

Introduction

This concise book explores the intersection of writing, literacy, and artificial intelligence, offering readers an overview of the deployment of artificial intelligence technologies in workplaces employing professional writers. These stories are presented alongside the history of computers and writing research, including connections to preceding technologies and trends. It comprises a series of sections alternating between analysis and three interview subjects. These interviewees and their research profiles and work histories are detailed in the pages that follow, each selected to support readers' understanding of the area of artificial intelligence in existing workplaces with an eye toward understanding and participating in future developments.

This introduction is designed to provide a brief overview of the book's contents and provide a roadmap for the overall argument, highlighting important elements of the book. In this section, we introduce the book's framework, which includes overviews of each of the carefully curated discussions with seasoned professionals in the field of professional writing working with AI. These interviews are integrated with insightful analyses and explanations of complex technical concepts. Additionally, concise explanations are thoughtfully interspersed between the pivotal chapters, serving as informative guides for those new to AI technologies.

Chapter 1 is titled "The Current State of Artificial Intelligence in Writing." It briefly describes our orientation towards artificial intelligence and introduces the research ensemble we work with: a network of humans, machines, technologies, and infrastructures that support creating this complex text. The chapter offers foundational definitions of different types of AI technologies: traditional, machine-learning, and the newest generative types. This definitional work then flows into descriptions of classroom applications that reveal limits of the current technology. The chapter concludes with a history of how this latest disruptive *têchné* developed, intertwined with rhetoric (with pointers to more in-depth resources) and setting the stage for subsequent discussion.

Chapter 2 presents the first interview, focusing on "Artificial Taxonomies: Agents Sorting Images." In this dialogue, a distinguished professional with a notable background in museum curation and exhibit design shares her journey into the world of artificial intelligence, particularly in stock image searches. The interviewee expands on her academic preparation and continued industry-campus partnerships, which includes organizing one of the earliest AI professional conferences, earning recognition as an authority in algorithmic image searches and creative work supported by intelligent agents.

Following this interview, an interlude and analysis section revisits the history begun in Chapter 1. This third chapter investigates the foundations of artificial agents and their historical evolution, with a specific focus on stock image storage

and the complex domain of intellectual property issues in visual media. It adeptly connects the theoretical foundations introduced in the book's introduction with the practical experiences and biographical elements gleaned from the interview, creating a unified narrative. The emphasis is braiding technology history with the development of the computers & writing and technical & professional writing communities in rhetoric.

Chapter 4 showcases the second interview, with a theme of "Professional Progressions: Agents Writing." Within these pages, a seasoned professional writer with two decades of experience offers insight into her career trajectory, spanning from technical writer to experience architect. Her work involving algorithmically-generated content is thoroughly examined with attention to the application of AI in cybersecurity and marketing.

Another interlude and analysis section follows in Chapter 5, shedding light on the evolution of the writing profession and the pivotal role of programmed agents within it. It connects the subject's experiences to the broader realm of technical communication. Central to this chapter are two important precursor disruptive technologies: photography and bicycles. Both chemical image making and two-wheeled transportation are different enough from writing and literacy that the contrast with AI offers readers some cognitive distance to understand the complex relationships between disruptive technologies and the cultures of practice supporting them. As authors, our goal is to help readers thoroughly understand AI technologies, so engagement is rewarded with depth of understanding and productive interaction. Photographs are so ubiquitous today in digital form in part because many of us carry powerful cameras as part of our phones. And we barely hesitate to apply automated post-production tools to our images. Texts follow suit.

Chapter 6 presents the third interview, focusing on pharmaceuticals and advanced manufacturing with artificial agents. This interview features a senior expert with extensive experience in integrating AI into advanced manufacturing and pharmaceutical production. The conversation offers invaluable insights into the integration of AI and automation within these industries, grounding the discussion in real-world examples.

The book concludes by acknowledging the fast-developing landscape of text-producing agents and their implications. The Conclusion emphasizes the numerous opportunities for professionals in writing and related fields to collaborate with artificial, programmed, digital agents, while also addressing potential challenges and concerns, consistent with the work of William Hart-Davidson¹ and others. The Conclusion is presented in an accessible and evocative manner, ensuring that readers conclude their reading with an inclusive understanding of AI in professional writing and workplaces.

1. William Hart-Davidson, "Writing with Robots and other Curiosities of the Age of Machine Rhetorics," in Jonathan Alexander and Jacqueline Rhodes (2018), *The Routledge Handbook of Digital Writing and Rhetoric*. Routledge.

Why a Book?

So why in 2025 in the late age of print, a book? The interview form lends itself to a podcast, why not a podcast?

We wanted to create a print artifact: something not only tangible but recognizable as a book to describe and document the emergence of artificial intelligence. Permanent, print, a thing of atoms.

