Guest Editorial

Introduction to Special Issue on Accessibility

—LISA MELONÇON AND NUPOOR RANADE

In the introduction to the 2013 collection *Rhetorical AccessAbility* [1], Melonçon argued that "technical communication is perfectly poised to put the theoretical work of disability studies to practice" [1, p. 5], and throughout the collection, accessibility became the lynchpin between the two fields, both theoretically and practically. However, in the intervening years, technical and professional communication's (TPC) engagement with accessibility and its application as a key part of design and communication decisions has been surprisingly limited.

Recent academic research has focused on pedagogical approaches [2]–[4] and issues of design, most of it theoretically based [5], [6], which leaves much room for applied approaches. Moreover, research and initiatives in the workplace are also lagging behind. For example, bigger organizations like IBM [7], Microsoft [8], and SAS [9] are conducting significant research in this area. This emphasis, however, has not reached widespread adoption beyond their own corporate borders, as evidenced by the myriad of access problems of a recent analysis of top webpages [10]. But the majority of trade publications around access are being written by design or technology experts with a focus on end application [11]–[13].

Even with legal statutes in place both in the US and abroad, and an increased awareness of diversity issues, practitioners and academics alike still struggle to adequately implement access into their workflows and make information accessible for users with a range of disabilities or limitations [14]. This struggle has resulted in an overreliance on the checklist (see, e.g., [15]). For example, when practitioners want to implement accessibility, they often turn to a checklist or other Voluntary Product Accessibility Template (VPAT) guidelines out of necessity or a lack of time or resources, without due consideration of the full communicative effects

and limitations of those checklists. This abstract framing of accessibility limits the analysis of communication practices since it fails to consider the broader issues of social construction and marginalization of knowledge. Even though scholars have pushed back against checklists [16] because they reduce access to an instrumental approach, more research is needed to examine and understand how to make information, systems, design, and products more accessible.

INCLUSIVE ACCESSIBILITY AS A METHODOLOGICAL FRAMEWORK

Melonçon defined accessibility as

the material practice of making social and technical environments and texts as readily available, easy to use, and understandable to as many people as possible, including those with disabilities. [1, p. 5]

As Melonçon and others [17], [18] have argued, accessibility is a rhetorical endeavor because of the necessity to consistently consider the many dimensions related to purpose, audience, technologies, and distribution (to name but a few characteristics of rhetorical analysis and production). Because of the rhetorical nature of accessibility, technical and professional communicators need to consider more holistic approaches to the processes of creating products and information that address issues of varying abilities.

Recent scholarship that calls for "nonequal design" [17] does not adequately consider that this approach "to a certain extent promotes the creation of nonequal versions and thus denies the right of people with disabilities to equal embodied experiences" [19]. However, scholarship—even with viable critiques of its efficacy—is much needed because it offers ways to reconsider fundamental approaches to how technical and professional communicators even *begin* the process of addressing accessibility.

We want to state directly something that much research continues to talk around. To achieve accessibility means that technical and professional communicators (and related professionals such as designers and computer scientists) have to engage with a paradigm shift. That paradigm shift involves a change in culture within organizations and throughout the processes of making so that accessibility and all that it entails is considered at the start and in every step of *any project.* Rather than waiting until the product stage, accessibility has to be considered during development, prototypes, experiments, and testing. Accessibility has to be proactive rather than reactive after the fact [20], [21].

More specifically, we follow Aimi Hamraie, who says,

> the emergence of access cannot be reduced to common sense, good will, or the affordances of the state. Nor is access simply a matter of keeping disabled users "in mind." [22, p. 6]

Rather, access and accessibility require a shift in mindset or an entirely different orientation [23], [24], a paradigm shift. Such a paradigm shift is needed because access and accessibility are still usually addressed at the end of the production process—that is, what is hoped to be achieved rather than a proactive consideration. Thus, accessibility needs practical and terminological help to guide the process of planning, designing, making, and using accessible products and information that moves the field from just thinking of the end purpose.

We suggest expanding accessibility to a new paradigm of inclusive accessibility, a methodological framework that highlights simultaneously the beginning (inclusive and participatory audiences) and the end (accessibility). Inclusive accessibility is about a mindset that is guided by a "methodological framework," a deliberate process that considers from the outset, issues of diversity and inclusion from audiences, to technologies, to purposes, to means of delivery.

