quality Leads to Less Favorable Evaluations of Witnesses and Lower Weighting of Evidence*, 45 LAW & HUM. BEHAV. 481, 484, 489–90 (2021); Ignazio Ziano & Deming Wang, *Slow Lies: Response Delays Promote Perceptions of Insincerity*, 120 J. PERSONALITY & SOC. PSYCHOL. 1457, 1474 (2021) (finding that people judged slower responses as less sincere). *See generally* Adam L. Alter & Daniel M. Oppenheimer, *United the Tribes of Fluency to Form a Metacognitive Nation*, 13 PERSONALITY & SOC. PSYCHOL. REV. 219 (2009); *see also* Eryn J. Newman & Norbert Schwarz, *Good Sound, Good Research: How Audio Quality Influences Perceptions of the Research and the Researcher*, 40 SCI. COMM. 246 249–55 (2018) (finding that audio quality influenced perceptions of science and scientists).

229. Nguyen & Canny, *supra* note 82, at 424, 431.

230. *See, e.g.*, Gail Goodman et al., *Hearsay versus Children's Testimony: Effects of Truthful and Deceptive Statements on Jurors' Decisions*, 30 LAW & HUM. BEHAV. 363, 367 (2006) [hereinafter Goodman et al., *Hearsay versus Children's Testimony*]; Gail Goodman et al., *Face-to-Face Confrontation: Effects of Closed Circuit Technology on Children's Eyewitness Testimony*, 22 LAW & HUM. BEHAV. 165, 196 (1998) [hereinafter Goodman et al., *Face-to-Face Confrontation*]; Sara Landström et al., *Children's Live and Videotaped Testimonies: How Presentation Mode Affects Observers' Perception, Assessment and Memory*, 12 LEGAL & CRIM. PSYCHOL. 333, 335 (2007); Sara Landström & Par Anders Granhag, *In-Court Versus Out-Of-Court Testimonies: Children's Experiences and Adults' Assessments*, 24 APPLIED COGNITIVE PSYCHOL. 941, 951 (2010); Orcutt et al., *supra* note 201, at 339, 358; Ann E. Tobey et al., *Balancing the Rights of Children and Defendants: Effects of Closed-Circuit Television on Children's Accuracy and Jurors' Perceptions, in* APPLIED PSYCHOLOGY: INDIVIDUAL, SOCIAL AND COMMUNITY ISSUES, VOLUME 1: MEMORY AND TESTIMONY IN CHILD WITNESSES 214, 232 (Maria S. Zaragoza et al. eds., 1995).

231. *See, e.g.*, Goodman et al., *Hearsay Versus Children's Testimony*, *supra* note 230, at 387–88; Goodman et al., *Face-to-Face Confrontation*, *supra* note 230, at 196, 198; Orcutt et al., *supra* note 201, at 340; Tobey et al., *supra* note 230, at 237. These studies also find few differences in jurors' ability to distinguish accurate from inaccurate testimony. *See supra* Part II.F.

232. *See, e.g.*, Chris Fullwood, et al., *The Effect of Initial Meeting Context and Video-Mediation on Jury Perceptions of an Eyewitness*, 2008 INTERNET J. CRIMINOLOGY 1, 7; Sara Landström et al., *The Emotional Male Victim: Effects of Presentation Mode on Perceived Credibility*, 56 SCANDINAVIAN J. PSYCHOL. 99, 99 (2015); Sara Landström et al., *Witnesses Appearing Live Versus on Video: Effects on Observers' Perception, Veracity Assessments, and Memory*, 19 APPLIED COGNITIVE PSYCHOL. 913, 923 (2005). Several studies have looked specifically at sexual assault complainants (which present the possibility of a more complex set of attributions). *See, e.g.*, Ellison & Munro, *supra* note 127, at 25 (noting and exploring the complex ways that communica-

actions to defendants who appeared remotely or in person found no differences in verdicts.[233]

Non-experimental studies have examined outcomes for defendants who appear by video as opposed to in person. An examination of felony bail hearings in Cook County, Illinois, for example, found that higher bail amounts were set when hearings were held via CCTV rather than in person.[234] Studies of immigration cases have found that participants who appeared via video were more likely to be ordered deported than those who appeared in person.[235] Given the complexities of these real-world situations, it is not clear whether these differences in outcomes are due solely to credibility differences occasioned by appearing on video per se. While attorneys and others who have observed video-conference proceedings worry that judges would "feel more emotionally distant from and apathetic to an immigrant on a television screen,"[236] researchers and other observers have identified many additional issues with video-conference procedures that may contribute to these outcomes, including the distorting effects of poor technology and logistical obstructions to consulting with counsel.[237] In

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tion mode might influence credibility in this context); NATALIE TAYLOR & JACQUELINE JOUDO, AUSTRALIAN INST. OF CRIMINOLOGY, THE IMPACT OF PRE-RECORDED VIDEO AND CLOSED CIRCUIT TELEVISION TESTIMONY BY ADULT SEXUAL ASSAULT COMPLAINANTS ON JURY DECISION-MAKING: AN EXPERIMENTAL STUDY, RES. & PUB. POL'Y SERIES NO. 68, 66–68 (2005), https://www.aic.gov.au/publications/rpp/rpp68 (finding no differences in credibility by mode of communication). For reviews, see Alicia Bannon & Janna Adelstein, *The Impact of Video Proceedings on Fairness and Access to Justice in Court*, BRENNAN CTR. FOR JUST. (Sept. 10, 2020), https://www.brennancenter.org/our-work/research-reports/impact-video-proceedings-fairness-and-access-justice-court; VANESSA MUNRO, SCOT. GOV'T, THE IMPACT OF THE USE OF PRE-RECORDED EVIDENCE ON JUROR DECISION-MAKING: AN EVIDENCE REVIEW 24–25 (2018).

233. Rossner & Tait, *supra* note 26, at 12 (but finding that in-person defendants were perceived as more likeable).

234. Shari Seidman Diamond et al., *Efficiency and Cost: The Impact of Videoconferenced Hearings on Bail Decisions*, 100 J. CRIM. L. & CRIMINOLOGY 869, 870 (2010) (finding "a sharp increase in the average amount of bail set in cases subject to the CCTP, but no change in cases that continued to have live hearings"). Another very recent study finds that plaintiffs who arbitrated remotely fared worse than those who arbitrated in person. Horton, *supra* note 6.

235. Ingrid Eagly, *Remote Adjudication in Immigration*, 109 NW. U. L. REV. 933, 937 (2015); Frank M. Walsh & Edward M. Walsh, *Effective Processing or Assembly-Line Justice? The Use of Teleconferencing in Asylum Removal Hearings*, 22 GEO. IMMIGR. L.J. 259, 271–72 (2008) (finding the effects of videoconferencing significant even after controlling for the fact that immigrants who are represented by attorneys are less likely to appear via videoconference). *See also Developments in the Law, Access to Courts*, 122 HARV. L. REV. 1151, 1185–86 (2009).

236. LEGAL ASSISTANCE FOUND. OF METRO. CHI. & CHI. APPLESEED FUND FOR JUST., VIDEOCONFERENCING IN REMOVAL HEARINGS: A CASE STUDY OF THE CHICAGO IMMIGRATION COURT 45–46 (2005), http://www.chicagoappleseed.org//immigration/VideoConReport_080205.pdf [hereinafter LEGAL ASSISTANCE FOUND.].

237. Diamond et al., *supra* note 234, at 898; Penelope Gibbs, DEFENDANTS ON VIDEO – CONVEYOR BELT JUSTICE OR A REVOLUTION IN ACCESS? 1, 8–9 (2017); MCKAY, *supra* note 77, at 114–17; LEGAL ASSISTANCE FOUND., *supra* note 236, at 1, 5–6 (describing various problems en-

addition, one researcher identified an "outcome paradox" – that even though video participants in immigration proceedings were more likely to be deported, this was not because judges were more likely to deny their claims. Instead, video participants "exhibited depressed engagement with the adversarial process—they were less likely to retain counsel, apply to remain lawfully in the United States, or seek an immigration benefit known as voluntary departure."[238]

Questions, therefore, remain about the extent to which communication media influence credibility and the degree to which any differences influence ultimate outcomes. In circumstances where all participants communicate online or appear via video rather than in person, any differences in persuasiveness may not clearly advantage or disadvantage any particular communicator.[239] In contrast, when just one negotiator or witness or the defendant appears via video or in writing while other participants appear in person, or when some participants appear via video and others by phone,[240] any differences in perceptions of credibility are more concerning.

Projected confidence also matters for persuasion.[241] Across modes of communication, therefore, persuasiveness may be impacted by how comfortable or confident participants feel when communicating in a particular format. Some participants may have a more persuasive delivery in a technology-mediated environment because they feel more comfortable asserting their arguments in that setting.[242] Communica-

countered in implementing video proceedings). *See also* Eric T. Bellone, *Private Attorney-Client Communications and the Effect of Videoconferencing in the Courtroom*, 8 J. INT'L COMM. L. & TECH. 24, 28 (2013). RCT studies in telehealth and employment interviews find similar outcomes in video and in-person modalities. *See* Renee Danser et al., *Remote Testimonial Fact-Finding, in* LEGAL TECH AND THE FUTURE OF CIVIL JUSTICE (David Engstrom ed., forthcoming 2022) (reviewing studies).

238. Eagly, *supra* note 235, at 933.

239. *See* Danser et al., *supra* note 237 (raising question of why one would assume that neutrals would particularly discount a defendant who appears via video rather than other witnesses or lawyers who also appear via video).

240. Quintanilla et al., *supra* note 19, at 21.

241. Robert J. Cramer et al., *Expert Witness Confidence and Juror Personality: Their Impact on Credibility and Persuasion in the Courtroom*, 37 J. AM. ACAD. PSYCHIATRY & L. 63, 71 (2009) (confidence of expert witnesses associated with credibility); Joshua J. Guyer et al., *Speech Rate, Intonation, and Pitch: Investigating the Bias and Cue Effects of Vocal Confidence on Persuasion*, 45 PSPB 389, 401 (2019); Sunita Sah et al., *Cheap Talk and Credibility: The Consequences of Confidence and Accuracy on Advisor Credibility and Persuasiveness*, 121 ORG. BEHAV. & HUM. DECISION PROCESSES 246, 253 (2013); Elizabeth R. Tenney et al., *Calibration Trumps Confidence as a Basis for Witness Credibility*, 18 PSYCHOL. SCI. 46, 48 (2007); Elizabeth R. Tenney et al., *The Benefits of Knowing What You Know (and What You Don't): How Calibration Affects Credibility*, 44 J. EXPERIMENTAL SOC. PSYCHOL. 1368, 1368–69 (2008).