Whatever direction history goes after the emergence of AI, we wanted to create a text to say: this is what we were thinking, this is what we were doing, and this is whom we were talking to and thinking about. Now, we don't imagine anything as dramatic as future archeologists returning to this moment (or this text) in the ruins of a fallen civilization. Instead, we offer a snapshot of the moment at the emergence of artificial intelligence in a powerful, widespread, and accessible form. We wish to capture and articulate both what we are thinking about this moment as well as the cultural zeitgeist at the emergence of generative artificial intelligence specifically focused on the impacts on writing and writing instruction.

It's fairly common in rhetorical studies to refer back to Plato's *Phaedrus* for the longevity of concern with emergent technology in which Socrates decries that one of the impacts of writing is forgetfulness. Plato records Socrates at the emergence of writing as a technology and it is only because Plato creates durable texts that we have words attributable to Socrates, access to Socratic thought, at least insofar as Plato can be trusted with reporting them. More than anything, we have access to the change from a dialogic to a literate culture.

And here we are at the emergence of what Ong named secondary orality, or at least at the moment of the emergence of a post-literate culture, and we want to capture it in the "old" technology of writing, preserving elements of writing that we might not even fully grok are literate entanglements. That is, while we strive to document and preserve, we do not fully discern all that is conserved; it is only in retrospect that others might assert what it is that we will have captured here. The very aspects that we see in danger of falling away in the post-literate may not be valued by future scholars, teachers, or writers.

John and Michael tend not to be overly sentimental about writing or literacy, but are very much interested in how it changes us, encapsulates thinking: literacy is the software on which we run. Part of what has grown up around literacy, at least in the Western tradition, is the idea of the encapsulation of the self in the ability to write and access reason. To be literate is to become a person, an individual worthy of citizenship, capable of engaging in democratic institutions from law and debate to the processes of self-rule, just as Socrates in the *Phaedrus* is bemoaning the fact that citizenship will be weakened by this technology. This *writing*.

So too our culture has built markers of identity, of selfhood, of worthiness, around literate action. And so, especially in the United States, we have connected

literacy, the ability to express oneself in written form, with the ability to vote in all the ways that have been twisted over the years to exclude huge swaths of people. We cling to this belief that a literate self is a responsible self, and that literate self can be engaged in the processes of democratic self-rule.

So many of these values were in flux throughout the imagining, writing, interviewing, and editing of this text from 2023 through 2025, and it is worth recording these thoughts in as much of their context as we can, so that we might remember the paradigm in which we lived: preserving whatever we can of the constructive context that made our choices visible in permanent words on the page. We don't yet know from the perspective of 2030 and 2040, what this moment will become. Looking back, we wonder whether this will be a watershed moment, as many of our interview subjects seem to think. The moment, the disruptive technology's emergence, these and other developments are interesting and important: worthy of preservation, and to capture this time and our thoughts at the emergence of generative artificial intelligence.

A book-culture perspective allows us a longer timeline for reflection. Writing is a few thousand years old, moveable-type 500: literate technologies allowed longevity, accuracy, fidelity, consistency, and reproducibility—and stability—to words. Today liquid text technologies and emergent multimedia reintroduce instability, particularly as artificial intelligence technologies allow the creation of deepfakes not just in text creation, but artificial voices mimicking recognizable sounds and emerging video technologies that have ended the era of believing what we see. Entire manufactured multimodal immersive experiences at levels of fidelity and apparent authenticity that seemed unattainable seemingly minutes ago.

We, John and Michael, want an authoritative text with all the stability of the print age—however late in the alphabetic game we are—that leverages all the affordances of the digital age. So, under the insightful auspices of the WAC Clearinghouse and founder Mike Palmquist, this book includes all that offers the illusion of stability in the digital age: an International Standard Book Number (ISBN), Digital Object Identifier (DOI), and and unique keywords to allow both for storage and findability. We want this book to be *read*. By human eyes. But we care less about whether the book is read off paper infused with pigment or high-resolution pixels through Gorilla glass. Having published in a variety of formats, from freely available webtexts to tightly controlled commercial publishing to academic publishers, we forgo the pennies in royalties to make this anachronistic text as accessible as possible, internationally, available with the click of a button. Reflecting a primarily digital readership, the book has no index. While we imagine some readers will use a paper interface and miss the traditional index, we also expect most would utilize the search function in PDF or eText—digital—interfaces. Indeed, we welcome and celebrate the savings in shifting from physical production, distribution, storage, and retention to digital access and perpetual retrieval—so long as the electricity and network infrastructures remain

humming. We have enough nostalgia to want to access a few physical paper copies we might sustain.

Therefore, yes, we recognize ironies in the process of capturing speech acts, turning these utterances into reader-accessible prose, sound into text, and recording those texts in a book—copies of which can be printed on demand and added to dusty shelves of similarly inert analogue sheaves of paper, waiting to be reinterpreted in the brain of a reader, an imagined audience member still attentive to the mode of textual enactment known as *reading*. And so, a book. Besides, being academics, hardcover formations continue to be the coinage most favored by promotion committees—so long as tenure remains part of the newly emergent reconfigurations of academic life: research, scholarship, teaching, and service. Indeed, a book for transferring knowledge. Certainly, tenure will survive in some form; but will it be available to writing specialists?