Methodology is a disciplinary ideology or an orientation of knowledge. Ideology functions as "a network of values, assumptions, and concepts that guide interpretation" [25, p. 10]. Methodology is used to make decisions about how to approach the curiosity, question, problem, or issue. In academia, methodology is often associated with research, but it can and should be considered as a framework to guide the practice—the work—of accessible TPC. Using methodology more expansively not only offers the ideological network of interpretation but also enables inclusion by making room for different levels of knowledge and expertise.

Manzini [26] claimed that everybody designs, and thus, diffuse design includes those practices enacted by everybody, but expert design remains the purview of those specifically trained in design. Manzini's claim and distinction offer a way to implement this paradigm shift because it opens up the terrain of accessibility for everyone to participate. The concept of diffuse design being open to "everyone" recognizes the tacit knowledge that different people (outside of trained experts) can bring to the design and implementation process of products and information [26]. Manzini's concept of diffuse design aligns with previous work in technical communication about both tacit knowledge and methodology, which accepts "knowledge by doing: the traditional, tacit, and often invisible … ways that people perform their everyday activities" [27, p. 163]. Using design as analogous, practitioners and academics would be well served to consider accessibility as something everyone should be engaged in, in diffuse or expert ways. It is only when accessibility becomes such a common topic initiated as a foundational consideration in all of the work of TPC that accessibility reaches its potentiality of being available for everyone.

Inclusive accessibility as a methodology keeps the emphasis on the applied and practical end that TPC needs to create accessible products and information. It also gives the field a way to begin projects differently with a strong business case rationale that illustrates the benefits of this approach as a cost saver rather than added costs at the end of a project.

This paradigm shift is not a semantic "switcheroo" for the sake of academic innovation. Rather, it is an attempt to purposively, explicitly encourage TPC scholars and practitioners to start in a different place—deliberately, thoughtfully, and inclusively—and to consider inclusive accessibility at every step of the project. Although access addresses whether users can use something, inclusivity asks to consider the product and information itself, and centers on who is being left out and insistent regard for what it means to define audiences and purposes. When applied, inclusive practices have the potential to reshape the project and its ends. Inclusive accessibility

fundamentally changes the questions being asked, the problems being solved, and the issues being addressed.

OVERVIEW OF ARTICLES IN THE SPECIAL ISSUE

The articles in this issue advance TPC's engagement with accessibility in various ways.

- *Starting with and grounding practices in accessibility:* Each article in this issue provides insights into how to invoke the paradigm shift to inclusive methodology that we describe above. From a focus on language (Bennett and Hannah) to the two tutorials (Baker, Nightingale, and Bills and Stranz), the articles highlight the necessity to start with accessibility.
- *Offering practice exemplars:* The articles offer insights that can directly affect the practice of TPC. Limited conceptions of accessibility in industry practice are problematic, and the reliance on checklists provides examples that are too narrow in their focus. By following the best practices and examples provided in the articles, practitioners can work to make their content and content delivery practices more accessible and inclusive (see the articles by Stranz and Huntsman).
- *Suggesting ways to transfer accessibility approaches across organizations:* Academics and practitioners could both work toward seeing how research can be transferred across organizations and problems. Too often, it seems, academics and practitioners alike discount research if they do not immediately see their own problem or issue addressed in the work when a closer and more engaged reading could likely uncover how the work could indeed be applied. In the teaching case by Sonka, McCardle, and Potts and the case study by Phelps, the approach used could be used in *any organization* to train and to provide professional development around issues of accessibility. In the same way that Huntsman's research uncovered the need for a "common ground," workplace projects should involve asking the same types of questions at the beginning of the project to better understand the barriers and motivations that could lead to improved accessibility. Those interested in improving accessibility processes within organizations, as well as improving accessibility in the final products or information need to think creatively about how existing research and case studies can be transferred and applied.
- *Highlighting different kinds of abilities:* Too often certain disabilities receive more prominence than others. Some scholars have gone so far as to question why some disabilities have fewer stigmas than others and held that within the disability community, there is something of hierarchy of disabilities. From an accessibility standpoint, visual disabilities are often highlighted and perhaps overemphasized. The articles in this issue focus on various kinds of abilities and underscore the necessity to consider the multiplicity of abilities when approaching accessibility. With a conscious effort, TPC can "do a better job of addressing the embodiment of uses, [so that] the limitations of their actual bodies would be diminished" [28, p.78].