242. *See* Maryalice Citera, *Distributed Teamwork: The Impact of Communication Media on Influence and Decision Quality*, 49 J. AM. SOC'Y INFO. SCI. 792, 797 (1998) (finding that less dominating participants had greater influence in group decision making tasks when the discus-

tors who feel unsure of themselves, uncomfortable with the technology, or are not sure they have been seen or heard may speak less confidently, fidget, or engage in other behaviors that may lead them to be less liked or trusted.[243] According to one study, some disputants lost confidence in mediators who appeared to be unfamiliar with the technology they were trying to use to run video-conference mediation.[244]

At the same time, too much comfort is not always a good thing and the degree of solemnity attendant to a proceeding may also impact the ability to be persuasive. As federal district court Judge Nancy Gertner puts it: "Testimony in a courtroom, in the gravitas of that setting, has an impact on all participants."[245] Overly relaxed participants may be perceived as less expert or competent.[246] In the prisoner context, loss of in-person ritual may both reinforce the prisoner's feeling of low status and prevent them from realizing when they are "on" in ways that negatively impact their ability to be persuasive.[247]

H. Judgment and Decision-Making

Differences in the technological nature of dispute resolution processes may impact the judgment and decision-making capabilities of disputants, lawyers, judges, jurors, arbitrators, and mediators. As countless social science experiments have made clear, human judgments and decisions are commonly impacted by a variety of heuristics and biases.[248] Such influences can lead us to miscalculate risks and misattribute responsibility.[249] They can affect our memories.[250] They can impact the extent to which we believe, extend empathy to,[251] and create rapport with other persons. Much as people may try to make

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sions were conducted by telephone or computer-mediated than when the discussion was in person).

243. Bandes & Feigenson, *supra* note 189, at 1294. One study suggested that prisoners' self-confidence could be undermined by seeing themselves in prison garb, in video self-view, given that there are often no mirrors in prisons. MCKAY, *supra* note 77, at 136.

244. Hammond, *supra* note 61, at 270.

245. Gertner, *supra* note 194, at 784.

246. If the relative informality of a videoconference, for example, causes disputants to dress and act less well than they might in court, their credibility may be negatively impacted. Poulin, *supra* note 3, at 1112–13.

247. MCKAY, *supra* note 77, at 101–03.

248. *See* ROBBENNOLT & STERNLIGHT, *supra* note 92, at 83–144.

249. *Id.* at 12–15, 111–15.

250. *Id.* at 33–52.

251. People tend to find it easier to feel empathy towards members of their own group, leading to a potential dark side of empathy. *See, e.g.*, Mina Cikara et al., *Us and Them: Intergroup Failures of Empathy*, 20 CURRENT DIRECTIONS PSYCHOL. SCI. 149, 149 (2011). *See generally* PAUL BLOOM, AGAINST EMPATHY: THE CASE FOR RATIONAL COMPASSION (2018); Hanan,

fair and unbiased judgments and decisions, their human psychology makes this task quite difficult.[252]

The speed and synchrony of dispute resolution processes are likely to influence how participants think and make decisions and the degree to which they are influenced by heuristics and biases. The availability of time to think through decisions can help participants prevent judgment or decision-making errors, while the pressure of synchronous communication may foster mistakes. Although a slower, more deliberate process is by no means guaranteed to prevent judgment or decision-making errors, it may give participants the breathing room to catch and arrest missteps. As psychologist Daniel Kahneman explains: "Constantly questioning our own thinking would be impossibly tedious . . . . The best we can do is . . . learn to recognize situations in which mistakes are likely and try harder to avoid significant mistakes when the stakes are high."[253]

While the asynchronous nature of some modes of communication can help slow down the processing of information, other aspects of technology might speed things up. As Judge Gertner has observed, one consequence of injecting more technology, such as video evidence, into live trials may be that jurors have less opportunity to review the material at their leisure. Whereas a juror might previously have taken their time to study a physical document, Gertner worries that tech-driven evidence passes management of the pacing to the attorneys, "tak[ing] away the jurors' ability to learn at their own speed."[254]

The channels of communication that are available may also have implications for judgment and decision-making. In particular, eliminating some channels of information, such as visual or audio, may minimize reliance on cues that can bias judgments. When disputants present their claims or negotiate using chat boxes, for example, mediators and arbitrators, and sometimes even opposing parties, may not be aware of disputants' race, gender, or ethnicity.[255] Just as

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supra note 196 (observing that judges will often perceive white criminal defendants as feeling more remorseful than similarly situated black defendants).

252. ROBBENNOLT & STERNLIGHT, *supra* note 92, at 83–144.

253. DANIEL KAHNEMAN, THINKING FAST AND SLOW 28 (2011).

254. Gertner, *supra* note 194, at 771. Some jurors who have served in both virtual and in-person proceedings, however, have noted that they were better able "to see the documents, exhibits and witnesses on the screen than it would have been in person." Davis, *supra* note 98.

255. As one cartoon puts it: "On the internet nobody knows you're a dog." Glenn Flesishman, *Cartoon Captures Spirit of the Internet*, N.Y. TIMES, Dec. 14, 2000, at G8. *See* Ebner et al., *supra* note 42, at 437 ("By masking or deemphasizing gender, race, accent, or national origin, to name just a few, email may actually reduce the impact of unconscious bias."); Avital Mentovich et al., *Are Litigation Outcome Disparities Inevitable? Courts, Technology, and the Future of Impartial-*

orchestras have found that requiring musicians to audition behind a screen results in the selection of a more diverse set of orchestra members,[256] so too might it be helpful to use anonymized dispute resolution processes. For this reason, some commentators have suggested that we might use virtual reality technology to effectively sanitize criminal trials, with jurors, arbitrators, or judges unaware of the demographics of accused criminals or victims.[257]

Communicating through fewer channels, of course, will not necessarily eliminate bias. When cues are missing, participants might consciously or unconsciously strive to fill in the gaps left by such sanitization.[258] Or participants may have a preconceived (accurate or not) impression or stereotype of a counterpart. Such preconceptions tend to persist longer when communication is written as compared to via voice. This is because the same written words can be more ambiguous than those that are spoken, leaving more room for interpretation and allowing interpretations that are consistent with prior expectations.[259]

Finally, the way a particular mode of communication is used to promote privacy or to create transparency has implications for decisionmaking. To the extent that decisionmakers are held accountable for their decisions – especially for the processes by which they make those decisions – decisions may be better reasoned.[260]

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ity, 71 ALA. L. REV. 893, 898 (2020) (finding fewer disparities in outcomes in text-based online process as compared to in-person process). Videoconferences would obviously not obscure the appearance of participants, and phone would have only limited anonymizing benefit. *See* Meilan Solly, *Artificial Intelligence Generates Humans' Faces Based on Their Voices*, SMITHSONIAN MAG. (June 12, 2019), https://www.smithsonianmag.com/smart-news/artificial-intelligence-generates-humans-faces-based-their-voices-180972402/. Even e-mail now often has cues to participant characteristics, in signature blocks for example.

256. Claudia Goldin & Cecilia Rouse, *Orchestrating Impartiality: The Impact of "Blind" Auditions on Female Musicians*, 90 AM. ECON. REV. 715 (2000).

257. ADAM BENFORADO, UNFAIR: THE NEW SCIENCE OF CRIMINAL INJUSTICE 267–70 (2015). *See also* Chet K.W. Pager, *Blind Justice, Colored Truths and the Veil of Ignorance*, 41 WILLAMETTE L. REV. 373, 428–32 (2005); Stanley P. Williams, Jr., *Double-Blind Justice: A Scientific Solution to Criminal Bias in the Courtroom*, 6 IND. J.L. & SOC. EQUALITY 48, 68–73 (2018).

258. Hanan, *supra* note 196, at 349–50.

259. Nicholas Epley & Justin Kreuger, *When What You Type Isn't What They Read: The Perseverance of Stereotypes and Expectancies Over Email*, 41 J. EXPERIMENTAL SOC. PSYCHOL. 414, 417–19 (2005).

260. *See, e.g.*, Marija Aleksovska et al., *Lessons From Five Decades of Experimental And Behavioral Research on Accountability: A Systematic Literature Review*, 2 J. BEHAV. PUB. ADMIN. 1, 8 (2019); Jennifer S. Lerner & Philip E. Tetlock, *Accounting for Accountability*, 125 PSYCHOL. BULL. 255, 257–58 (1999); Shefali Patil et al., *Process Versus Outcome Accountability*, *in* THE OXFORD HANDBOOK OF PUBLIC ACCOUNTABILITY (M. Bovens et al. eds., 2014). It is, of course, possible for lawyers and other decisionmakers to intentionally or unintentionally provide pretextual rationales for their determinations. Michael I. Norton et al., *Causistry and Social Category Bias*, 87 J. PERSONALITY & SOC. PSYCHOL. 817, 828 (2014); Sam R. Sommers & Michael I. Nor-

I. Procedural Justice

People care not only about the substantive outcomes produced by legal processes, but also about the fairness of the procedures that produce those results.[261] Procedural justice judgments are influenced by the opportunity for *voice* – the ability to participate in the process and to provide perspective; *neutrality* – decisionmakers who are unbiased and use objective criteria; *trustworthiness* – authorities who care about disputants' interests and genuinely try to reach the right result; and treatment with *dignity and respect.*[262] People crave procedural justice not only in the courtroom, but also in negotiation, mediation, arbitration, and attorney interviews.[263]

Engaging in dispute resolution processes through different communication modalities will inevitably affect the procedural "feel" of justice.[264] The nature of the different modalities and their effects have implications for whether participants believe that they have been seen, heard, and treated respectfully. The relative formality of the

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ton, *Race-Based Judgments, Race-Neutral Justifications: Experimental Examination of Peremptory Use and the* Batson *Challenge Procedure*, 31 LAW & HUM. BEHAV. 261, 264, 269 (2007).

261. *See* E. ALLAN LIND & TOM R. TYLER, THE SOCIAL PSYCHOLOGY OF PROCEDURAL JUSTICE 1–5 (1988). Indeed, people may appreciate a result as being "just" even when they do not receive the substantive results they wanted. Tom R. Tyler, *Procedural Strategies for Gaining Deference: Increasing Social Harmony or Creating False Consciousness?*, *in* SOCIAL INFLUENCES ON ETHICAL BEHAVIOR IN ORGANIZATIONS 69 (John M. Darley et al. eds., 2001). Other types of justice will also be important to disputants and there may be effects of communication modalities on distributive, restorative, or retributive justice. Additional research on these potential effects is needed. *See generally* Valerie Jenness & Kitty Calavita, *"It Depends on the Outcome": Prisoners, Grievances, and Perceptions of Justice*, 52 L. & SOC. REV. 41 (2018).

262. *See, e.g.*, Steven L. Blader & Tom R. Tyler, *A Four-Component Model of Procedural Justice: Defining the Meaning of a "Fair" Process*, 29 PERSONALITY & SOC. PSYCHOL. BULL. 747, 749 (2003). These concerns are also shared by people in countries with very different cultures and legal systems than those in the United States. *See* E. Allan Lind et al., *Procedural Context and Culture: Variation in the Antecedents of Procedural Justice Judgments*, 73 J. PERSONALITY & SOC. PSYCHOL. 767, 768, 777 (1997); Tom R. Tyler et al., *Cultural Values and Authority Relations: The Psychology of Conflict Resolution Across Cultures*, 6 PSYCHOL. PUB. POL'Y & L. 1138, 1140–41 (2000).

263. *See, e.g.*, Rebecca Hollander-Blumoff & Tom R. Tyler, *Procedural Justice in Negotiation: Procedural Fairness, Outcome Acceptance, and Integrative Potential*, 33 LAW & SOC. INQUIRY 473, 493 (2008) (negotiation); E. Allan Lind et al., *Individual and Corporate Dispute Resolution: Using Procedural Fairness as a Decision Heuristic*, 38 ADMIN. SCI. Q. 224, 245–46 (1993) (arbitration). Disputants' procedural justice priorities may evolve as technology changes. *See* Ebner & Greenberg, *supra* note 5, at 96–97; ETHAN KATSH & ORNA RABINOVICH-EINY, DIGITAL JUSTICE: TECHNOLOGY AND THE INTERNET OF DISPUTES 164 (2017). These attributes of procedural justice, however, are likely to continue to matter to disputants in some form.