As Michael continues to tell students each semester, writing is worth studying precisely because it is a form of magic. An idea in one brain is painstakingly encoded into symbols that we collectively call “text,” transferred on the page or screen, and those symbols appears before a reader who interpolates the text, decodes it, imagining the voice of the author, and miraculously a close facsimile of the original thought appears in the brain of the reader. It’s a little miracle that literate minds take for granted every time that process of thinking, encoding, transference, interpretation, and engagement transpires. A thought whisks from one brain to another. Pure magic. AI provides an illusion of the encoding, but the utterances are collective probabilities of thought and not writing itself. We are Plato? As Isocrates convincingly argues, sophistry is an ancient discourse created to discern authentic thought from rote memorization. Sophistry serves us well in the age of artificial intelligence as well.

We believe in the open access print-on-demand model of publishing, and remain activist participants in the reinvention of scholarly communication in the digital age—*née* the age of artificial intelligence—and we ask the impertinent question in the future imperfect: what will literacy have become?

Artificial Intelligence, Emergent

In the wake of the burgeoning interest and hype surrounding generative and predictive artificial intelligence, we embarked on a journey to historicize the emergence and introduction of these technologies. This book presents interviews with experts who have been at the forefront of developing artificial intelligence (AI) for over a decade, offering insights that span both traditional predictive AI and cutting-edge emergence of generative AI.

With all the hype, our interest was in historicizing the emergence and introduction of generative and general artificial intelligence.

Our interview subjects were selected for their deep expertise and long-standing involvement in AI. They have been instrumental in developing and deploying

AI systems, providing a unique perspective that looks back into the past and forward into the future. Their insights are invaluable, especially as AI continues to impact workplaces and job searches, shaping the skills and knowledge required in today's workforce.

We chose our interview subjects because we knew they had been working in artificial intelligence for at least a decade, starting first with more traditional forms of predictive AI, but also were in the vanguard of generative AI. The interviews that we present are with people who know the technology quite well. They have been working with the intricacies of establishing systems for many years, and the perspectives they offer are longer range. They see further back into the past because they've been working on these issues for a long time, and they give perspective that can look further into the distant future, because they have been working and developing these technologies and the systems that are based on them for a longer time than most of us who encountered ChatGPT. As this book is being prepared, we're now seeing impacts of the technology in workplaces and employment.

AI in Education and the Workforce

We emphasize the importance of AI literacy, particularly for students and professionals. Whether skeptical or enthusiastic about AI, understanding this technology is crucial. Students, especially those from technologically advanced institutions, will inevitably face questions about AI in job interviews. Similarly, writing instructors must be prepared to discuss and potentially integrate AI into their teaching methods.

Coming from a high technology campus with a strong STEM orientation, no matter what their belief or feeling about generative AI, they will be asked about artificial intelligence when they are interviewing for jobs, and that's an important thing, even if students are skeptical, even if they do not want to use artificial intelligence technology. If they are avoiding or resisting use of the technology, they're going to be asked that question in part because they're coming from Universities and have cutting edge exposure to the technology, but also because these are the experiences that their current workforce is unlikely to have encountered. Managers and interview teams are going to ask new graduates what they think of the emergent technology, if it is as disruptive, if it is as effective, as they've been hearing—and talking to them about how different folks have planned to deploy the technology at different workplaces. The same is true of teachers of writing, whether they are teaching first year composition courses, professional writing courses, or preparing the next generation of writing instructors. Whether primarily teaching service courses, or advanced major courses, or in a concentration or a program that offers a minor, in any of these configurations, we are still bound to have an answer whether or not we want to use artificial intelligence, or to the extent to which we want to use artificial intelligence.

Our Experience with AI

Throughout the writing of this book, we have increasingly incorporated AI into our workflow. John and Michael share their experiences using AI to respond to student queries and assist in the creation of this text. While the ideas and content are ours, AI has been instrumental in clarifying complex sentences, providing running summaries of interviews, and aiding in the revision process.

One of the interesting things that has happened as we have written this book is that we have grown increasingly comfortable using the technology for certain applications in different sections. John describes the ways he has used generative artificial intelligence to respond to student queries. Michael offers narratives of different students in advanced classes working with generative artificial intelligence, but we both talk quite openly about how we use the technology in our work, in our everyday flow, and even how we've used artificial intelligence in the creation of *this* text.

This introduction was drafted as speech, spoken into Otter.ai, which produced a transcript. The transcript had “highlights” that Otter determined represented major themes in the 24-minute-long speech. That transcript was analyzed by Mistral's chatbot, which generated section headers and suggested organizational changes. For instance, the tool gathered mentions of the interview subjects together for clarity and created a list of 4 sentences that all addressed social justice issues. Those sentences were rewritten as a stand-alone paragraph.

The text itself and the ideas embedded in the text are ours. They are human created. We have used artificial intelligence to clarify muddled sentences. Interestingly, AI is good at locating confused and confusing prose, looking at a complex compound sentence and a paragraph of complex, compound sentences and drawing out main ideas—helping us with revision. If the AI can effectively assist in doing in 30 seconds or a minute what would take humans 20 minutes, half an hour, most of a day, to sort through convoluted, confused sentences or paragraphs, then why wouldn't we use the technology?

