

## Special Issue Proposal: The infrastructures of communication, writing and design

Over the last two decades, the social sciences and humanities have gone through somewhat of an “infrastructural turn” that has renewed focus on the material and social infrastructures that make higher-level practices possible (Appel, 2018; Sandvig, 2013). Scholars such as Susan Leigh Star (Star, 1999; Star & Ruhleder, 1996), Geoff Bowker (Bowker, 2005; Bowker & Star, 1999), and many others from social scientific disciplines began to theorize the role infrastructures (both social and material) play in holding the world together (Anand et al., 2018; Appel et al., 2018; Graham & Marvin, 2001; Gupta, 2018; Harvey, 2018; Larkin, 2013; Mukherjee, 2018). Similarly, more humanistic scholars such as Lisa Parks (2005, 2012) and Nicole Starobinski (2015) explored the agential role communication infrastructures play in shaping contemporary communication practices. Across disciplines, the transdisciplinary infrastructural turn has raised questions about how to study infrastructures and how to recognize their importance to a wide range of social practices.

The infrastructural turn has also impacted writing studies (DeVoss et al., 2005; Grabill, 2010), technical communication (Frith, In Press; Frith, 2020; Hart-Davidson et al., 2007; Read, 2020, 2019; Swarts, 2010), and design research (Dourish & Bell, 2007, 2011; Vertesi, 2014). Researchers have taken different approaches to the study of infrastructure within these fields. Some research has shown how writing and design themselves can act as infrastructures that are rendered mostly invisible but play an agential role in shaping later practices (Frith, In Press; Frith, 2020; Read, 2019). Other researchers have examined how specific material infrastructures shape practices of writing and design (DeVoss et al., 2005; Dourish & Bell, 2011; Hart-Davidson et al., 2007). Other research has explored how social infrastructures, such as people involved in writing programs, work as a base upon which larger university functions are built (Grabill, 2010). In addition, researchers from outside these fields have done work to expose the biases built into infrastructure that reify inequality and systems of injustice. For example, Safiya Noble’s (2018) work has exposed how Google’s search infrastructure reproduces racism and sexism in its results. Gebru (2018) has analyzed how data infrastructures that feed into AI systems reproduce inequality. And many other scholars have examined how built infrastructures are ableist and exclude certain bodies. Finally, user experience research in HCI has established links with infrastructure studies both to theorize the user experience of different infrastructures and to examine how buried infrastructure may impact the user experience of interfaces (Vertesi, 2014).

While infrastructural research has shaped some scholarship in fields relevant to the readership of *Communication Design Quarterly*, the research remains most disconnected and spread across individual articles found in separate journals. There is no centralized conversation happening about the role infrastructures (both social and material) play in shaping practices of writing and design. Consequently, this special issue will be one of the first to formalize that conversation by bringing together diverse research topics in writing and design that engage with questions of infrastructure. This special issue will be an exploration of the role infrastructures play in writing and design and will centralize a conversation that, at least to this point, has remained somewhat disconnected.

We are particularly seeking articles that engage with scholarship that engages with questions about how infrastructures shape writing and design. The infrastructures could be social infrastructures; for example, research could examine how design teams work as an infrastructural base that shapes artifact for end users to engage with. The infrastructures could be material infrastructures; for

example, research could examine how the increasingly ubiquitous deployment of remote work infrastructures (e.g., Zoom, Slack) structure work practices. Of especially urgent interest are articles that address how infrastructures of writing and design function to maintain, perpetuate, or potentially disrupt, systemic racism, injustice, and ableism. We do not want to limit how authors understand infrastructure, but we do hope authors engage with infrastructure as a concept, and the editors are happy to work with authors to help develop conceptualizations of infrastructure.

We are also interested in practitioner experience reports from industry that provide firsthand accounts of how workplace infrastructures shape technical communication and design work. Practitioners engage with and must navigate multiple infrastructures each day, and practitioner reports can provide another angle on how our disciplines can frame the importance of infrastructure in our research and pedagogy.

### Possible topics

Topics for this special issue could include, but are not limited to...

- The design of infrastructures of various types
- Infrastructures of user experience
- Infrastructure of design
- How infrastructures shape workplace communication
- How social infrastructures shape the design process
- The role writing plays as infrastructure (social or material)
- How design and writing play hidden infrastructural roles in essential processes
- Theories of social and material infrastructures
- Infrastructures of systemic racism and injustice
- Ableist infrastructures
- Infrastructures for writing processes in big science and industry
- Infrastructures of writing and design pedagogies and training

### Submission guidelines

Proposals should be submitted **by April 30, 2021** and should be no more than 500 words in length (not including references) and sent as an email attachment in .docx format to [jfrith@clemsun.edu](mailto:jfrith@clemsun.edu) and [read3@pdx.edu](mailto:read3@pdx.edu). All proposals should include submitter name, affiliation, and email address as well as a working title for the proposed article.

Please include in your proposal the following information:

- Type of proposed article: original research or experience report.
- Connection to CFP: how does the proposal align with the overall aims of this special issue?
- Specific topic as it relates to infrastructure: how are you understanding infrastructure as a concept/phenomenon?
- Method of discussion: how would the proposed article go about addressing this specific topic (i.e., report of empirical research, theoretical or rhetorical argument, report of new process, case study of organization, discussion of emerging technology, pedagogical approach, practitioner experience report, etc.)?
- Reader takeaway: what specific knowledge about infrastructure would a reader of the proposed article gain by reading it?

