Collaboration in the Rhetoric of Science, Technology, and Medicine

Papers from the ARSTM-ECD Preconference to NCA

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The concept of collaboration lies at the heart of this special issue of *Poroi*. This issue is rooted in the papers and discussions that emerged from the co-sponsored 2023 preconference of the Association for the Rhetoric of Science, Technology, and Medicine (ARSTM) and the National Communication Association's Environmental Communication Division (NCA-ECD). The collection brings together scholarship that examines, theorizes, and enacts collaboration from a variety of perspectives. The preconference served as an important space where scholars and practitioners from rhetoric, environmental communication, science and technology studies, and related fields engaged with the pressing challenges and opportunities of working together across disciplinary and institutional boundaries. Of course, the heart of this theme was the idea of ARSTM and NCA-ECD working together to better address contemporary issues related to science, technology, medicine, and the environment.

Collaboration, as a practice and an ideal, is central to the challenges we face today in a world defined by interconnected crises. Scholars in the cognate discipline of Technical and Professional Communication (PTC) have for decades been considering the theoretical and practical implications of collaboration (Thompson, 2001). From addressing environmental degradation to navigating the public interfaces of science, technology, and medicine, the work of communication scholars is increasingly shaped by the need to cross traditional boundaries and form alliances that amplify impact (Prelli & Kinsella, 2013). Of course, contemporary scholars now recognize collaboration not just as a human endeavor, but as an orchestration of the symbolic-material world (Barad, 2007; Cronin et al., 2004; Edwards et al., 2011). This was the spirit that animated the 2023 preconference

and, by extension, this special issue. By embracing collaboration as a guiding theme, contributors explored its theoretical dimensions; its practical, ethical, and political stakes; and practiced new approaches to collaboration.

The articles in this issue reflect the rich conversations that took place. Some are direct extensions of the work presented there, while others are inspired by its themes and provocations produced during the preconference. Collectively, the articles here offer a diverse array of perspectives on collaboration, from its capacity to drive innovation to its challenges in negotiating power, equity, and inclusion. These works aim to deepen our understanding of how collaboration shapes and is shaped by the fields of rhetoric, science, technology, medicine, and environmental communication. While not every author writes specifically about collaboration, their work was possible because of it, a fact that the preconference attests to.

It is my hope that this special issue serves as both a reflection of the preconference and an invitation for further exploration. The articles herein are not only contributions to the study of collaboration but also calls to action for scholars and practitioners alike. Collaboration, after all, is not merely a topic of study—it is a practice that demands ongoing effort, creativity, and care. I'd like to thank the authors for their contributions, the reviewers for their thoughtful engagement, and the ARSTM and NCA-ECD communities for their continued commitment to fostering meaningful dialogues. I hope this issue inspires readers to think critically about collaboration and to engage in their own practices of building connections that matter.

Overview of ARSTM's History and Commitment to Collaboration

ARSTM was born in some ways out of a need to unite scholars working at the intersections of rhetoric, science, technology, and medicine (Walker et al., 2014). Since its founding, the group's interdisciplinarity demanded new collaborative work across academic fields, and its creation in 1992 marked the formalization of efforts by a small but dynamic community that had long been meeting informally. These early gatherings often began as breakfast meetings during National Communication Association (NCA) conferences, and what began as informal conversations about rhetoric's role in science grew into a formalized structure, with the University of Pittsburgh and the University of Iowa providing the institutional support necessary to launch what is now ARSTM. That support is still evident here in the pages of *Poroi*.

From its outset, ARSTM embraced collaboration as both an organizing principle and a means of survival. Foundational members like Carolyn Miller and John Angus Campbell highlighted the importance of creating an inclusive space for rhetorical inquiry into science, technology, and medicine. Early debates even shaped the organization's name, as members emphasized the distinctiveness of first science, then technology, and finally medicine within rhetorical studies. As a result, ARSTM expanded its scope and continually adapted its structure and mission to reflect the evolving needs of its members. These emerging scholars not only contributed to the organization's operations but also expanded its intellectual horizons. Events like spirited preconference dinners became a hallmark of ARSTM, fostering an environment where senior scholars and newcomers could exchange ideas and form meaningful connections. This ethos of mentorship and mutual support has been central to ARSTM's identity and has ensured its longevity as an organization. Collaboration has always been important for sustaining ARSTM and its community. Ideally this issue reflects the continued expansion of the ARSTM community as it partners with NCA-ECD.

Today, ARSTM continues to thrive as a hub for interdisciplinary collaboration. Its annual preconferences, workshops, and panels at NCA, RSA, and beyond remain vital spaces for dialogue and innovation. The organization's culture, rooted in conviviality and intellectual rigor, ensures that it remains a welcoming space for scholars across disciplines and career stages. Through partnerships with other organizations, like the RSA, NCA, and NCA-ECD, ARSTM exemplifies how collaboration can amplify scholarly impact and address complex societal challenges. Moreover, collaboration is meaningful as a practice that bonds communities and enriches scholarship through those communities.