Artificial intelligence also helped compile the minute by minute running summaries offered in the analysis, the descriptions of the content as the clock is running, and we imagine readers being able to use these glosses to orient themselves in the text of the transcripts. These summaries do not create or establish ideas. They are simple functional descriptors of what is contained in the text, when it appears in the interview, and that distinction is an important part of engaging with the technology, of learning what the technology is good at, what the technology is less good at, but it's also bred of familiarity. It's only because we have developed expertise using generative AI and descriptive AI, and have spent time with several different generative AI interfaces, that we're able to meaningfully and purposefully engage the technologies and to discern how, where, and why they are effective. AI created none of the ideas in the book, wrote zero of the insights, and added nothing of value beyond streamlining the processes of writing we have already developed as expert

writers. This is perhaps a key distinction: here we are not primarily writing about the teaching of writing using AI but writing about AI in workplaces.

AI as Technosocial Agent

We acknowledge the dual nature of AI—its potential for both empowerment and disruption. By engaging with the technology, understanding its development, and participating in its deployment, we can influence its future trajectory. We draw on the insights of Bruno Latour and Paulo Freire to discuss the adoption and adaptation of technologies in people's lives, highlighting the importance of democratic engagement.

The technology simply isn't scary. We are watchful of the use of AI as an excuse for numerous unethical actions forced on to people in culture. Like a bulldozer, there is potential power in the machine and it can be abused and misapplied. Moreover, AI allows entrenched powerful cultural agents to mask continued oppressive behaviors. But the AI technology itself? It isn't scary, not to us, not anymore. Bruno Latour, in an interview from 1993 that had a strong impact on thinkers working with the early internet, said that the post-moderns often describe technology as arriving sleek and magical from beyond human intervention, and he laughed, and I think that laugh is precisely descriptive of our relationship to this emergent technology (Latour & Crawford, 1993). Latour understands technologies as historical, as the outcome of sustained human labor, working in communities to produce a given outcome. The values embedded in the technologies may be obfuscated and they may not be the values of the users, but the values are always added by those developing the technologies, discernable through engagement and investigation, as in Latour's *Aramis* (1996). The technologies are human and imbued with all the wonderful and terrible features of everything human, including the ability to both unravel the tendrils of discourse as well as intervene in the deployment and use of the technologies.

We chose these interview subjects because they contributed to and participated in and helped launch some of the most advanced and sophisticated artificial intelligence tools that professional writers and writing instructors are liable to encounter. In doing so, we can see the history of how the technology has been built and established over time. It is not a mystical force arriving from beyond the stratosphere. It is a human created technology, and yes, it is deeply problematic in that it is a corporate, controlled, billionaire-sponsored, oligarchical designed system that, in its worst applications, is seen as a way of displacing workers. Yet only through engaging the technology, understanding and criticizing this development history, and participating in the continued deployment and widespread use of the technology will we have any voice in the distribution and adaptation of these technologies.

We return to Freire's insightful distinction between *adoption* of technologies into people's lifeworlds and *adaptation* to technology in people's work. Freire's

values are very different from those expressed by the creators of AI, misaligned with ours, as expressed here (Freire & Macedo, 2000). We are primarily concerned with describing workplaces, and workplaces that are technologically advanced and financially privileged. We recognize that gap between the Brazilian peasants Freire writes about, yet that distinction between adoption into and adaptation to imposed technologies asserts an important distinction that continues to drive our interest in and evaluation of automation technologies. People either adapt to technologies that are forced upon them, and they find coping strategies, resisting strategies, whole hosts of ways of working against the perceived requirements of technologies, or they adopt them into their lifeworlds, changing their habits, their *habitus* to better interact with and labor with new artifacts in their environment, their community, their context, their surroundings.

There is hope that we can adopt technologies, even those described as disruptive, even those created through not only non-democratic but anti-democratic design regimes. We can engage those technologies and create democratic applications and niches for citizen participation. Much like Andrew Feenberg describes, we're not talking about utopian hopes for technologies that somehow are autonomously going to generate a better world or a healed planet. We acknowledge the huge amount of labor and time such engagement requires, but we also believe, with Feenberg, that the alternative—the right of refusal—leaves citizens powerless and subject to the whims of the powerful that have created the technology. In looking back at the histories of technology that have been built—the telegraph, the railroad, radio, television and broadcast technologies in the mid-20th century—each of these technologies have liberatory potential, empowering possibilities. Their histories often record initial opportunities for democratic engagement. Once they have a business model and are generating revenue, moneyed and powerful interests reduce the use value, reduce the democratic potential, reduce the liberatory potential of different technologies over time—the process that Cory Doctorow so wonderfully captures in his term *enshittification*. Artificial intelligence is a significant and powerful emergent, disruptive technology, thoroughly enshittified.