264. *See* Nancy Welsh, *ODR: A Time for Celebration and Procedural Safeguards*, LAW, TECH. & ACCESS TO JUST. (June 27, 2016), https://law-tech-a2j.org//-time-for-celebration-and-procedural-safeguards/. For more detailed discussion of procedural justice and remote civil proceedings, see generally Justin Sevier, *Procedural Justice in COVID-19-Era Civil Trials*, 71 DEPAUL L. REV. (forthcoming 2022).

courtroom, for example, and its strict rules, can be intimidating and interfere with participants' ability to feel like they have effectively communicated their perspective.[265] The complexity or confusion attendant to formal, in-person processes can run counter to providing dignified treatment.[266]

On the other hand, formality may also foster participants' beliefs that they have had their "day in court," that they have had the opportunity to tell their story to an authority, and that they have been afforded the dignity and respect of the court.[267] Indeed, too much informality – at the extreme, lawyers appearing in their underwear or lying in bed or appearing through a filter[268] – surely interferes with how respected participants feel. One witness in an online proceeding found that the "intrusion of everyday life—cats that meowed, dogs that barked, doorbells that were rung—broke the formality and solemnity of a court," and she was "left feeling that she may have missed out on her opportunity to influence the court."[269]

An Australian study compared the reactions of prisoners who participated in legal hearings via video to those who appeared in person, illustrating this duality.[270] Most prisoners appreciated not having to travel long distances, endure strip searches, or appear in court in handcuffs,[271] the absence of which likely increased their sense of having been treated respectfully. But many prisoners also experienced the online process as comparatively disempowering and felt disconnected from the proceedings.[272] Because they were not present in the courtroom and because of technological issues, the prisoners did not always

265. *See, e.g.*, Hanan, *supra* note 196, at 318–19.

266. Bulinski & Prescott, *supra* note 19, at 218–20.

267. Hazel Genn, Online Courts and the Future of Justice, Birkenhead Lecture at Gray's Inn U.C. London 10–13 (Oct. 16, 2017), https://www.ucl.ac.uk/laws/sites/laws/files/birkenhead_lecture_2017_professor_dame_hazel_genn_final_version.pdf; Bandes & Feigenson, *supra* note 189, at 1311–12.

268. *See, e.g.*, Ashley Feinberg, *Investigation: I Think I Know Which Justice Flushed*, SLATE (May 8, 2020, 4:42 PM), https://slate.com/news-and-politics/2020/05/toilet-flush-supreme-court-livestream.html; David K. Li, *"I'm Not a Cat": Video Shows Lawyer Can't Turn Off Kitten Filter During Zoom Court Appearance*, NBC NEWS (Feb. 9, 2021, 3:01 PM), https://www.nbcnews.com//us-news/i-m-not-cat-video-shows-lawyer-can-t-turn-n1257168; Debra Cassens Weiss, *Lawyers Smoke Cigars, Drink Wine During Zoom Hearings; Litigants Appear From Hair Salon or While Driving*, ABA. J. (Feb. 16, 2021, 10:35 AM), https://www.abajournal.com/news/article/lawyers-smoke-a-cigar-drink-wine-during-zoom-hearings-litigants-appear-from-hair-salon-while-driving?.

269. Legg, *supra* note 6, at 182.

270. MCKAY, *supra* note 77, at 39–56 (describing research design).

271. *Id.* at 11–12, 73.

272. *Id.*

feel that they made themselves heard,[273] they were uncertain how they were being seen,[274] they were unsure when they were supposed to speak,[275] and they were often confused.[276] One prisoner said: "I didn't even really feel like I was really much a part of it."[277] Another felt "removed from the process" and "totally disconnected."[278] And a third said that appearing by video "[m]akes you feel like, umm, how can I say it, I don't really know how to say it, like you're not actually there."[279] In these ways, the experiences of voice and respectful treatment can be undermined.

Other participants, too, may feel more respected when online processes spare them unnecessary inconvenience or screening procedures. But to the extent that characteristics of the communication modality lead to the prioritization of speed and efficiency over rapport building or in-depth inquiries, feelings of voice and dignity may be impaired.[280] A premium on efficiency, for example, might mean that disputants feel pressured into settlements rather than allowed to voice their perspective.[281] Processes that foster feelings of co-presence and provide mechanisms for communicators to signal that they are attendant to and understanding of each other[282] can support voice and dignity. In contrast, when the mode of communication interferes with attention and responsiveness,[283] feelings of having a voice or having been treated with dignity may suffer.

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273. Several prisoners, for example, discussed difficulties they encountered in trying to get the attention of their attorney, who was located in the courtroom. *Id.* at 103.

274. *Id.* at 114–15.

275. *Id.* at 108.

276. *Id.* at 112–13.

277. *Id.* at 73.

278. *Id.*

279. *Id. See also* Derek S. Chapman et al., *Applicant Reactions to Face-to-Face and Technology-Mediated Interviews: A Field Investigation*, 88 J. APPLIED PSYCHOL. 944, 949–50 (2003) (finding that interviewees found in-person interviews fairer than video interviews).

280. *See generally supra* note 262.

281. At the Clark County Nevada Family Mediation Center, eleven full-time mediators were required to handle 3,900 mediated cases, averaging out to 354 cases per year per mediator. *Clark County Nevada Family Mediation Center*, TYLER TECH. https://www.tylertech.com/resources/case-studies/clark-county-family-mediation-odr-case-study (last visited Jan. 7, 2022) [hereinafter *Clark County Nevada*]. The jurisdiction implemented a pilot study of online dispute resolution to deal with this enormous caseload. The study found that successful party-to-party negotiations were completed in an average of about six days. *Id.* While the study did not show that anyone felt pressure to settle, the numbers do raise questions.

282. Kim et al., *supra* note 102, at 672–74. It is possible that the close-up views entailed in video-conference proceedings foster feelings of psychological closeness that increase perceptions of procedural justice. Sevier, *supra* note 264 (manuscript at 8, 30–31).

283. Burgoon et al., *supra* note 108, at 347, 361.

Perceptions of neutrality and trustworthiness can also be negatively impacted by the mode of communication. For those prisoners who participate in legal hearings via video from detention, the control still maintained by guards may be more salient than if they were in the courtroom, thereby weakening their perceptions of the process's neutrality.[284] Physical signals of the judge's neutrality and independence – such as the physical separation of the judge on the bench from the rest of the participants – may be attenuated if all participants simply appear on a video screen.[285] Asymmetries in how participants are able to participate may also generate perceptions of unfairness.[286]

The comparative transparency and privacy of various systems[287] are also likely to impact perceptions of neutrality and trustworthiness. The public nature of open court processes, for example, may be experienced as highly transparent and perhaps foster belief in the fairness of the system. In very different ways, online text systems may promote feelings of transparency and neutrality when the same forms will be used for all disputants.[288] The creation of a record in some processes, too, may support feelings of transparency and fairness.

J. Societal Perspectives on Justice

The incorporation of technology into dispute resolution may have a psychological impact on society, as well as on individual disputants. Public interactions with the justice system affect how members of the public interact with one another and how they regard legal authorities. Public perceptions of dispute resolution systems as just, fair, authentic, and legitimate affect the stability of society. By observing or participating in both adjudicative and non-adjudicative dispute resolution processes, community members may learn about societal values,[289] express or defuse their emotions,[290] or contribute their own information

284. Molly Treadway Johnson & Elizabeth C. Wiggins, *Videoconferencing in Criminal Proceedings: Legal and Empirical Issues and Directions for Research*, 28 LAW & POL'Y 211, 215 (2006).

285. Legg, *supra* note 6, at 180.

286. Quintanilla et al., *supra* note 19, at 26.

287. *See supra* Part I.C.

288. Bulinski & Prescott, *supra* note 19, at 242, 244 (noting that online systems offer the possibility of heightened transparency).

289. Public trials dating back to the Greeks have been seen as "schools" and "theaters of justice" that can help educate the public. JUDITH RESNIK & DENNIS CURTIS, REPRESENTING JUSTICE: INVENTION, CONTROVERSY AND RIGHTS IN CITY-STATES AND DEMOCRATIC COURTROOMS 297 (2011).

290. In the Middle Ages, even trials of rats and other animals were held publicly in order to allow people to vent their concerns and receive assurance that problems would be addressed. Jean R. Sternlight, *Justice in a Brave New World?*, 52 CONN. L. REV. 213, 246–48 (2020). Non-adjudicatory dispute resolution processes such as community conference and circle practices

or ideas. Open proceedings can also provide a society with external scrutiny for their processes.[291]

Throughout history and across many types of societies, communities have decided whether and how to provide members with access to justice processes and have taken many approaches to incorporating members into dispute resolution.[292] Typically, "authoritative justice has been performed at a 'proclaimed place' known to the entire community."[293] Whereas this site might once have been a special tree or rock, today many societies use buildings – often courtrooms – to accommodate the public role in dispute resolution.[294] The visual aspects of courtrooms have been used to foster values such as transparency, accessibility, accountability, and legitimacy.[295] The symbolism, spectacle, and formality of these public dispute resolution processes have been seen as important for enhancing the legitimacy of those processes.[296] Rituals, ornate courtrooms, coats of arms, and special attire (for example, robes or wigs) have all been used to convince the public of the morality and authenticity of justice processes.[297] At the

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have similarly been used in a broad range of societies to allow members of a community to share their concerns, restore peace, and align group values. *Id.* at 249–51.

291. As political theorist Jeremy Bentham stated a few hundred years ago, "[p]ublicity is the soul of justice. Without publicity, all other checks are insufficient: in comparison of publicity, all other checks are of small account." *Jeremy Bentham Quotes*, QUOTE.ORG, https://quote.org/quote/publicity-is-the-soul-of-justice-without-594508 (last visited Jan. 7, 2022). *See also* LINDA MULCAHY, LEGAL ARCHITECTURE: JUSTICE, DUE PROCESS AND THE PLACE OF LAW 85 (2011) (noting that trials "are also forums in which evidential narratives which unfold in court can be made accessible and transparent to the public"); RESNIK & CURTIS, *supra* note 289, at 295 (discussing Bentham's emphasis on the importance of openness, which he termed "publicity," to enhance accountability of judicial processes).

292. The public has not traditionally had access to all forms of dispute resolution (private settlements, mediations, or arbitrations). *See, e.g.*, Amy Schmitz, *Untangling the Privacy Paradox in Arbitration*, 54 KAN. L. REV. 101 (2006). However, in many societies the public has had access to at least some forms of dispute resolution, such as trials or public conciliations. For a discussion of the origins of the importance of courts being open, see RESNIK & CURTIS, *supra* note 289, at 14–15.

293. Bandes & Feigenson, *supra* note 189, at 32.

294. *See, e.g.*, *id.* at 1282, 1315, 1331 (discussing that courtrooms provide a physical site of justice and also widen the lens of justice to include a public audience). *See generally* LINDA MULCAHY & EMMA ROWDEN, THE DEMOCRATIC COURTHOUSE: A MODERN HISTORY OF DESIGN, DUE PROCESS, AND DIGNITY (2020).

295. RESNIK & CURTIS, *supra* note 289, at 26 (discussing use of "public 'performances' of Law").

296. *See, e.g.*, Bandes & Feigenson, *supra* note 189, at 1316 (discussing that courtroom architecture and symbolism encourage attitudes of formality, respect, and seriousness).