## PRODUCTION SCHEDULE

The schedule for the special issue is as follows:

April 30, 2021 (post-AT\*TW) – 500-word proposals (not including citation) due

June 1, 2021 – (for summer writing) Guest editors return proposal decisions to submitters

January 30, 2022 (post winter break) – Draft manuscripts of accepted proposals due

June 1, 2022 – Final manuscripts due

September, 2022 – Publication date of special issue

## CONTACT INFORMATION

Questions about either proposal topics or this special issue should be directed to Jordan Frith; [jfrith@clemsun.edu](mailto:jfrith@clemsun.edu) and Sarah Read; [read3@pdx.edu](mailto:read3@pdx.edu).

## References

Anand, N., Gupta, A., & Appel, H. (Eds.). (2018). *The promise of infrastructure*. Duke University Press.

Appel, H. (2018). Infrastructural time. In N. Anand, A. Gupta, & Appel, Hannah (Eds.), *The promise of infrastructure* (pp. 41–62). Duke University Press.

Appel, H., Anand, N., & Gupta, A. (2018). Introduction: Temporarily, politics and the promise of infrastructure. In A. Nikhil, A. Gupta, & H. Appel (Eds.), *The promise of infrastructure* (pp. 1–41). Duke University Press.

Bowker, G. (2005). *Memory practices in the sciences*. MIT Press.

Bowker, G., & Star, L. (1999). *Sorting things out*. MIT Press.

DeVoss, D. N., Cushman, E., & Grabill, J. T. (2005). Infrastructure and Composing: The When of New-Media Writing. *College Composition and Communication*, 57(1), 14–44. JSTOR.

Dourish, P., & Bell, G. (2007). The infrastructure of experience and the experience of infrastructure: Meaning and structure in everyday encounters with space. *Environment and Planning B: Planning and Design*, 34(3), 414–430.

Dourish, P., & Bell, G. (2011). *Divining a digital future*. MIT Press.

Frith, J. (2020). Technical Standards and a Theory of Writing as Infrastructure. *Written Communication*, 37(3), 401–427. <https://doi.org/10.1177/0741088320916553>

Gebru, T. (2018) Understanding the Limits of AI: When Algorithms Fail. MIT Technology Review, 26 <https://events.technologyreview.com/video/watch/timnit-gebru-ai-limits-algorithms-fail/>.

- Grabill, J. (2010). Infrastructure outreach and the engaged writing program. In S. K. Rose & I. Weiser (Eds.), *Going Public: What Writing Programs Learn from Engagement* (pp. 23–36). Utah State University.
- Graham, S. D. N., & Marvin, S. (2001). *Splintering urbanism: Networked infrastructures, technological mobilities, and the urban condition*. Routledge.
- Gupta, A. (2018). The future in ruins: Thoughts on the temporality of infrastructure. In A. Nikhil, A. Gupta, & H. Appel (Eds.), *The promise of infrastructure* (pp. 62–79). Duke University Press.
- Hart-Davidson, W., Bernhardt, G., McLeod, M., Rife, M., & Grabill, J. T. (2007). Coming to Content Management: Inventing Infrastructure for Organizational Knowledge Work. *Technical Communication Quarterly*, 17(1), 10–34. <https://doi.org/10.1080/10572250701588608>
- Harvey, P. (2018). Infrastructures in and out of time: The promise of roads in contemporary Peru. In N. Anand, A. Gupta, & H. Appel (Eds.), *The promise of infrastructure* (pp. 80–101). Duke University Press.
- Larkin, B. (2013). The Politics and Poetics of Infrastructure. *Annual Review of Anthropology*, 42(1), 327–343. <https://doi.org/10.1146/annurev-anthro-092412-155522>
- Mukherjee, R. (2018). Jio sparks Disruption 2.0: Infrastructural imaginaries and platform ecosystems in ‘Digital India.’ *Media, Culture & Society*, 41(2), 175–195. <https://doi.org/10.1177/0163443718818383>
- Noble, S. (2018). *Algorithms of oppression*. New York University Press.
- Parks, L. (2005). *Cultures in orbit: Satellites and the televisual*. Duke University Press.
- Parks, L. (2012). Technostruggles and the satellite dish: A populist approach to infrastructure. In G. Bolin (Ed.), *Cultural Technologies: The Shaping of Culture in Media and Society* (pp. 64–86). Routledge.
- Read, S. (2019). The Infrastructural Function: A Relational Theory of Infrastructure for Writing studies. *Journal of Business and Technical Communication*, 33(3), 233–267.

- Sandvig, C. (2013). The internet as infrastructure. In W. H. Dutton (Ed.), *The Oxford Handbook of Internet Studies* (pp. 86–108). Oxford University Press.
- Star, S. L. (1999). The ethnography of infrastructure. *American Behavioral Scientist*, 43(3), 377–391.  
<https://doi.org/10.1177/00027649921955326>
- Star, S. L., & Ruhleder, K. (1996). Steps toward an ecology of infrastructure: Design and access for large information spaces. *Information Systems Research*, 7(1), 111–134.  
<https://doi.org/10.1287/isre.7.1.111>
- Starosielski, N. (2015). *The undersea network (sign, storage, transmission)*. Duke University Press.
- Swarts, J. (2010). Recycled Writing: Assembling Actor Networks From Reusable Content. *Journal of Business and Technical Communication*, 24(2), 127–163.
- Velho, R. (2017). Fixing the Gap: An investigation into wheelchair users' shaping of London public transport. [Doctoral Dissertation; University College London].  
<https://static1.squarespace.com/static/592d8b521e5b6c638f3040c9/t/59ce6fad29f1875fd4035c46/1506701230073/Velho+-+PhD+Thesis+Summary.pdf>
- Vertesi, J. (2014). Seamful Spaces: Heterogeneous Infrastructures in Interaction. *Science, Technology, & Human Values*, 39(2), 264–284. <https://doi.org/10.1177/0162243913516012>