AI as Co-Created Agent

In a 2025 presentation for the Berkeley Language Center's *Language, Literature & Culture Study in an Age of AI* conference, Rodney H. Jones traces theories about human interaction with AI through a history of linguistics (citing Vygotsky's theory "Thought itself ... cannot take place without cultural tools to mediate it"), media theory, (citing Marshall McLuhan's understanding of media as extensions of humans), cybernetics (Katherine Hayles' concept of technogenesis), human-computer interaction (Alan M. Knowles's theory of machine-in-the-loop systems), and post-humanism (Donna Haraway and Karen Barad, with Haraway's cyborg thinking and Barad's understanding of "humans, the physical world, and technologies as always already entangled") (Jones, 2025). Jones

ultimately explores how a post-humanist understanding of AI might inform classroom practices regarding LLMs, but his work is also helpful in understanding how we conceptualize AI throughout the book as infrastructural in relation to the workplace and writing classrooms.

Situating AI within post-humanist theories, Jones argues that, “From this [post-humanist] perspective, it’s not a matter of interactions between separate entities separated by a jagged frontier, but of intra-action—the ways different parts of the whole work together and come to co-constitute one another” (2025, 25:43). To understand these “intra-actions” as a process of co-creation, Jones distinguishes between loops and cuts, explaining that “The loop metaphor assumes that human-machine interaction is about regulating and improving a system, while the cut metaphor recognizes that each interaction redefines what counts as human, machine, creativity, intelligence and culture” (27:28). While this distinction is useful for moving broader conversations in the field forward, as technical communicators (like Knowles) we are invested in “regulating and improving” human-machine interactions, in this case with AI in particular. We would be doing our students a tremendous disservice if we weren’t, though we must also do so critically and ethically. That said, Jones also attempts to translate post-humanist understandings of AI “into actual pedagogical practice” (28:02), and several of his insights help describe how we implicitly approached the research in this book. Jones defines creativity as a combination of three concepts: interfacing, inferencing, and imagining. Imagining, in particular, identifies an important underlying assumption that emerged from our dialog and analysis throughout the process of writing. Jones explains:

This idea that we shouldn’t be focusing on using AI, but on imagining it, has also been gaining ground in the digital humanities, with scholars like Foster and Evans [Evans & Foster, 2024], who suggest that literary scholars shouldn’t try to turn AI into good literary critics, but rather strive to create what they call “bad robots,” designed to disrupt conventional readings, changing the question from, “Is AI a good literary critic?” to “What kind of literary critic can I imagine AI to be?” and “What kind of critic can AI imagine me to be?” (48:27)

Similar to Jones, in our Conclusion we call for a shift away from framing AI as a potential replacement for technical communicators towards understanding AI as an assistant. That said, replacing “literary critic” with “technical communicator” in Jones’ construction illustrates an important unstated premise of our research. Not only did we set out to answer the question of “How are technical and professional communicators using AI in the workplace?” and “What now?” we also found answers to the questions “What kind of technical and professional communicators can we imagine AI to be?” and “What kind of technical and professional communicators can AI imagine us to be?” These questions are

entangled with Derek Mueller's questions in the foreword: What is AI for? What are people for?

Jones concludes his presentation by referencing Sarah Burris' dissertation, amplifying three commitments that Burris calls for:

[Burris] Argues that critical post-human literacies require that we commit to three things. First, a recognition of entanglement. The understanding that creativity is not about power or control, but about how we share the world with other human and non-human beings. Second, speculative thinking, which is about training our capacities to simulate and role-play and imagine. And last, ethical engagement, which is not just a commitment to social justice and the critical questioning of power relations, but the recognition that we are always implicated in processes of gentle cutting, of talking AI into existence. We are always in some way responsible. We are always on the hook. (49:16)

Like Jones' work, Burris' commitments are also reflected at different points throughout—with our emphasis being on speculative thinking and ethical engagement.

Historical Context and Future Potential

Looking back at the history of technologies like the telegraph, radio, and television, we see patterns of initial democratic potential followed by corporate control. AI, as a powerful and disruptive technology, follows a similar path. We feel a professional obligation to explore its potential for social justice and democratic application, despite the challenges posed by its corporate-controlled design history.

We feel we have an obligation, and we do have interest in engaging and articulating possibilities for the technology, however unlikely it is to realize any liberatory potential. We also feel professional obligation to engage with and articulate the possibilities for the technology, because we know that every literate user, every writing instructor, every student and every student becoming a professional, every young emergent professional who takes the time to understand and utilize the technology has the potential to become the user who cracks the code, makes some insight, creates some unforeseen ability to engage and rearticulate the technology and bring it in the direction of Feenberg's pre-Internet French Teletel and Minitel. We see potential for social justice in AI, as we tell the tale briefly, of a New York City lawyer who brings in artificial technology to help support tenants' rights. The same tenants who need the support of this technology simply would not be able to afford the kind of legal representation that they need to take on their moneyed landlords. That discrepancy in power is precisely the kind of asymmetrical resistance that a tool as powerful as artificial intelligence

can provide. We're not saying that undoes any loss of employment that seems on the horizon, but we hold fast to our assertion that unethical management practices result in layoffs. Managers, CEOs, and HR professionals are blaming and scapegoating the technology when these powerful decision-makers are looking for ways to reduce the workforce and further increase productivity by further encumbering over-burdened workers.