As this special issue on collaboration demonstrates, ARSTM's history is a testament to the power of collective effort. From its grassroots beginnings to its current status as a leader in the rhetoric of science, technology, and medicine, ARSTM has shown how collaboration sustains scholarly communities and enriches academic inquiry. This issue celebrates not only the collaborative work presented at the ARSTM-ECD preconference but also the enduring legacy of an organization built on the principles of connection, inclusion, and shared purpose.

A Collaborative Exploration of Collaboration

This special issue of *Poroi* showcases how collaboration, as both a theme and practice, fosters new avenues for rhetorical inquiry

and cross-disciplinary engagement. Emerging from the collaborative preconference co-sponsored by ARSTM and NCA-ECD, these contributions reflect the dynamic interplay of ideas that can arise when scholars from diverse fields come together. Each article in this collection not only explores collaboration as a rhetorical and methodological tool but also illustrates how it can be employed to address pressing societal and intellectual challenges. Many of these articles are informed by new materialist approaches to collaboration and rhetoric that assume the mutual dependence of forces in a world that can no longer be effectively understood as anthropogenic.

Brent Kice's article, "Consubstantial Versus Incongruous Mindbombs: The Case of Environmental Activists Defacing Priceless Works of Art," sets the stage by examining how collaboration manifests in the symbolic strategies of environmental activism. Using Kenneth Burke's pentadic ratios, Kice distinguishes between consubstantial mindbombs, which align purpose and scene to create unity, and incongruous mindbombs, which disrupt through scene-act tensions. By engaging both rhetorical theory and cultural analysis, Kice highlights how activist acts rely on a complex collaboration of visual, spatial, and symbolic elements to disrupt public apathy. This article underscores the importance of understanding collaboration as not just cooperative but sometimes disruptive, paving the way for more nuanced rhetorical interventions.

Extending the discussion of environmental and social anxieties, Jeremy Tirrell's "Consuming Bodies: Ticks, Pigs, and Gothic Capitalism" examines how collaborative networks in biotechnology and capitalism commodify biological matter. Through the lens of Gothic capitalism, Tirrell reveals how these systems evoke cultural fears even as they promise progress. His analysis complements Kice's by showing how collaboration in scientific, economic, and rhetorical spaces can simultaneously generate innovative solutions and ethical problems. Tirrell's work deepens our understanding of how collaborative systems operate on both material and symbolic levels, enriching the rhetorical landscape with insights into the complexities of collective action and its consequences.

From this focus on systemic collaboration, Kate Maddalena's "Smart Drugs, Gender, and the Rhetorical Turning" shifts to the individual and cultural dynamics of wellness and enhancement. By analyzing the rhetorical tropes of cognitive enhancers, Maddalena demonstrates how collaboration between scientific discourse and cultural narratives constructs gendered subjectivities. Her use of rhetorical tropology to trace the intersections of Gothic

masculinities and femininities within nootropic discourse highlights how collaboration across rhetorical spaces creates shared but contested knowledges. Maddalena's work bridges the material and cultural, illustrating how collaborative rhetorical practices shape identity and ethos in a rapidly commodified health landscape.

The theme of collaboration extends into the institutional with Kari Lundgren's "Charting, Rhetoric, and Technical Communication: Improving Primary-Care Progress Notes and Patient Care through Attention to Audience and Purpose." Lundgren investigates how collaboration between technical communication principles and medical documentation can improve both patient outcomes and administrative processes. By analyzing clinical progress notes and engaging with primary-care providers, Lundgren demonstrates how rhetorical training can foster collaboration between providers and their multiple audiences—patients, colleagues, insurers, and legal professionals. Her article highlights the potential for rhetorical collaboration to bridge gaps in professional practices, offering practical strategies to enhance the efficacy and clarity of medical communication.

Finally, Meredith A. Johnson and colleagues' "Collaboration as a Form of Institutional Critique: Teaching and Learning in the Wake of Anti-DEI Legislation" brings the focus back to academia, examining how collaborative pedagogy can resist and adapt to legislative challenges that undermine diversity, equity, and inclusion (DEI). By addressing how scholars and educators can work together to sustain inclusive practices under restrictive conditions, this article resonates with the preconference's collaborative ethos. Johnson et al. argue that collaboration is not merely a method but a form of institutional critique, offering pathways for resilience and adaptation in the face of systemic adversity. Their work exemplifies how collaboration can sustain the integrity of academic and intellectual endeavors, even in contentious political environments.

Together, these articles form a cohesive narrative that illustrates the multifaceted nature of collaboration—its capacity to bridge disciplines, challenge conventions, and foster innovation. They reflect the spirit of the ARSTM-ECD preconference, demonstrating how collaboration can illuminate the intersections of rhetoric, science, technology, medicine, and environmental communication. By linking theoretical exploration with practical applications, these works offer a roadmap for leveraging collaboration as a powerful tool for addressing complex challenges.

As this special issue concludes, I extend our gratitude to the contributors for their innovative scholarship and to the ARSTM and NCA-ECD communities for fostering the collaborative environment that inspired this collection. These articles not only advance an understanding of collaboration but also invite further dialogue and partnership, affirming the transformative potential of working together to create new knowledge and address shared concerns.

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