297. *See, e.g.*, Bandes & Feigenson, *supra* note 189, at 6 (quoting ROBERT A. FERGUSON, THE TRIAL IN AMERICAN LIFE 68 (courtrooms "aim to create 'an aura,' a mystique of authenticity and legitimacy")); RESNIK & CURTIS, *supra* note 289, at xv ("When resolving disputes and sanctioning violations of their laws, rulers acknowledged through public rituals of adjudication that something other than pure power legitimated their authority.").

same time, there can be tension between providing such symbolism and providing easy access to justice.[298]

Changes in the technological processes of dispute resolution are likely to affect these public aspects of justice. It is important, for example, to take into account what might happen to "the power of the trial as an important social ritual."[299] We see several potential important impacts.

A move to technology-mediated processes like videoconferencing has the potential to enhance public participation. Members of the public may more easily access a process that does not require them to go to a particular physical place. Similarly, the opportunity to review recordings asynchronously at a convenient time increases access and transparency.[300] On the other hand, if access is provided only through video-conference links, some members of the public may lack the appropriate technology or technological skills to access the proceeding or may fear that what they are seeing or reading has been altered.[301]

Moving from in-person processes to video-conference procedures also changes the visual cues that are available to observers. While some visuals, like a judge in a robe or an official seal, can be replicated in videoconferences, the witnessing public will inevitably miss out on aspects of the proceeding and its setting that they would have perceived in person. The judge may be sitting at a desk at home rather than on the bench. Even if the judge is in the courtroom, the camera may not show the courtroom's high ceiling or beautiful art or wooden

298. RESNIK & CURTIS, *supra* note 289, at 377 ("[L]aw's institutional forms should be structured to teach members of polities to make claims on justice as well as to seek justice – so as to have the capacity to contest and to understand what law can and should do.").

299. MULCAHY, *supra* note 291, at 178. *See generally* Nicholas M. Hobson et al., *The Psychology of Rituals: An Integrative Review and Process-Based Framework*, 22 PERSONALITY & SOC. PSYCHOL. REV. 260 (2018). We are not the first to wonder about this. *See, e.g.*, Bandes & Feigenson, *supra* note 189, at 1282 (discussing implications for disputants of transition from live trials to videoconference in light of courtroom "as a physical site of justice" and "notion of public access to the courtroom"); MULCAHY, *supra* note 291, at 162–78 (contemplating the significance of the "dematerialization of the courthouse"); RESNIK & CURTIS, *supra* note 289, at 303 (reliance on new technologies such as the internet may make it easier to observe proceedings but may impinge on the sense of community and decorum).

300. *See, e.g.*, Legg, *supra* note 6, at 169. It is possible that recording will be more likely for videoconferences, where the ability to make a recording is built into the technology and does not require technological changes to courtrooms. And as we noted earlier, moving away from a physical setting may be less coercive, less disempowering, or more accessible for participants. MULCAHY, *supra* note 291, at 173.

301. While some may believe that technology such as blockchain can protect against these risks, others remain dubious. *See* Mike Orcutt, *How Secure is Blockchain Really?*, TECH. REV. (Apr. 25, 2018), https://www.technologyreview.com////how-secure-is-blockchain-really/.

floor.[302] Parties and witnesses will appear as squares on a screen rather than seated in special places imbued with meaning. The participants in the process, in turn, may well be less aware that there is a public audience. In contrast, observers may also see some things that they would not be able to see in person. They are, for example, more likely to see the faces of some participants who they would otherwise have primarily seen from behind and are likely to have a closer view of participants than they would have had in person. The ease with which participants can see each other, with closer views and no impeded sightlines, can give lay participants in virtual trials a greater feeling of engagement in the process.[303]

Finally, watching a video or reading a transcript may not provide the same level of emotion or drama as observing an in-person justice event. Whether the emotion is positive (because justice has been served) or negative (as some would see a public hanging) the change may well be significant, at least for some kinds of disputes. While few may miss the public airing of traffic tickets, it may matter that the public no longer observes or participates live and in person in the resolution of important civil and criminal disputes.[304]

III. DRAWING ON PSYCHOLOGY TO SELECT AMONG AND EFFECTIVELY USE DISPUTE RESOLUTION COMMUNICATIONS PROCESSES

The psychology that relates to dispute resolution and technology is informative, nuanced, and sometimes counterintuitive. Because the interaction between technology and human beings is complex, there are no one-size-fits-all recommendations. As one mediator recognized: "For each negative difference there appears to be a positive one . . . . No positive body language is offset by no negative body language. No immediacy is set off by time to think. No face-to-face impression is set off by no initial prejudices."[305] Nonetheless, decisionmakers can

302. Of course, to the extent that many courtrooms have a more utilitarian design or are shabby, the transition to a judge's home office could be an improvement. Bandes & Feigenson, *supra* note 189, at 1337–38 (discussing the "prosaic reality" of many courtrooms).

303. LINDA MULCAHY ET AL., CSIS, EXPLORING THE CASE FOR VIRTUAL JURY TRIALS DURING THE COVID-19 CRISIS: AN EVALUATION OF A PILOT STUDY CONDUCTED BY JUSTICE 4, 20 (2020), https://files.justice.org.uk/wp-content/uploads/2020/04/06165956/Mulcahy-Rowden-Virtual-trials-final.pdf.

304. Many family members and survivors of the bombing of the federal building in Oklahoma City, for example, felt the need to "bear witness" and to do so live. JODY LYNEÉ MADEIRA, KILLING MCVEIGH: THE DEATH PENALTY AND THE MYTH OF CLOSURE 126–27 (2012). *See also* Rowden & Wallace, *supra* note 138, at 504–05.

305. Mediator quoted in Hammond, *supra* note 61, at 276. *See also* Miguel A. Dorado, *Computer-Mediated Negotiation of an Escalated Conflict*, 33 SMALL GROUP RES. 509, 510 (2002)

use the analytical structure we provide to apply the wealth of available information about how and under what circumstances communication media can affect dispute resolution. Using this approach, decisionmakers can decide whether, how, and in what combinations to deploy technology in a dispute resolution process.[306] These decisions may include choosing between modes of communication, using different forms of communication at different stages of a process, and adjusting particular technology to better serve their interests.

Practical wisdom calls for an assessment of the "proper aims of the activity," the ability to balance and contextualize conflicting aims, and the capacity to account for others' perspectives and emotions.[307] We, therefore, offer a set of questions for decisionmakers to consider in deciding how best to approach their dispute resolution tasks. First, decisionmakers must identify their goals, as it is difficult to choose an appropriate path without having clear objectives in mind. Second, decisionmakers will want to consider the participants in the process—the characteristics of the disputants, neutrals, or attorneys. Third, decisionmakers will want to examine the differences among disputes and the array of tasks that must be accomplished within disputes.[308] Finally, once a communication medium is chosen or imposed, an understanding of the relevant psychology can also help participants to use that medium most effectively. Throughout, it will be important for decisionmakers to consider that reactions to different forms of communication will change over time and may vary with how participants use technology in other aspects of their lives.[309]

A. What Are the Goals for the Process?

Decisionmakers' varying goals have implications for both what communication medium should be selected and for how the process

("[N]o single medium surpasses the others on all counts, but every medium has positive and negative impacts on the negotiation encounter.").

306. Although individual decisionmakers—whether attorneys, clients, judges, mediators, or courts—will often not have exclusive power to make these choices, these tools will help them make decisions when they can.

307. BARRY SCHWARTZ & KENNETH SHARPE, PRACTICAL WISDOM: THE RIGHT WAY TO DO THE RIGHT THING 25–26 (2010) (drawing on psychology and Aristotelian political philosophy).

308. These same factors will also impact decisionmakers' choices among the underlying dispute resolution processes, e.g., whether the dispute should be litigated or whether a negotiation should be attempted.

309. For example, additional virtual interaction in non-legal settings could potentially compound the fatigue and loss of focus that might be experienced in virtual legal proceedings or, alternatively, might help participants develop their ability to avoid or manage fatigue or enhance their focus in such settings.

might best be conducted in a given medium.[310] These goals will differ in part by role—courts, for example, may have different objectives than attorneys; attorneys and clients may have differing interests or priorities; and mediators may have different concerns than judges or attorneys. But even within roles, individual courts, neutrals, lawyers, or disputants will have diverse aims. Participants will frequently have multiple interrelated goals[311] and goals may differ across contexts or cases and need to be balanced against one another.[312]

One goal, for example, might be ensuring that participants have access to the system. Requiring disputants to physically appear at a courthouse or lawyer's office can impede access to justice when distances are long or transportation is unavailable or inconvenient.[313] Physical attendance requirements can also impede access for other participants, such as jurors or the public. Technology-assisted communication can both increase access by bridging distances and limit access for those without the necessary technology or skills. Asynchronous technologies may enhance access by making it possible for disputants to participate in hearings, negotiate, or take part in mediation without taking time off from work. The extent to which technology enhances or limits access will also depend on how it is utilized. Whether and how a judge or mediator deploys her own mute button or is able to control those of the participants, for example, will affect access in an online proceeding.

Another goal might be efficiency—minimizing the expenditure of time and money by disputants, lawyers, courts, or neutrals. Accomplishing the same results or experience at a lower cost in time or money is likely attractive to courts and judges and also to many disputants and their attorneys. Remote processes do not require costly travel and may also save participants and attorneys from having to sit in court waiting for other matters to finish. Text-based communication

310. *See* Willem Standaert et al., *How Shall We Meet? Understanding the Importance of Meeting Mode Capabilities for Different Meeting Objectives*, 58 INFO. & MGMT., Jan. 2021, at 1.

311. *See* Jennifer K. Robbennolt et al., *Symbolism and Incommensurability in Civil Sanctioning: Legal Decision-Makers as Goal Managers*, 68 BROOK. L. REV. 1121, 1128, 1158 (2003) (discussing overlapping, conflicting, and complementary goals).

312. *See id.* We do not take a normative position on any of these goals here, nor have we attempted to be comprehensive. Rather, we have tried to highlight some of the goals that are most frequently discussed. "Justice" as a goal does not get us far, as there are so many alternative conceptions. *See* Lisa Blomgren Bingham, *Designing Justice: Legal Institution and Other Systems for Managing Conflict*, 24 OHIO ST. J. ON DISP. RES. 1, 28–46 (2008).

313. *See supra* note 59 (describing experiences in Arizona and Michigan); Bulinski & Prescott, *supra* note 19, at 222; Prescott, *supra* note 60, at 2006.

systems may be somewhat costly to develop, but perhaps these costs are not as significant as some might fear.[314]

Some decisionmakers might prioritize procedural justice as an important goal, seeking to ensure that participants feel that their perspective has been fairly heard and considered by third-party neutrals or opposing attorneys or disputants.[315] This concern may lead some decisionmakers to prioritize the solemnity and formality of an in-person proceeding during which participants can voice their perspective and concerns.[316] Similarly, emphasizing procedural justice might lead decisionmakers in adjudicative processes to prefer processes that are transparent and that create a record.

Lawyers and disputants will often be focused on how to use dispute resolution processes to persuade others—with goals centered on persuading an adjudicator to rule in their favor or a counterpart to agree to a satisfactory resolution. We have seen that persuasion can happen across modes of communication, but decisionmakers can think about the nature of the arguments that are available to them and their own persuasive skills and choose a communication medium that best suits them or perhaps disfavors an opponent. An advocate with high-quality substantive arguments might prefer a communication medium that focuses attention on those arguments.[317] Intricate arguments may facilitate persuasion in a medium that allows more rapid back and forth.[318] A person who knows that they are skilled at building rapport may prefer an in-person or at least a video-conference medium.[319] By contrast, a particularly talented writer may prefer a text-based communication format. Participants who are worried about being too easily persuaded might opt for an asynchronous process to allow them to fully consider and respond to a counterpart's proposals. If one is worried about a counterpart's persuasiveness, it may also be wise to choose an environment where one can fully focus and not become unduly fatigued.