Emergent Examples: Future Agents ... of Justice?

We hope that this book inspires readers to see the alternative configurations of AI that are possible. By engaging with the technology critically and creatively, we can shape its future in ways that align with democratic values and social justice. We draw parallels with the early internet and the participatory ethos of platforms like Wikipedia, envisioning a future where AI can be a tool for empowerment and resistance to power, asymmetrically.

While concern for the environment has driven significant critique of AI, our apprehensions stem from the technology's development history. It is a top-down technology, feared often for its labor-saving and therefore workforce reduction potential. While we continue to assert that decision-making based on these empty promises are abuses of power, such critique has not stopped unscrupulous managers from using the technology as an excuse to reduce the number of employees. While unfortunate, such labor reductions seem to be localized for the moment.

Moreover, it is at the intersection of social justice and artificial intelligence we wish to dwell. Social justice applications and citizen control of the technology is vividly exemplified through the lens of tenants' rights in legal aid AI. By examining case studies where AI has been deployed to support tenants' legal rights, we can observe how technology can be harnessed to address systemic inequalities. This exploration leads to a broader consideration of what constitutes legal aid AI and its potential to transform access to justice.

Sateesh Nori developed Roxanne AI in order to support the needs of tenants in New York City who could not otherwise afford legal consultation let alone representation (Poggio, 2025). In New York City, tenants often face difficulties in getting landlords to make necessary repairs, often enduring long wait times and complex legal processes with limited professional support. To address this issue, Nori, a housing attorney and professor at NYU (New York University) School of Law, developed Roxanne AI, an AI-powered chatbot. Launched in early January of 2025, Roxanne AI provides tenants with actionable legal information about their rights regarding repairs and housing conditions.

The chatbot, a collaboration between NYU Law School, Housing Court Answers, and Josef Legal, uses retrieval-augmented generation (RAG) technology²

2. See Martineau, 2023 for a more detailed explanation of this approach: <https://research.ibm.com/blog/retrieval-augmented-generation-RAG>

to guide tenants through legal processes for issues like heating, hot water, mold, and lead paint. It aims to fill a gap in legal assistance, as the right to counsel in eviction cases does not extend to repair issues.

Roxanne AI has been used thousands of times, with positive feedback on its ease of use and accuracy. The chatbot is designed to avoid providing incorrect information and has garnered interest from legal aid organizations, the New York court system, and the state attorney general's office for its potential to improve access to justice. With landlords resorting to orbital strategies to hide their identity as well as their organization's size from tenants, such real estate legal shenanigans have attracted scholarly (Gomory et al., 2024) as well as citizen journalist (Mykulyn & Raymond, 2022) and activist attention (Dingari, 2023). There is enough demand from a wider public audience that such case studies and stories that Thompson-Reuters has established a "channel," or persistent web presence, for "AI for Legal Aid" and "AI for Justice" (Thomson Reuters, 2025) among its technology-centered reporting.

Drawing on Andrew Feenberg's philosophy of technology, we argue that, while initial opportunity for participatory design in AI development has passed, activist engagement allows for the reapplication of AI as an engine for citizens' rights. Feenberg's emphasis on the social shaping of technology underscores the importance of stakeholders impacting usage patterns after the design process. Such interventions, like Sateesh Nori's Roxanne AI, offers examples of effective reinterpretations of AI systems that show pathways forward reflecting and promoting social justice values, however the technology was developed. This participatory dimension may not immediately democratize the technology but it fosters critical citizen engagement, empowering individuals to actively shape the tools that govern their lives.

The potential of AI to advance social justice, particularly in the realm of tenants' rights and legal aid, is significant. Through participatory design and a commitment to linguistic inclusivity, AI can be reimagined as a tool for empowering citizens and promoting a more just relationship among populations with competing interests.

The organization Black in AI³ recognizes contributions to the developing technology from one underrepresented group and points a way forward in engaging and participating in the development of the technology into the future. Meanwhile, HYFIN historicizes and rearticulates the timeline of the technology's development, making sure contributions from a wide variety of programmers and designers are recognized (Moody, 2024).

Though some critiques of AI center on its environmental costs—particularly electricity and water usage—these concerns, while urgent, risk narrowing our focus to infrastructural efficiency. Groups like Black in AI and HYFIN expand the conversation, showing that shaping AI's future also depends on recognizing

3. <https://www.blackinai.org/about>

who contributes to its development and how those contributions are framed. All networked computer requests consume resources: electricity to run hot memory, access long-term storage, and transfer data. Analysis of AI requests are misleading insofar as the resources necessary to run standard internet data requests are part of the AI requests, indistinguishable from them, and so the AI premium of resource consumption is unclear at best (Amanta, 2024; Energy.gov, 2024) and, at worst, misleading. It is true that the organizations supporting AI development are considering new low-cost power sources, pointedly modular nuclear power, which is a chilling dimension to a narrative already fraught with alarmist appeals to moral panic. And it seems we use every kilowatt for new processes saved through efficiency, known as the rebound effect (Greening et al., 2000). These infrastructural dynamics matter, and surface at times throughout our interviews—but so do the stories we tell about AI's origins and potential.