Huntsman's research informs design processes by illustrating that despite institutional variability, technical and professional communicators can find and leverage common ground to move away from a singular, policy-driven approach to accessibility in favor of a more sustainable value-driven accessibility, which generates and supports long-term accessibility design. She argues that such a shift will help find, amplify, and implement accessibility, while accounting for the uniqueness of workplace frameworks.

Bennett and Hannah examine the public-facing documents in JP Morgan Chase & Company's diversity and inclusion initiatives to identify tensions and opportunities for TPC interventions to contribute to disability discourse. The authors offer guidelines for more equitable documentation practices through the fusion of TPC, disability studies, and legal studies. They demonstrate how TPC can engage in more nuanced understandings of disability and access that support the dynamic and relational nature of each of these fields.

Phelps' article describes the creation of a faculty-facing training module about dyslexia. It proposes a shift away from checklist-only methods for addressing accessibility, arguing that train-the-trainer programs provide superior results that address the needs of those within the disabled/abled community while also amplifying their voices and experiences across varied contexts. The article covers the process of the module's creation and implementation via the iterative analysis, design, development, implementation, and evaluation (ADDIE) method. In doing so, it also provides a framework for creating similar modules that industry practitioners and faculty can implement within their own organizations, especially those looking for rapid scalability and efficacy for new accessibility initiatives.

Sonka, McCardle, and Potts describe the ways in which the understanding of accessibility is imperative for the success of TPC programs, both academically and in the much wider practical world. Their article fuses research and practice from different fields such as technical communication, user experience, and learning user experience, along with interactions with industry experts. They share their experience of using this knowledge to craft an undergraduate program whose goal was to teach students to be architects of digital experiences. This teaching case describes how they built the accessibility-centered program, including information about how what they learned can be useful for other educational institutions considering such an implementation, as well as for developing similar practices and training programs in industry.

Baker, Nightingale, and Bills argue that technologies that blind or visually impaired individuals use for editing text present several challenges such as the lack of usability, navigational and sense-making issues with screen readers, limited text display ability by refreshable braille displays, and the extensive commands needed to operate braille notetakers. The study's blind coauthor (who prefers this terminology) draws on her academic and professional experience to provide procedural information for blind or visually impaired practitioners and students. The tutorial provides insights into a blind editor's editing process and provides instructions for duplicating this process to mitigate some of the challenges mentioned.

In the final piece of this issue, Strantz provides a much-needed tutorial on how to create visually accessible data visualizations drawn from a series of existing guidelines. He distills sometimes overly complex technical guidelines into a series of easy-to-follow practices such as using design features, implementing semantic web standards, and user testing. Strantz's tutorial can be deployed in any setting to create accessible visualizations.

Taken together, these articles represent the idea that accessibility is much more than meeting technical and legal requirements. Accessibility is an amalgamation of finding solutions to make technology and information available to everyone, not just those who can afford it or access it technologically. More than requirements, accessibility for technical communicators means helping to shift attitudes and approaches. As Jones has claimed, technical communicators are perfectly poised to be advocates, and part of expanding inclusion and justice is to consider accessibility differently [29].

IMPLICATIONS OF AND LOOKING FORWARD TO ACCESSIBILITY WORK IN TPC

The articles in this issue make it clear that technical and professional communicators should indeed advocate for and lead initiatives in improving products and information for all audiences, including those with varying abilities. Accessibility is a concrete instantiation of achieving equity and inclusion for diverse audience of products and information. As TPC continues to be concerned with issues of justices, ensuring that accessibility and disability are included in those conversations becomes paramount.

Looking forward, the field particularly needs research that would shed light on processes and approaches to accessibility in workplace projects in a variety of organization types. This issue provides insights into unique concerns of implementing accessible solutions and helps frame new ways of understanding them. More research is required to address some of the questions that stem from such conversations that can be tackled in future research, such as the following.