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314. NAT'L CTR. FOR STATE COURTS, JTC RESOURCE BULLETIN: ODR FOR COURTS VERSION 2.0, 14 (2017), https://www.ncsc.org/__data/assets/pdf_file/0031/18499/2017-12-18-odr-for-courts-v2-final.pdf.

315. *See supra* Part II.I.

316. Others may feel procedural justice is better served by text boxes than by an in-person court appearance. *See* Bulinski & Prescott, *supra* note 19, at 248–49.

317. *See supra* notes 216–17.

318. *See* Loewenstein et al., *supra* note 109, at 35–36.

319. *See supra* notes 225–26.

Some decisionmakers will surely want to design an adjudication process or a deposition to serve truth-seeking goals.[320] Such decisionmakers will be particularly concerned about the possibility of deceit. No communication modality can prevent lying. While spontaneous lies might be more likely in synchronous processes, planned lies are more likely in asynchronous processes, and either type of lie can occur in any platform.[321] Some ways of cheating, however, such as referring to written notes or off-camera witness coaching, are more feasible when communication is mediated by technology.[322] Thus, where this type of behavior is of concern, decisionmakers might prefer an in-person process or take steps to minimize the off-camera problem.[323] When it comes to evaluating the veracity of communication, we have seen that effective credibility assessments do not turn on whether we can observe body language or other nonverbal communication.[324] A better strategy is ensuring that documents can easily be exchanged or that time is sufficient to permit good analysis of statements and documents.

A related goal might be to elicit or disclose as much information as possible, as shared information can be important to either truth-seeking or creative negotiation. If the goal of generating disclosure is focal, decisionmakers might lean toward modes of communication that are perceived to be private and within which they are best able to build rapport. They might also prefer the quicker back-and-forth of a synchronous process.[325] On the other hand, decisionmakers might sometimes strive to minimize disclosure, perhaps during a deposition or a distributive negotiation. Decisionmakers whose goal is to minimize disclosure might prefer a mode of communication that is more formal

320. *See, e.g.*, Sternlight, *supra* note 290, at 218–22, 244–53 (discussing historical emphasis on truth finding as major purpose of litigation, and idea that justice involves far more than a search for truth). *See also* Sevier, *supra* note 264 (manuscript at 10) (describing "decision accuracy" as courts being "skilled at uncovering the important facts underlying a dispute, interpreting those facts correctly, and applying those facts to the relevant law"). *See generally* John Thibaut & Laurens Walker, *A Theory of Procedure*, 66 CALIF. L. REV. 541(1978) (discussing fundamental dichotomy between seeking truth and seeking justice). We appreciate that some attorneys or clients may be more focused on winning, than on finding the truth, and that mediators are usually seeking to help disputants find resolutions rather than truth.

321. *See supra* notes 169–71.

322. *See, e.g.*, Schmitz, *supra* note 6, at 289–90.

323. Ward, *supra* note 10 ("[I]f it appeared a witness was being coached by someone off camera, the court could order the witness to change the camera angle to see if someone else was in the room.").

324. *See supra* notes 195–96.

325. *See supra* note 149.

or an asynchronous medium that allows more opportunity to choose their words carefully.[326]

Some decisionmakers may seek to foster long-lasting or creative solutions that reach bigger issues. Helping disputing couples wrestle with more of their issues at the outset, for example, might avoid recurring problems. Or helping a local community, day laborers, and businesses work out their issues might be more sustainable than merely ruling on whether day laborers can stand on a particular street corner to solicit work.[327] This goal of creative long-lasting resolutions may lead lawyers and disputants to choose negotiation or mediation over adjudication, and it may also lead court administrators, mediators, attorneys, and disputants to prefer processes that allow the disputants to best engage with each other on these broader issues.[328] This might mean, for example, that engaging in mediation in person or via video would be preferred to a text-based process. Indeed, one study of mediators found that while mediators who considered their mediation style to be a mix of facilitative and evaluative approaches were able to transfer their approach to a text-based process fairly easily, the more purely facilitative mediators reported more difficulty in maintaining their style in the written context.[329] Instead, they tended to become more directive when mediating via text.[330]

Finally, decisionmakers may not only concern themselves with the immediate participants in the process, but may also want to design or choose a process to serve broader societal or community goals, such as educating the public as to laws and values, ensuring adequate accountability by public officials, maintaining or enhancing communal bonds, or providing a forum in which affected persons and community members can express their emotions or air their concerns.[331] Choosing a process that provides public access and transparency will be important for achieving these kinds of justice concerns. Decisionmakers focused on these public goals will also want to pay attention to the public experience of attending a hearing or a trial in different media.

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326. *See* Ebner et al., *supra* note 42, at 95–97.

327. *See* Lela P. Love & Cheryl B. McDonald, *A Tale of Two Cities: Day Labor and Conflict Resolution for Communities in Crisis*, DISP. RESOL. MAG., Fall 1997, at 8, 8–10.

328. *See generally* LISA BLOMGREN AMSLER ET AL., DISPUTE SYSTEM DESIGN: PREVENTING, MANAGING, AND RESOLVING CONFLICT (2020).

329. Hammond, *supra* note 61, at 269.

330. *Id. But see also* Susan Summers Raines, *Can Online Mediation Be Transformative? Tales from the Front*, 22 CONFLICT RESOL. Q. 437, 448 (2005) (arguing that "reframing is probably easier in an online environment").

331. *See, e.g.*, Sternlight, *supra* note 290, at 246.

B. Who Are the Participants?

It is also important to consider the characteristics of the prospective participants and their relationships with one another. Disputants, attorneys, mediators, judges, jurors, or arbitrators will all vary in ways that can inform the choice of communication medium.

Individual participants, for example, will face a range of access issues. Some people will find it difficult to attend in-person proceedings, whether due to geographic impediments, cost, or scheduling issues. Similarly, asynchronous communications can be useful for those with limited access to the internet and those who might have a hard time attending meetings or hearings during business hours.[332] On the other hand, some will lack access to a good internet signal or computer, in which case in-person meetings or telephonic communications might be more accessible.[333] One judge, who held remote trials during the pandemic and who was initially concerned about potential negative effects of digital divide issues on jury service, ultimately observed that allowing both in-person and remote service options resulted in increased jury participation and a more diverse jury pool.[334] He noted that "more people own smartphones than cars, [and] the key is to make sure we don't exclude those people who don't have either."[335]

We have also seen that differences among participants will affect their comfort with particular communication media and that greater comfort allows participants to use these modalities in more advanced ways.[336] Stereotypically, but often true, younger persons may feel more comfortable than older persons using more sophisticated technology such as videoconferencing or texting.[337] Some people will feel

332. *See* Bulinski & Prescott, *supra* note 19, at 226; Prescott, *supra* note 60, at 1996.

333. Limits on telephone data plans can make even telephone hearings potentially problematic, particularly when hearings are lengthy or fall at the end of a billing cycle. *See* Mazzone & Wilson, *supra* note 19.

334. Pressman, *supra* note 91.

335. *Id.*

336. *See supra* notes 32–33, 61.

337. *See, e.g.*, Deborah Kirby Forgays et al., *Texting Everywhere for Everything: Gender and Age Differences in Cell Phone Etiquette and Use*, COMPUTERS HUM. BEHAV. 314, 315–17 (2014); *Mobile Fact Sheet*, PEW RES. CTR. (Apr. 7, 2021), https://www.pewresearch.org/internet/fact-sheet/mobile/; *see also* Amanda Lenhart, *Cell Phones and American Adults*, PEW RES. CTR. (Sept. 2, 2010), https://www.pewresearch.org/internet/2010/09/02/part-four-a-comparison-of-cell-phone-attitudes-use-between-teens-and-adults/. *See also* Kate Conger & Erin Griffith, *As Life Moves Online, an Older Generation Faces a Digital Divide*, N.Y TIMES (Mar. 27, 2020), https://www.nytimes.com/2020/03/27/technology/virus-older-generation-digital-divide.html. This generational divide may be changing, and that change has likely been accelerated somewhat due to the pandemic. *See, e.g.*, Jennifer L. Gaskin, *Move Over Millennials: Seniors Are Adopting Online Habits at Record Volumes*, THE SENIOR LIST (Apr. 9, 2020), https://www.theseniorlist.com//seniors-online-activity-skyrockets/; Linda Poon & Sarah Holder, *The 'New Normal' for Many*

more at ease in person or on the telephone, whereas others will prefer writing. Persons who hold a lower status in a particular context might be more comfortable participating via a medium with fewer social cues.[338] This comfort and familiarity is significant because those who are more familiar with a modality may have less need for synchrony.[339] By contrast, a lack of familiarity with a particular medium or discomfort with the level of formality posed may tax attention in ways that are counterproductive.[340] Comfort with particular forms of technology may also change over time and vary depending on the content of the communication.[341]

Other differences among participants may also push toward one modality or another. Some clients may feel more "heard" if they have the chance to speak to a judge, mediator, or opponent in person; others may feel more heard if they can express themselves clearly using well-designed text boxes.[342] A lawyer who believes she can make a quick, good impression may prefer a synchronous process. Some disputants may want to settle and move on or have their dispute resolved as quickly or economically as possible, caring less about future relationships or addressing broader issues; others may want a process that is more facilitative or transformative or that provides more procedural justice.[343]

The use of technology may also play out quite differently depending on the nature of the relationships among participants. Although, as we have seen, it can take more time and effort to build rapport when communication channels are limited, communicators who are familiar and comfortable with each other are better situated to overcome these limitations.[344] Such participants may not need an in-person meeting or

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Older Adults Is on the Internet, BLOOMBERG CITYLAB (May 6, 2020, 6:00 AM), https://www.bloomberg.com//features/-05-06/-seniors-are-becoming-more-tech-savvy. *See generally* Annie T. Chen et al., *Reactions To COVID-19, Information and Technology Use, and Social Connectedness Among Older Adults with Pre-Frailty and Frailty*, 42 GERIATRIC NURSING 188 (2020).

338. *See, e.g.*, Friedman & Currall, *supra* note 61, at 1336.

339. Geiger & Parlamis, *supra* note 61, at 71.

340. *See supra* Part II.A.

341. *See, e.g.*, Gwyneth Doherty-Sneddon, *Face-to-Face and Video-Mediated Communication: A Comparison of Dialogue Structure and Task Performance*, 3 J. EXPERIMENTAL SOC. PSYCHOL.: APPLIED 105, 121 (1997); Hammond, *supra* note 61, at 268; *National Poll: Public Warming to Idea of Remote Court Appearances*, NAT'L CTR. FOR STATE COURTS (June 24, 2020), https://www.ncsc.org/newsroom/at-the-center/2020/national-poll-public-warming-to-idea-of-remote-court-appearances.

342. Bulinski & Prescott, *supra* note 19, at 229 (observing that an online system may offer "new and better ways for litigants to voice their positions").