As readers engage this text and read the interview transcripts, we hope readers catch glimmers of the alternative configurations of artificial intelligence that we not only see, but hope for. Michael remembers the beginning of the internet, Internet 1.0, that held the potential power of the electronic printing press. The early web presented opportunities for writers, for authors, to control and contribute texts and ideas as never before. The journal *Kairos* emerged from that early web, and it is in that spirit that we engage artificial intelligence not as a *fait accompli*, but as an ongoing unfinished narrative. Citizens have important roles to play in what artificial intelligence will and can become, and our hope remains that this slim volume contributes to not just alternatives, but a powerful counterfactual engagement with the technology that reflects the hope—the optimism—of the early web that recreates or re-envision hopes for participatory technologies. We're happy that Wikipedia still exists and that it has mostly, and interestingly, recently remained resiliently resistant to oligarchical meddling,⁴ that it has maintained attention to the participatory and democratic values on which it was founded. We hope that the early case studies we include, like those aimed at increasing the potential for social justice supported by artificial intelligence, that we will see new green shoots, new potential counter-cultural and counter-trend examples emerge in the tradition of Hawk (2007). We hope we might even inspire students and other literacy professionals to download, experiment, and reprogram open-source chatbots. We can build our own rebellious, subversive versions of AI technologies: resistance machines

4. Britain's *Guardian* first reported tension between Musk and Wikipedia in 2024, then France's *Le Monde* was the first to report Musk's renewed attack on the functional, democratic technology in the wake of the enshitification of X, formerly Twitter. See <https://www.theguardian.com/commentisfree/2023/oct/23/why-is-elon-musk-attacking-wikipedia-because-its-very-existence-offends-him> and https://www.lemonde.fr/en/pixels/article/2025/01/29/why-elon-musk-is-calling-for-a-boycott-of-wikipedia_6737574_13.html

that automate dissent, subversion, social action, and amplify pro-democracy messaging. We look forward to case studies of AI rhetorical jujitsu, which use the momentum of the hype machine against itself to demonstrate how we can push the oligarchs off balance and reclaim access to the deeply powerful but misapplied lessons of generative artificial intelligence.

Artificial Intelligence as Superpower

Over the last few years, we have been fortunate enough to speak with people who have been defining, creating, and working with artificial intelligence technologies. Here, we present three extended interviews with people who have occupied representative places in organizations and industries that reveal the development, current status, and the future of these technologies. It has become commonplace to mention Gibson's oft-referenced mantra, that the future is here; it just isn't evenly distributed, and nowhere is that more evident than in the use of programmed agents in the workplace. But technoculture critic Igor Schwarzmenn asserts the time for that quote has passed, asserting:

The more we rely on this quote as a mantra, the more we relinquish our own agency. It puts us all into the position of living in a future that belongs to someone else and never our own. (Schwarzmenn, 2019)

If Schwarzmenn is right, the last thing John and Michael want to do is erase the agency of our interviewees, especially Bridget and Kate, whose gender status leave them often spoken over and under-appreciated in the male-dominated tech sector; they have earned their agency and expertise. These are both technical experts and literacy experts, and provide insight into professional uses of language models, the promise they represent, as well as some of the pitfalls these technologies have revealed. Our hope is that readers will be able to discern the useful role AI has in communication. Our motivation in collecting these narratives is to strengthen our assertion that artificial intelligence, deployed as a human-centered and participatory technology, can enhance human capacity for symbolic-analytic work, problem-solving, and increase satisfaction for work beyond the information age into whatever the human-machine cooperative co-botic future comes to be called. Far from displacing humans, by focusing on the lived experiences of our interview subjects, we see potential for expanding human capacity with artificial intelligence, which Shneiderman insists has the capacity to become a "superpower" (2022). So long, that is, as the technology is developed as a human-centered technology with controls, affordances, and transparency.

Together, the three interviews provide an overarching introduction to the creation, establishment, and work-a-day world of artificial intelligence technologies. Developed over the last few decades, the recent public emergence of numerous

generative AI tools for producing text, images, audio, and video is a public cotillion for capabilities that have long been in development. The interviews have been selected because of the places they hold on the timeline of the development of the technologies, in representative organizations, and the kinds of work being done by rhetorically trained professionals.

Artificial Infrastructures articulates the emergent roles of artificial intelligence specifically in high technology environments, with an eye toward the concerns of technical and professional writing experts and writing instructors, accessible to readers with a wide range of familiarity with artificial intelligence technology. The book addresses the question of *What now?* in an age when artificial agents draft text and respond to requests for unique prose. We are mindful that by the time this text is published, the capabilities and even the names of the technologies referenced will likely have changed, and may have cycled through more than one or two generations, leaving the technologies more capable and even more discomfitingly uncanny. Yet undeniably *artificial*.