- How have organizations addressed *access*? Empirical work and case studies can be used to describe techniques and strategies for implementation, legal implications, ethical challenges, and noteworthy successes or failures in achieving accessibility.
- How can we reconsider our base definitions of accessibility and universal design in new ways that are more relevant today, and how will they help improve our implementation strategies?
- How might we expand concepts of user experience through accessibility? And what are the costs and benefits of doing so?
- How are professional communicators engaging in accessibility testing to increase the tests' effectiveness?
- In what ways can professional communicators expand critical methodologies for accessible user experience? What do these look like in practice?
- What is the role of access and accessibility in intercultural communication projects? How can we expand our understanding of these practices through access?

We hope that this Special Issue will reinvigorate research into the theory and practice of accessibility and the roles that technical and

professional communicators can play in those processes. Accessibility remains a crucial site of investigation for academic researchers and an elusive goal within the workplace. The overarching goal is an emphasis on accessibility's role in conceptualizing and building of inclusive and equitable products, services, and information. We see the need to create contexts that will encourage technical and professional communicators to look critically at the role that accessibility plays in the process and practice of design, communication, and everyday experience.

LISA MELONÇON, Guest Editor
University of South Florida
Tampa, FL 33620 USA
(email: meloncon.research@gmail.com)

NUPOOR RANADE, Guest Editor
George Mason University
Fairfax, VA 22030 USA
(email: nranade@gmu.edu)

REFERENCES

[1] L. Melonçon, Ed. *Rhetorical Accessability: At the Intersection of Technical Communication and Disability Studies.* New York, NY, USA, USA: Baywood, 2013.

[2] S. K. Oswal, "Can workplaces, classrooms and pedagogies be disabling?," *Bus. Prof. Commun. Quart.*, vol. 81, no. 1, pp. 3–19, Mar. 2018.

[3] A. Hitt, "Foregrounding accessibility through (inclusive) universal design in professional communication curricula," *Bus. Prof. Commun. Quart.*, vol. 81, no. 1, pp. 52–65, Mar. 2018, 10.1177/2329490617739884.

[4] G. M. Clegg, "Unheard complaints: Integrating captioning into business and professional communication presentations," *Bus. Prof. Commun. Quart*, vol. 81, no. 1, pp. 100–122, Mar. 2018, 10.1177/2329490617748710.

[5] A. Konrad, "Reimagining work: Normative commonplaces and their effects on accessibility in workplaces," *Bus. Prof. Commun. Quart*, vol. 81, no. 1, pp. 123–141, Mar. 2018, 10.1177/2329490617752577.

[6] S. Zdenek, "Guest editor's introduction: Reimagining disability and accessibility in technical and professional communication," *Commun. Design Quart.*, vol. 6, no. 4, pp. 4–11, 2019, 10.1145/3309589.3309590.

[7] Home – IBM Accessibility. (10 Jun 2021.). [Online]. Available: http://www.ibm.com/able

[8] Ability - Microsoft Research. (10 Jun 2021.). [Online]. Available: https://www.microsoft.com/en-us/research/group/ability/

[9] SAS Disability Support Center. (10 Jun 2021.). [Online]. Available: https://support.sas.com/accessibility/index.html

[10] WebAim. (30 Sep. 2019). The WebAIM million: An accessibility analysis of the top 1,000,000 home pages. [Online]. Available: https://webaim.org/projects/million

[11] H. Pickering, Inclusive Design Patterns: Coding Accessibility Into Web Design. *Smashing Magazine GmbH*, 2016.

[12] K. Holmes, *Mismatch: How Inclusion Shapes Design.* Cambridge, MA, USA: MIT Press, 2018.

[13] R. Gilbert, *Inclusive Design for a Digital World: Designing with Accessibility in Mind.* New York, NY, USA: Apress, 2019.

[14] B. Gregory. (2018). Designing for cognitive differences. [Online]. Available: https://alistapart.com/article/designing-for-cognitive-differences/

[15] IBM checklist for Accessibility. (30 Sep 2019.). [Online]. Available: https://www.ibm.com/able/guidelines/ci162/accessibility_checklist.html

[16] S. K. Oswal and L. Meloncon, "Saying no to the checklist: Shifting from an ideology of normalcy to an ideology of inclusion in online writing instruction " *WPA: Writing Prog. Admin.*, vol. 40, no. 3, pp. 61–77, 2017.