343. Raines, *supra* note 330, at 440–41.

344. Norman A. Johnson & Randolph B. Cooper, *Media, Affect, Concession, and Agreement in Negotiation: IM Versus Telephone*, 46 DECISION SUPPORT SYS. 673, 674 (2009).

videoconference to feel the trust or rapport that might enhance a negotiation or mediation. Similarly, we have seen that participants who are inclined to approach their interaction cooperatively are well-situated to use a variety of communication media effectively.[345] Hopes or expectations for a positive future relationship may also moderate the potential negatives of leaner forms of technology.[346] Thus, parties with an established working relationship – such as two attorneys who have dealt with each other in the past – or a set of participants who are inclined to take a cooperative stance, might work better together over the phone or in a text-based modality than parties or attorneys who are relative strangers.

Parties with negative relationships or those who are predisposed to be uncooperative, on the other hand, might prefer or be better served by more distanced forms of communication. We have seen that more synchronous and multi-channel modes of communication can intensify conflict for those who take an uncooperative stance.[347] Similarly, some mediators have suggested that using text-based or phone mediation can be preferable to in-person mediation when parties have an unequal power relationship or a history of domestic violence, not only to preserve physical safety, but also to ensure that a richer communication medium is not used to intimidate the weaker or more vulnerable party.[348] Leaner or asynchronous forms of communication may also help to tamp down negative emotions.[349] Indeed, parties with a prior negative relationship might be more willing to participate if they would not need to confront one another face-to-face.[350] At the same time, to the extent that parties with a prior negative relationship are interested in working to improve or repair that relationship, incorpo-

345. Swaab et al., *supra* note 174, at 30–31.

346. Friedman & Currall, *supra* note 61, at 1340–41.

347. Swaab et al., *supra* note 174, at 26.

348. Fernanda S. Rossi et al., *Shuttle and Online Mediation: A Review of Available Research and Implications for Separating Couples Reporting Intimate Partner Violence of Abuse*, 55 FAM. CT. REV. 390, 397 (2017); *Clark County Nevada*, *supra* note 281 (noting the benefit of helping parents "avoid potentially volatile situations that might arise when a divorcing couple meet face-to-face"). *See generally* Trina Grillo, *The Mediation Alternative: Process Dangers for Women*, 100 YALE L.J. 1545 (1991). Research comparing asynchronous in-person shuttle mediation and synchronous videoconferenced mediation for high conflict divorces found few differences in how the parties assessed the process. *See also* Amy Holtzworth-Munroe et al., *Intimate Partner Violence (IPV) and Family Dispute Resolution: A Randomized Controlled Trial Comparing Shuttle Mediation, Videoconferencing Mediation, and Litigation*, 27 PSYCHOL., PUB. POL'Y, & L. 45, 56 (2021). However, mediators preferred shuttle mediation over synchronous video mediation and shuttle mediation was twice as likely to result in agreements than was synchronous video mediation. *Id.* at 55.

349. *See supra* notes 133–35 and accompanying text.

350. Friedman & Currall, *supra* note 61, at 1336.

rating some face-to-face discussion might be useful. As noted above, some mediators have found it harder to engage in more facilitative processes through written modes of communication.[351]

C. *What is the Dispute or Task?*

Just as goals and participants differ, the underlying disputes or tasks also vary in ways that should impact decisionmakers' technological choices. Whether the underlying dispute resolution process is adjudicative or consensual, whether the case is civil or criminal, whether the relevant task is information exchange or brainstorming or reaching an agreement, whether any agreement needs to be finetuned or just broadly principled, or whether the dispute is a one-off or likely to recur, all have implications for the choice of communication modality. Thus, a decisionmaker might believe it desirable to hold a trial of a certain matter in person, should trial prove necessary, but first try to settle the matter through text-based negotiation. Or a court might decide that jury selection is best done with a mix of written questionnaires and online voir dire but ask the selected jurors to deliberate in person.

The complexity of the dispute is one factor for decisionmakers to consider. Complicated and detailed proposals, for example, might best be communicated asynchronously, in writing, so that specifics are clear and there is a record that can be revisited as necessary. And large disputes that involve many different stakeholders might fruitfully incorporate technology-mediated processes that will better enable many people to be at the table. At the other end of the spectrum, some courts are setting up processes to handle more straightforward cases with online text-based processes rather than with a more labor intensive in-person or video-conferencing process, reserving these more intensive processes for more complicated cases.[352]

Decisionmakers will also want to consider whether the dispute stems from a lack of shared information, whether the disputants or their attorneys need an opportunity to better explain their perspec-

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351. *See supra* note 330.

352. *See, e.g.*, Bulinski & Prescott, *supra* note 19, at 221–22, 228; ONLINE DISPUTE RESOLUTION ADVISORY GROUP, ONLINE DISPUTE RESOLUTION FOR LOW VALUE CIVIL CLAIMS 1, 3, 21–23 (2015) (U.K.). Dollar value is not likely a useful dividing line in this regard; disputes that involve few dollars may still be complex in terms of either law or interpersonal issues. *See* Menkel-Meadow, *supra* note 19, at 7 (noting that some low- and high-monetary disputes require "room to brainstorm and create a different solution, give an apology, come to understand someone else's perspective and improve, rather than just 'resolve' relations and disputes").

tive, or whether there is a need for legal argumentation.[353] Some disputes primarily turn on the exchange and review of documents and other information and are settled or adjudicated easily once the parties have exchanged relevant information or once they have provided that information to the court.[354] Such disputes might include customer complaints over an item that was received in a damaged condition,[355] personal injury or contractual matters where the main issue is damages, traffic violations that turn on photographic or video evidence, or child support disputes that involve proof of employment or earnings. Similarly, within disputes, there will be instances in which a particular task, meeting, or hearing is primarily one of information exchange—for example, the disclosure of financial records, the presentation of an offer, or hearings on routine matters.[356] For such disputes or tasks, technological media can allow disputants to exchange documents with one another or to provide them to a judge or arbitrator quickly and easily. Asynchronous processes can also be effective for conveying information because they can facilitate the efficient transfer of large amounts of information, give communicators more time to digest and analyze that information, and allow more time to generate meaning.[357] Conducting these sorts of proceedings more efficiently can also free up time and attention for other cases or tasks.[358]

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353. *See* Jean R. Sternlight, *Lawyers' Representation of Clients in Mediation: Using Economics and Psychology to Structure Advocacy in a Non-Adversarial Setting*, 14 OHIO ST. J. ON DISP. RES. 269, 273–74 (1999) (arguing mediation can be used to overcome both economic and psychological barriers to negotiated agreement).

354. Bulinski & Prescott, *supra* note 19, at 210 ("An enormous share of court resources is devoted to resolving traffic and other minor civil infractions that resemble administrative tasks more than litigation. Courts should and—in the short or long run—will be using technology for these types of proceedings."). Some information exchange, of course, might still be best done in person, "for example, if there is physical evidence that needs to be touched and which cannot be replaced by video." Pressman, *supra* note 91.

355. *See, e.g.*, Louis F. Del Duca et al., *eBay's De Facto Low Value High Volume Resolution Process: Lessons and Best Practices for ODR Systems Designers*, 6 ARB. L. REV. 204, 208 n.13, 216 (2014).

356. Dodson et al., *supra* note 12, at 14.

357. *See* Alan R. Dennis et al., *Media, Tasks, and Communication Processes: A Theory of Media Synchronicity*, 32 MIS Q. 575, 581 (2008) (distinguishing tasks that focus on "conveyance" and "convergence"). *See also* Bulinski & Prescott, *supra* note 19, at 210 (observing that conveyance disputes are "particularly conducive to asynchronous communication because [they] mainly involve[ ] parties' exchange of information, documents, exhibits, and other evidence.")

358. Bulinski & Prescott, *supra* note 19, at 210 ("Computers, software, and smartphones are capable of bearing a large part of this load, freeing up judges and lawyers to focus on the tough issues that require truly human experience and insight."). Other characteristics of the task may also turn out to matter. One study, for example, found that in-person interviews were better for creating accurate composite sketches than video-conferenced interviews. Heidi J. Kuivaniemi-Smith et al., *Producing Facial Composite Sketches in Remote Cognitive Interviews: A Preliminary Investigation*, 20 PSYCHOL., CRIME, & L. 389, 396–97 (2014).

By contrast, some disputes or tasks do not turn on a lack of shared information. They require, instead, that the parties reframe their perspectives, that participants develop a more nuanced understanding of each other, or that participants come to a meeting of the minds. If the controversy involves disputants who are likely to have continued involvement with one another or if it is just one instance of a larger underlying problem, more integrative solutions may be desired and more facilitative processes preferred. Divorcing parents may want and need to hash out their values and preferences about how to provide the best home environment for their child. A personal injury dispute may turn on different perspectives about whether a defendant acted negligently. Some types of hearings are more complex, and the relevant argumentation might be enriched by more engaged back-and forth "sparring."[359] The need for at least some convergence in these kinds of disputes may mean that relying on written forms of communication alone may not allow sufficient opportunity for disputants or their attorneys to try to persuade one another or a neutral of the validity of their position, or for the participants to reach a mutual understanding. A videoconference or an in-person meeting may be more productive for tasks involving convergence, coordination, and generative interaction.[360] Some tasks, like brainstorming, might ideally incorporate a mix of synchronous and asynchronous processes to foster broad generative thinking.[361]

D. Effectively Using Communication Processes

Advocates, parties, or institutions who have decided (or had it decided for them) that they will use a particular dispute resolution communication process can also use psychological insights to tailor and participate in that medium in ways that will best serve their pur-

359. Dodson et al., *supra* note 12, at 15.

360. *See* Geiger & Laubert, *supra* note 185, at 408, 415; Geiger & Parlamis, *supra* note 61, at 71. *See also* LINDA MULCAHY ET AL., CSIS, TESTING THE CASE FOR A VIRTUAL COURTROOM WITH A PHYSICAL JURY HUB: SECOND EVALUATION OF A VIRTUAL TRIAL PILOT STUDY CONDUCTED BY JUSTICE 4 (2020), https://files.justice.org.uk/wp-content/uploads/2020/06/06165935/Mulcahy-Rowden-second-evaluation-report-JUSTICE-virtual-trial.pdf (describing trial with remote jurors together in "hub" that allowed for remote-style trial with in-person deliberation).

361. Vincent R. Brown & Paul B. Paulus, *Making Group Brainstorming More Effective: Recommendations from an Associative Memory Perspective*, 11 CURRENT DIR. PSYCHOL. SCI. 208, 209 (2002); Art Markman, *Your Team Is Brainstorming All Wrong*, HARV. BUS. REV. (May 18, 2017), https://hbr.org/2017/05/your-team-is-brainstorming-all-wrong; Paul B. Paulus & Jared B. Kenworthy, *Effective Brainstorming*, *in* THE OXFORD HANDBOOK OF GROUP CREATIVITY AND INNOVATION 287 (Paul B. Paulus & Bernard A. Nijstad eds., 2019). *See also* Alan R. Dennis et al., *Beyond Media Richness: An Empirical Test of Media Synchronicity Theory*, Proc. 31st Annual Hawaii International Conference on System Sciences 48, 54 (1998) (finding that asynchronous, written process generated more unique ideas than in-person communication).

poses.[362] Low quality audio or video, spotty or absent internet access, or poorly designed text-based systems, for example, will make any technology-mediated communication less effective. Designers and participants will also need to consider the effects of asymmetries in how different participants participate in the process.[363]

Beyond the basic technological requirements, participants should focus on (and practice) effectively using communication modes in ways that account for human psychology. If they are videoconferencing, for example, participants should adjust their cameras to eye level.[364] Placing speaking notes near the camera can also help participants ensure that their eye gaze is directed toward others. Participants can also potentially increase empathy by setting camera angles to show participants' entire upper bodies, rather than merely their faces.[365] Keeping in mind counterparts' limited views and being transparent when needing to look elsewhere or speak to someone who is off camera can minimize the risks that such behaviors will lead to distrust or damage rapport.[366]

Communicators who are not meeting in person can try to build rapport by engaging in preliminary small talk.[367] It is possible to smile and nod to connect with another person on a video call. Participants in videoconferences and phone calls can make facilitative sounds ("um-hum"). Communicators can use explicit statements of relation, affinity, or affection when communicating in media that lack more subtle means of communicating.[368] Indeed, more relational work is done via written verbal cues in text-based forms of communication as compared to in-person communication where nonverbal signals are possible.[369] While food cannot literally be shared when communicators are not meeting in person, it may be possible to create an atmosphere of rapport by eating or drinking together during a video call.[370] This at-

362. Miller, *supra* note 14.

363. *See generally* Quintanilla et al., *supra* note 19.