Artificial Infrastructures develops a durable argument about the nature of technology, ensuring it lasts longer than the current generation of AI tools. With a new GPT engine available as this book is published, the next generation already promises to “radically disrupt” writing, and by extension, the lives and careers of writing professionals (and writing instructors & instruction). Rather than anxiety caused by the disruption of writing with the aid of technology, *Artificial Infrastructures* recognizes the “always already” nature of literacy and its technological enframement, arranged and presented for writing teachers, professional writers, and professionals who write.

Organization & Structure

At its core, *Artificial Infrastructures* is built on a tradition of expert narrative and interview. Three professionals who have worked with artificial intelligence, in its early integration into image analysis, copy and instruction writing, and finally, in high-technology manufacturing and engineering. Our three expert participants offer long histories of automation, technology integration, and language digitization in a broad range of applications and workplaces. Since Plato—through Socrates in the *Phaedrus*—declared that technology in the form of writing gave students the appearance of wisdom without its substance, each emergent technology from alphabetic representation on the page to cut and paste through grammar checkers, Wikipedia, through paper mills through today’s artificial agents, writing has been contested ground since the western tradition equates identity and intellectual accomplishment with literate action. This is never more evident than in the increasing demands for publication in ever-more selective publishing outlets for academics to produce prose that fewer and fewer audience members actually have time to read. Machines—algorithms—that produce the appearance of literate action are not only suspect, but

to some corners of literacy professionalization, existentially threatening. *Artificial Infrastructures* addresses the concerns of these readers and informs those who address such audiences, offering perspective that informs and delights while also offering a salve to the apparent threat inherent in the appearance of intelligences that produce spontaneous copy. Historical, professional, as well as technological precedent informs the analysis presented alongside and between the interviews.

Three interviews are the core of the short text:

- A BA-prepared professional with over a decade of experience working, first, in museum curation and exhibit design, joined a startup as employee #7, the startup was acquired by a large stock image company, where she now writes a blog about the role of artificial intelligence in stock image search. Along the way, she designed and hosted one of the earliest AI professional conferences and is a recognized expert in algorithmic image search and creation.
- A Ph.D. prepared professional writer with two decades of experience who began as a technical writer for a multinational usability laboratory, became an independent contractor, and then joined a larger international security software corporation. Her current work involves balancing algorithmically-created copy with (human-) written text from support instructions to in-house technical documentation to marketing writing. She has seen the development of the field from technical writer to document specialist to usability engineer to experience architect and to whatever is next.
- Finally, we interview a senior expert with 30-plus years of experience working with advanced manufacturing and pharmaceutical production representing the interests of industry experts who have direct experience integrating AI-supported systems. With experience designing production systems for pharmaceuticals and advanced manufacturing, we ask the interview participant to speculate meaningfully about the field's future. This interview grounds the text in compelling recent real-world examples of manufacturing companies incorporating AI as well as automation and AI in pharmaceuticals and healthcare.

The book *Artificial Infrastructures* engages concerns of writing instructors and working professional writers considering their futures, articulates the role of writing for working professionals, engages students of professional and technical writing with substantive examples and role models for successful career trajectories. Artificial intelligence, in its many facets, is the revolution in technology we have prepared for, and we are ready to take advantage of its affordances. *Artificial Infrastructures* describes these opportunities and asserts strategies for advantageously engaging emerging technologies while dispelling many (mostly western) myths that link literate text production with identity formation and rational thinking.

This book, with its central focus on the convergence of writing, literacy, and artificial intelligence, places a substantial emphasis on the provision of vivid and context-rich insights through interviews with seasoned professionals actively engaged in AI development. These professionals stand as exemplars, demonstrating the real-world applications and consequences of AI technologies. The book's structure is designed to ensure that these interviews, complemented by in-depth analyses, furnish readers with a comprehensive understanding of AI's multifaceted roles across diverse professional domains. It builds on the history of computers and literacy as developed by the computers and writing community as well as the tradition of professional interviews with subject matter experts, as exemplified by Savage & Sullivan (2000) among many others. These encompass image sorting, content generation, advanced manufacturing, and pharmaceuticals. Through these interviews, readers gain invaluable and practical insights into the actual significance and potential of AI, making this book an indispensable resource for anyone interested in this emergent technology focused on the needs of writing teachers, technical communicators, and future professional writers.

A note on usage: we are aware of the increasingly popular use of TPC for *Technical and Professional Communicators* among scholars and pedagogues we read and respect and so use TPC when appropriate, as well as technical communicator, technical writer, professional communicator, and professional writer at different places in the text. *Technorhetor* is a favorite of Michael, while he also has some stake in convincing more professionals to accept Experience Architect as a title. While we note these terms are not without baggage, in a text as long and complex as this, we use numerous constructions for readability and wide appeal. We trust the reader will understand.

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The future is unwritten.

—Joe Strummer, *The Future is Unwritten*