[17] C. Boyle and N. A. Rivers, "A version of access," *Tech. Commun. Quart.*, vol. 25, no. 1, pp. 29–47, 2016.

[18] J. M. Slatin and S. Rush, *Maximum Accessibility.* Boston, MA, USA: Addison-Wesley, 2003.

[19] S. K. Oswal and Z. Palmer, "A critique of disability and accessibility research in technical communication through the models of emancipatory disability research paradigm and participatory scholarship," in *Assembling Critical Components: A Framework for Sustaining Technical and Professional Communication*, J. Schreiber and L. Melonçon, Eds. Fort Collins, CO, USA: WAC Clearinghouse/Univ. Press Colorado, 2021.

[20] J. Dolmage, "Mapping composition: Inviting disability in the front door," in *Disability and the Teaching of Writing: A Critical Sourcebook*, C. Lewiecki-Wilson and B. J. Brueggemann, Eds. Boston, MA, USA: Bedford/St.Martin's, 2008, pp. 14–27.

[21] S. K. Oswal, "Breaking the exclusionary boundary between user experience and access: Steps toward making UX inclusive of users with disabilities," in *Proc. ACM Int. Conf. Des. Commun.*, 2019, pp. 1–12, 10.1145/3328020.3353957.

[22] A. Hamraie, *Building Access: Universal Design and the Politics of Disability.* Minneapolis, MN, USA: Univ. Press Minnesota, 2017.

[23] L. Melonçon, "Orienting access in our business and professional communication classrooms," *Bus. Prof. Commun. Quart.*, vol. 81, no. 1, pp. 34–51, Mar. 2018.

[24] M. Knight, "Accessibility and disability: Absent keywords in business and professional communication," *Bus. Prof. Commun. Quart.*, vol. 81, no. 1, pp. 20–33, Mar. 2018.

[25] P. Sullivan and J. E. Porter, *Opening Spaces: Writing Technologies and Critical Research Practices*. Westport, CT, USA: Ablex Publishing, 1997.

[26] E. Manzini, Design, *When Everybody Designs: An Introduction to Design for Social Innovation*. Cambridge, MA, USA: MIT Press, 2015.

[27] C. Spinuzzi, "The methodology of participatory design," *Tech. Commun.*, vol. 52, no. 2, pp. 163–174, May 2005.

[28] L. Melonçon, "Technological embodiments," in *Rhetorical Accessability: At the Intersection of Technical Communication and Disability Studies*, L. Melonçon Ed. New York, NY, USA: Baywood, 2013, pp. 67–81.

[29] N. N. Jones, "The technical communicator as advocate: Integrating a social justice approach in technical communication," *J. Tech. Writing Commun.*, vol. 46, no. 3, pp. 342–361, Jul. 2016.

Lisa Melonçon is currently a Professor of technical and professional communication with the University of South Florida, Tampa, FL, USA, where she is also the interim Department Chair. Her research interests include rhetoric of health and medicine, disability studies, and programmatic issues in technical and professional communication. Her award-winning research has appeared in journals such as *Technical Communication Quarterly*, *Technical Communication*, and *Journal of Technical Writing and Communication*, as well as numerous other journals and edited collections.

Nupoor Ranade received the B.S.E. degree in Computer Engineering from the Pune Institute of Computer Technology, Pune, India, in 2011, and the M.S. degree in Technical Communication and the Ph.D. degree in Communication, and Rhetoric and Digital Media from North Carolina State University, Raleigh, NC, USA, in 2017 and 2021, respectively. She is currently an Assistant Professor with George Mason University, Fairfax, VA, USA. She has authored or coauthored articles published in *Technical Communication*, *Computers and Composition*, *Feminism and Visual Culture*, *Kairos*, and *Communication Design Quarterly*. Her main research focuses on exploring the field of human–computer interaction and the role it plays in behavioral studies that impact the pedagogical approach. Her research interests include usability analysis, data analysis, and rhetorical studies in the artificial intelligence and Internet of Things domain.