364. Nguyen & Canny, *supra* note 82, at 430–31.

365. *Id.* at 425, 431 (finding similar levels of empathy for in-person communicators and those whose cameras showed upper bodies, but less empathy for face only video communication).

366. Park & Whiting, *supra* note 181 and accompanying text.

367. Morris et al., *supra* note 37, at 90, 100.

368. *See, e.g.*, Geiger, *supra* note 187, at 758 (finding that more "explicit relationship building communication" occurred in e-mail as compared to in-person communication); Morris et al., *supra* note 37, at 90–92; Walther et al., *Let Me Count the Ways*, *supra* note 37, at 52–57 (finding that immediacy and affinity were similar in person and chat).

369. Walther et al., *Let Me Count the Ways*, *supra* note 37, at 53.

370. *55 Percent of Americans are Joining Virtual "Happy Hours"*, DIG. INFO. WORLD (May 10, 2020), https://www.digitalinformationworld.com/2020/05/survey-how-americans-socialize-during-quarantine.html.

tention to relationship building can also help to discourage the negative behaviors that can result from feelings of anonymity and perceived distance between communicators.[371]

To the extent that communication via text-based modalities or video is more prone to misunderstanding,[372] participants can take care to minimize ambiguity, communicate emotion more explicitly, provide thorough explanations, use clear descriptions in subject lines, and remind counterparts of the content of a prior conversation. Participants should be alert for potential misunderstanding, reading messages carefully,[373] using more frequent and direct questions to detect confusion or crossed signals, and correcting mistakes quickly. Participants should also plan for the potential downsides of asynchrony, establishing a practice of timely response (at least to let others know that their messages have been received and when to expect an answer)[374] or setting expectations at the outset for the pace of exchanges.

Possible differences in perceptions of credibility across modes of communication can be addressed in a variety of ways as well. Instructing judges, mediators, jurors, and arbitrators about credibility determinations can help to moderate some inappropriate influences on their judgments.[375] Making efforts to enhance rapport and persuasiveness by adjusting cameras to eye level and being transparent if one needs to look elsewhere may also help communicators alleviate some of the potential credibility downsides of video. Paying attention to camera angles is important for other reasons as well. Suspect confessions, for example, are viewed as more voluntary and less coerced when the camera is focused on the suspect as compared to when the camera is trained on both the suspect and the interrogator or focused solely on the interrogator.[376] To the extent that dehumanization is

371. *See* Nadler & Shestowsky, *supra* note 94, at 153–54.

372. *See supra* notes 128–30.

373. Ebner, *supra* note 14 ("Never skim through a message, assuming you will get the gist of it. You will get the wrong gist. Read messages carefully, paying attention to details such as specific wording and phraseology.").

374. Hammond, *supra* note 61, at 270.

375. *See, e.g.*, Jennifer K. Elek et al., *Knowing When the Camera Lies: Judicial Instructions Mitigate the Camera Perspective Bias*, 17 LEGAL & CRIM. PSYCHOL. 123, 124 (2012); Ziano & Wang, *supra* note 228, at 1474 (finding that instructing people to ignore response speed can reduce the influence of speed on judgments of sincerity). Yael Granot et al., *In the Eyes of the Law: Perception versus Reality in Appraisals of Video Evidence*, 24 PSYCHOL., PUB. POL'Y. & L. 93, 98, 100–01 (2018).

376. *See, e.g.*, G. Daniel Lassiter et al., *Evidence of the Camera Perspective Bias in Authentic Videotaped Interrogations: Implications for Emerging Reform in the Criminal Justice System*, 14 LEG. & CRIM. PSYCHOL. 157, 167 (2009) [hereinafter Lassiter et al., *Evidence of the Camera Perspective Bias*]; G. Daniel Lassiter et al., *Evaluating Videotaped Confessions: Expertise Provides No Defense Against the Camera Perspective Effect*, 18 PSYCHOL. SCI. 224, 224 (2007); G.

problematic in videoconferences, perhaps counsel can alleviate this issue by making extra effort to personalize their client with words, attire, or background.

When using any mode of technology-mediated communication, participants should take advantage of the helpful features provided by the tool. If transparency is important, participants should use the options provided by the medium to provide live access or to create a video, audio, or written record. Or, if privacy is important, parties should set ground rules such as requiring doors to be shut, requiring participants to use headphones, and prohibiting recording to minimize the risk that discussions will be overheard or recorded. Using the available formatting options, attachments, chat boxes to share links, or embedded whiteboards or screensharing can facilitate clear explanation, information exchange, or collaboration, support the use of other technological aids (e.g., litigation analytics),[377] or increase persuasive effect.[378] Similarly, to provide privacy, mediators can use breakout rooms for caucusing, clients and their attorneys can use them for consultation, and judges could ask attorneys to go into a breakout room to attempt to settle a case. Backgrounds can be used thoughtfully to convey or obscure information, to make an impression, or to signal solemnity.[379] When using asynchronous media, participants should use the opportunities inherent in that medium by taking time to reflect. Participants might also combine modes of communication to use the advantages of one to make up for the deficiencies of another. Research has found, for example, that it can be effective for negotiators using text-based systems to start with a brief phone call to schmooze and get to know each other in order to establish rapport more quickly.[380]

Daniel Lassiter & Audrey A. Irvine, *Videotaped Confessions: The Impact of Camera Point of View on Judgments of Coercion*, 16 J. APPLIED SOC. PSYCHOL. 268, 272–75 (1986). Research exploring evaluations of video recorded confessions has also found that videotaped confessions are judged to be more voluntary and less coerced than audio recordings or transcripts of the same confession. Lassiter et al., *Evidence of the Camera Perspective Bias*, *supra*, at 164–65.

377. Carrel & Ebner, *supra* note 125, at 15–16, 32.

378. Screen sharing might also facilitate the smooth discussion of exhibits with witnesses. *See* Benjamin Perkel, *Virtual Civil Trials Are a Reality in New Jersey*, JURY MATTERS (Apr. 2021), https://civiljuryproject.law.nyu.edu/newsletters/ (describing the difficulties that occurred in one virtual trial when the "witness being cross-examined significantly struggled to identify which portions of their deposition testimony counsel was referring to").

379. *See* Rowden & Wallace, *supra* note 138, at 518.

380. Moore et al., *supra* note 95, at 39; Morris et al., *supra* note 37, at 97; Janice Nadler, *Rapport in Legal Negotiation: How Small Talk Can Facilitate E-mail Dealmaking*, 9 HARV. NEGOT. L. REV. 223, 223 (2004); Thompson & Nadler, *supra* note 109, 115.

Fatigue and distraction might be managed by scheduling shorter sessions and taking breaks.[381] This can be helpful across modes of communication but might be particularly useful given the fatigue-inducing features of videoconferencing. Making deliberate choices about whether to view videoconferences in speaker view or gallery view, how large or small to set views of other participants, when to hide self-view, and when to use only audio can also reduce the demands on attention. Video-conference participants can decrease fatigue by using external cameras and keyboards to increase the distance between themselves and their screens.[382] Given the risks of multitasking, lawyers or neutrals may want to insist that those viewing screens or on conference calls shut off potential distractions, leave their phones in another room, or even download software that will prevent them from multitasking.[383]

Participants' effectiveness, their trust in the system and the neutrals, and their sense of procedural justice can also be enhanced by clear instructions. Making sure that all participants know how to use the relevant technology, that they understand what to expect from the process, and that they know what will be asked of them can improve their ability to express themselves and increase the likelihood that they will feel that they have been treated with dignity and respect. Participants can be instructed about how to set cameras, how to dress, and other best practices to enhance their persuasive capabilities. Conveners could start sessions by "orienting a remote participant to the

381. *See, e.g.*, Frank Burke, *In an ODR World, Is the Time Right to Switch to Multiple Shorter, Staggered Mediation Sessions?*, MEDIATE.COM (July 2020), https://www.mediate.com/articles/Burke_Shorter_Sessions.cfm; Davis, *supra* note 98 (describing how remote jury trial was scheduled to end by early afternoon each day); Parker & Weizenecker, *supra* note 78. Note that when travel is not required, it may also become logistically more feasible to hold more shorter mediation sessions rather than try to squeeze an entire mediation into one or two days. While we in the United States are used to in-person hearings that are held straight through, for several days as needed, this is not always the way trials are held in other jurisdictions. *See, e.g.*, Bandes & Feigenson, *supra* note 189, at 1285 ("[S]ome inquisitorial systems rely much more heavily on dossiers of documentary evidence."); Susan A. Bandes, *Remorse, Demeanor and the Consequences of Misinterpretation*, 3 J. L., RELIGION, & ST. 170, 171 n.3 (2014) (describing some civil law jurisdictions in which evidence is more typically presented on paper than in person and disputes are resolved in stages over a lengthy period of time).

382. Bailenson, *supra* note 79, at 12.

383. Parker & Weizencker, *supra* note 78 (suggesting that online jurors could be provided with court-issued tablets or laptops that *only* contained the software required to view the trial, or that blocking or monitoring software be employed); Davis, *supra* note 98 (describing a judge who provided jurors with computers that only had the videoconferencing software). *See* Anastasia Kozyreva et al., *Citizens Versus the Internet: Confronting Digital Challenges with Cognitive Tools*, 21 PSYCHOL. SCI. PUB. INTEREST 103, 125, 132–33 (2020).

courtroom space" or giving a "guided tour" of the platform.[384] Procedures to usher participants into the dispute resolution setting may help focus attention and signal the appropriate level of solemnity.[385] Text-based systems should similarly be equipped with clear and understandable instructions. Protocols should be established to help all participants understand each participant's role and to help them understand when proceedings have started or finished, how to handle documents, and when they can be seen on camera.[386]

Process designers can also take other steps to help provide participants with procedural justice or to provide the community with a feeling that they have fully observed and participated in a dispute resolution process. Some important symbolic aspects of in-person proceedings might be replicated in video hearings, text-based platforms, or phone calls. It might be important, for example, for the judge to appear or be pictured in her judicial robe in front of a background that bears the official seal of the court. Formal announcements might be made to commence a telephonic hearing. Different backgrounds or screen names might be used to delineate the roles of various participants—parties, attorneys, judges or other neutrals, jurors, bailiffs, and so on. Or designers might use the physical placement of images on the screen to convey roles.[387] In contrast, common backgrounds might be used to level the playing field. In some cases, remote locations (e.g., rooms at prisons or other remote sites) can be more carefully designed to reflect the solemnity of the court and foster the dignified treatment of the participant.[388]

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384. Ebner, *supra* note 14; Emma Rowden et al., *Sentencing by Videolink: Up In the Air?*, 34 CRIM. L.J. 363, 381 (2010).

385. *See generally* MEREDITH ROSSNER & MARTHA MCCURDY, VIDEO HEARINGS PROCESS EVALUATIONS (PHASE 2) FINAL REPORT (2020) (descripting pre-hearing processes and hearing waiting rooms).

386. *See* MCKAY, *supra* note 77, at 54–56, 181; MULCAHY ET AL., *supra* note 303, at 5–6, 22–25; Rowden et al., *supra* note 384, at 381. *See also* Caroline Cornelius & Margarette Boos, *Enhancing Mutual Understanding in Synchronous Computer-Mediated Communication by Training*, 30 COMM. RES. 147, 155–56 (2003); *see generally* Margaret Hagan, *A Human-Centered Design Approach to Access to Justice: Generating New Prototypes and Hypotheses for Interventions to Make Courts User-Friendly*, 6 IND. J.L. & SOC. EQUAL. 199 (2018).

387. *See* MCKAY, *supra* note 77, at 134–36 (discussing the importance of background); MULCAHY ET AL., *supra* note 303, at 26–29 (discussing and showing examples of backgrounds and screen organization).

388. Rowden et al., *supra* note 384, at 382 ("A sense of dignity, of solemnity, and of being taken seriously is the product of the artfully crafted courtroom space, supporting a carefully performed ritual. When this space is split across multiple sites, more careful attention to the design of remote spaces is warranted.").

CONCLUSION

Courts, mediators, disputants, lawyers, judges, arbitrators and all other decisionmakers can use the insights of psychology to make effective choices about which communication process is most useful for a given set of circumstances. These decisions will never be simple, but the lessons of psychology provide a valuable roadmap. Different channels of communication, synchrony or asynchrony, the potential for privacy or transparency, and varying degrees of formality, familiarity, or accessibility, create opportunities for designing, tailoring, and using the available array of communication mechanisms in sophisticated ways. Thinking carefully about how the characteristics of different media can affect the nuances of dispute resolution and how these effects interact with decisionmakers' goals, the individual participants, and the characteristics of the dispute or task at hand is essential for choosing among different media. Participants can also draw on this analysis to tailor a particular dispute resolution communication medium to best serve their purposes.

Process designers, including courts, dispute resolution providers, and companies, can also use the lessons of psychology, together with principles of human-centered design,[389] to build even more effective systems. In some cases, designers will want to identify and figure out how to recreate important aspects of existing processes. At the same time, however, advances in technology also create opportunities for designers to reimagine how justice is done, using the opportunity to innovate and improve.[390]

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389. Tim Brown, *Design Thinking*, HARV. BUS. REV., June 2008, at 85, 86, https://hbr.org/2008/06/design-thinking; Hagan, *supra* note 386, at 204. *See also* CATHERINE D'IGNAZIO & LAUREN F. KLEIN, DATA FEMINISM 137 (2020) (discussing the importance of designing for those who have been most marginalized); MAKING JUSTICE AVAILABLE INITIATIVE, MEASURING CIVIL JUSTICE FOR ALL 1, 6–7, 21 (2021), https://www.amacad.org/sites/default/files/publication/downloads/2021-Measuring-Civil-Justice-for-All.pdf.

390. *See, e.g.*, MULCAHY ET AL., *supra* note 303, at 30 (suggesting the need to "develop new forms of ceremony and ritual"); Prescott, *supra* note 60, at 2019; Matt Reynolds, *Courts Attempt to Balance Innovation with Access in Remote Proceedings*, ABA J. (Feb. 1, 2021), https://www.abajournal.com/magazine/article/courts-attempt-to-balance-innovation-with-access-in-remote-proceedings (quoting Michigan Supreme Court Chief Justice Bridget Mary McCormack as saying: "This pandemic was not the disruption any of us wanted. But it might be the disruption we needed to transform the judiciary into a more accessible, transparent, efficient, and customer-friendly branch of government"); Christopher T. Robertson & Michael Shammas, *The Jury Trial Reinvented*, 9 TEX. A&M L. REV. (manuscript at 42–44) (forthcoming 2022); Rowden et al., *supra* note 384, at 381 (arguing that decisionmakers should "consider how those [courtroom] rituals and spaces can be re-configured in ways that enable them to achieve their objectives in a videolinked environment"); Ward, *supra* note 10 (describing how the pandemic pushed courts to think differently).

We have focused here on the ways in which psychological phenomena cause communicating through different media to affect key aspects of dispute resolution. In addition to addressing these psychological impacts, designers will also need to address many other issues that may flow from decisions to communicate in different media.[391] It will be important, for example, to facilitate effective access to counsel,[392] to address the special needs of pro se disputants,[393] to give attention to how legal teams or panels of judges or arbitrators will communicate among themselves,[394] and to address the possibility of off-camera coaching or intimidation.[395] Designers will need to think creatively about how to enable the positive kinds of informal interaction that might have occurred in the hallways of the courthouse or during the unstructured time when participants are arriving at or leaving a mediation and that might have led to settlement or built rapport.[396] Courts might need to provide internet access or facilities from which people can effectively participate in their technology-mediated proceedings.[397] Addressing these issues, and others, in addition to the psychology of dispute resolution communication, are essential to creating successful processes.

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391. For a good discussion of some of the many relevant issues, see generally Alice L. Bannon & Douglas Keith, *Remote Court: Principles for Virtual Proceedings During the Covid-19 Pandemic and Beyond*, 115 NW. U. L. REV. 1875 (2021).

392. *See supra* note 237; MCKAY, *supra* note 77, at 54–56, 181. *See also* BENNINGER ET AL., *supra* note 18, at 33, 105–07 (reporting criminal defense attorney concerns about the negative impact of virtual processes on their ability to have confidential conversations with clients); MULCAHY ET AL., *supra* note 303, at 4, 14–15 (describing provision of separate virtual "room" for consultation between attorney and client).

393. *See, e.g.*, Quintanilla et al., *supra* note 19, at 3–6.

394. *See* Ula Cartwright-Finch, *Sticky Notes Actually*, CORTEX CAPITAL (2020), https://www.cortexcapital.org/justicerebooted; Ula Cartwright-Finch, *Flying Cyber-Solo*, CORTEX CAPITAL (Oct. 2020), https://www.cortexcapital.org/justicerebooted.

395. For an example of one court system's best practices, see generally STATE COURT ADMINISTRATIVE OFFICE, MICHIGAN TRIAL COURTS VIRTUAL COURTROOM STANDARDS AND GUIDELINES (April 2020, rev. Aug. 2020), https://courts.michigan.gov//-resources/Documents/VCR_stds.pdf. *See also* Debra Cassens Weiss, *Lawyer is Suspended for Texting Witness During Phone Deposition: How Did Opposing Counsel Find Out?*, ABA J. (Nov. 22, 2021), https://www.abajournal.com/news/article/lawyer-is-suspended-for-texting-witness-during-phone-deposition-how-did-opposing-counsel-find-out; Debra Cassens Weiss, *Prosecutor's Suspicion During Assault Defendant's Zoom Hearing Leads to Arrest*, ABA J. (Mar. 10, 2021), https://www.abajournal.com//article/a-prosecutors-suspicion-during-assault-defendants-zoom-hearing-leads-to-his-arrest.

396. *See, e.g.*, Mazzone & Wilson, *supra* note 19.

397. *See, e.g.*, Angela Morris, *Now Trending: "Zoom" Kiosks to Breach Digital Divide Between Public and Remote Courts*, TEX. LAW. (May 29, 2020), https://www.law.com/texaslawyer/2020/05/29/now-trending-zoom-kiosks-to-breach-digital-divide-between-public-and-remote-courts/.

More work is needed on many issues. We have drawn on research that has been conducted in legal contexts where it is available, but in many areas, additional work could be done to investigate how these phenomena play out in and across legal contexts. To take just one example, the most rigorous studies of the potential for dehumanization of those who appear by video have been done in nonlegal settings.[398] Similarly, research ought to explore how interaction across modes of communication compares in different legal settings or dispute resolution processes. The ability to record and archive online proceedings could provide an important new source of data for researchers.

Research on both outcomes and perceptions of process is essential. Further studies that carefully examine whether and how outcomes differ for participants who engage in dispute resolution via different communication media is needed.[399] To the extent that research finds differences in outcomes,[400] detailed studies are needed to explore the circumstances under which such differences occur, the mechanisms that are responsible, and strategies for mitigating any disadvantages. Because participants care about process in addition to outcome, it will be important to continue to explore what features of in-person and technology-assisted dispute resolution are fundamental to providing a sense of procedural justice.

In deciding how to structure the public side of dispute resolution, decisionmakers will also benefit from research that addresses whether and how all of this will make a difference for the public's justice experience. Designers and researchers will need to develop a more nuanced understanding of how the perceived legitimacy of courts and in-person community meetings, and the dispute resolution they provide, is affected by a move away from courthouses and public meetings to the realm of video, audio, or text. Determining how participating in public justice from private rather than public spaces influences perceptions of the system, which symbols and rituals are necessary to foster public respect, how important signals can or cannot be replicated outside of courtrooms, and how new signals, symbols, or rituals might be fostered in a remote setting are essential questions to grapple with as dispute resolution becomes more high-tech. Research

398. Danser et al., *supra* note 237 (reviewing the literature and finding that randomized controlled trials in nonlegal contexts showed no evidence of dehumanization).

399. *See, e.g.*, Ingmar Geiger, *From Letter to Twitter: A Systematic Review of Communication Media in Negotiation*, 29 GROUP DECISION MAKING & NEGOT. 207, 231 (2020) (reviewing literature on the effects of communication media on negotiation outcomes and finding mixed results); *see generally* Nadler & Shestowsky, *supra* note 94 (same).

400. *See supra* notes 231–38.

might also consider whether participation in virtual juries leads jurors to increase civic behaviors, such as voting, as occurs with in-person juries.[401]

As courts and others experiment with and increasingly use new mechanisms for dispute resolution, their efforts have the potential to provide a sandbox within which researchers can explore the effects of the options they make available. It will be important to facilitate ongoing evaluation of these innovations—for courts and other institutions to collect data about participation, default rates, outcomes, barriers, and user perceptions.[402] Research will need to be continually updated as decisionmakers innovate, as technology spreads, and as users become more familiar with the technology used. Similarly, as the technology deployed becomes ever more varied and sophisticated,[403] psychologists and others should continue to explore how the characteristics of these new media and processes influence the psychology of dispute resolution and the administration of justice.

401. JOHN GASTIL ET. AL, THE JURY AND DEMOCRACY: HOW JURY DELIBERATION PROMOTES CIVIC ENGAGEMENT AND POLITICAL PARTICIPATION 37 (2010); Valerie P. Hans et al., *Deliberative Democracy and the American Civil Jury*, 11 J. EMPIRICAL LEGAL STUD. 697, 712 (2014).

402. *See, e.g.*, Margaret Hagan & Olivia Rosenthal, *Will the Courts' New Normal Bend Towards Justice + Equity – or Away*, LEGAL AGGREGATE BLOG (July 23, 2020), https://law.stanford.edu//7/23/-courts-new-normal-bend-towards-justice-equity-or-away/.

403. Perhaps an eventual move to holographic justice will diminish the difference between in-person and technological justice events? *See, e.g.*, Susan Nauss Exon, *The Next Generation of Online Dispute Resolution: The Significance of Holography to Enhance and Transform Dispute Resolution*, 12 CARDOZO J. OF CONFLICT RES. 19, 21 (2010).