

The Laboring of Labor Communication Research

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Introduction

This chapter provides a personal/institutional history of labor communication studies. It begins by examining the private and scholarly context for my decision to write about communication labor beginning in the 1970s. The chapter proceeds to focus on how my writing, both alone and with research partners, especially Catherine McKercher, evolved over 40-plus years with a focus on the following themes—the essential connection between research and activism in and out of the university, the central relationship of labor research to the evolving field of political economy, the expanding internationalization of labor communication research, the impact of neoliberalism on research and funding, the importance of emphasizing a broad category of interconnected knowledge workers as the object of labor communication research, the centrality of class struggle to the knowledge labor workforce and the recent growth of labor activism in the technology sector, and the need to teach labor research in and out of the classroom to prepare future generations of labor communication scholar/activists. Each of these points is examined from the perspective of my own experience and that of the colleagues and students with whom I have had the privilege to labor in research and activism.

Class Tells

I came to the study of labor in communication from a working-class family. My father was a trade unionist in the printing district of Manhattan when New York was a city of industrial enclaves. In addition to taking on the primary role of raising our family, my mother took in piecework from the garment district, a job that brought together three generations of our family, all living in the same tenement building, for what we called

“cutting the lace.” My only direct memory of my father’s labor process was a visit to his lithography factory where massive presses published magazines, posters, and anything requiring full color printing. There is nothing nostalgic about the memory. The sharp odor of the chemicals stung my lungs, as it did my father’s, forcing his premature retirement. A more pleasant recollection is sitting with my dad to work on union matters, from keeping dues records when he became a union representative to hearing him talk about running for higher union office, a campaign that proved exciting but unsuccessful. Before becoming a teenager and before hearing the words “social class,” I understood what it meant to toil in a factory, to work for a union, and, thanks to my mom, to work in the underground homework economy.

My escape from a claustrophobic “railroad” tenement apartment and the misery of trying to stay one step away from outright poverty was books. With a public library nearby, the collection my dad brought home from a bygone bookstore job, and with the help of dedicated teaching nuns, I was never at a loss for reading material. What was for me a way to block out my surroundings became a ticket out of the neighborhood. Specifically, it earned me a place at Regis High School, one of the country’s greatest and most rigorous, a Jesuit-run tuition-free institution located in a classic uptown building between Park and Madison Avenues. The area around Regis was home to the wealthiest New Yorkers and to the center of the world’s advertising industry. It felt like a universe away from my tenement neighborhood in Little Italy. Regis taught me how to labor in the intellectual world, from starting the day with *The New York Times* delivered to my locker, through a full day’s traditional classical education in ancient Greek, Latin, French, literature, math, and theology, and ending late at night after a required three hours of daily homework. From there it was on to Georgetown University, a normally conservative institution turned upside down by the 1960s, especially by the Civil Rights Movement and the war in Vietnam. With the benefit of teachers steeped in critical theory and active in war resistance, I learned the labor of radicalism, including the need for intense academic work. As a result, I graduated first in my class at Georgetown and won a spot at Harvard to pursue the PhD in 1970.

After working at part-time jobs throughout high school (delivering groceries, serving drinks at an exclusive men’s club) and college (research assistant to a demographer), Harvard’s funding made it possible for me to take a break from life-supporting jobs to focus on doctoral work. Nevertheless, I faced another big job in addition to course work: I was drafted into the armed forces a week before classes began at Harvard and had to learn the labor of fighting the US establishment, especially my local draft board. With the support of the anti-war community and especially from my father, a World War II Marine Corps veteran with four years of combat in the Pacific, I was able to defeat every effort to send me to Vietnam and ultimately to win conscientious objector status.

Class Struggle at Harvard

In a somewhat unorthodox way, my progress toward developing a research program on labor progressed through my doctoral studies at Harvard. I built on reading the work of Marx and the literature on social class at Georgetown through encounters

with faculty who rejected critical theory. Central to this was my work with Daniel Bell who wrote his major books *The Coming of Post-Industrial Society* (1973) and *The Cultural Contradictions of Capitalism* (1976) while I was a graduate student, including a period when I served as one of his research assistants. I sat in on Bell's undergraduate lecture course on Marx and took his graduate seminars expounding on these books. It was through him that I first encountered research on the relationship of work to technology. Sufficiently steeped in both the lived experience of social class and the new critical research on labor (Braverman 1974) and assisted by a brilliant group of fellow graduate students, I developed a critique of Bell's work that extended to the emerging neoliberal and neoconservative research agendas. This included the research of Bell's Harvard colleague Seymour Martin Lipset whose classic study *Union Democracy* (1956) addressed the failure of democracy in the International Typographical Union, both his and my dad's union. Making demands on unions that were not made of more powerful corporations was a hallmark of mainstream research at the time, particularly by former socialists like Bell. Lipset not only shared Bell's revisionist view, but he also promoted a theory of "working class authoritarianism" whose empirical grounding I critiqued in papers for more open-minded professors.

Not all my experience at Harvard involved critical engagement with faculty. The 1970s was a period of national turmoil, including in the workplace, where employers were compelled to modernize production methods in factories and loosen controls in offices to satisfy a workforce of young people who had grown up in the 1960s and were not easily controlled. Companies like General Motors learned the hard way that failure to reform invited workplace rebellions and strikes. Moreover, scholars increasingly looked abroad for potential models of worker control and workplace democracy, such as the Mondragon worker cooperatives in the Basque region of Spain, the Kibbutzim in the early decades of the state of Israel, and worker self-managed enterprises in the former Yugoslavia (Hunius et al. 1973; Montgomery 1979). This research provided a common theoretical, substantive, and activist framework for my own studies and for those of numerous fellow graduate students. It formed a core that I would build upon over the years.

Despite our disagreements, I was happy to work with Bell on my dissertation research that addressed the regulation of technological innovation in the mass media. He was brilliant, supportive of his students, and perhaps most importantly, because he understood his limitations. That last quality led him to send me to Professor Anthony Oettinger, a chair professor in computer science whose knowledge of communication technology, especially the burgeoning digital world, was unparalleled in the United States. Oettinger guided me through the literature with patience and friendship that led ultimately to continuing our relationship through a postdoctoral fellowship and later as a senior research fellow with what became the Program on Information Resources Policy in the Division of Engineering and Applied Physics. He was also instrumental in helping me to secure a fellowship with President Carter's White House Office of Telecommunications Policy where I deepened my knowledge of technology and policy and used the time to read deeply into the growing literature on labor history, workplace democracy, and neo-Marxism.

Theory–Labor–Praxis

With a foundation in communication, technology, and labor studies, and with enough experience in a government setting to convince me that I was best suited for an academic career, I launched my research work. The labor portion of this can roughly be addressed in four stages: theory–labor–praxis, labor convergence, labor in the next internet, and passing the torch. The first stage involved integrating critical theory with research on communication, including finding a place for labor. I began to pursue this in the late 1970s in a series of articles with Andrew Herman, then a gifted undergraduate at Georgetown and now a senior professor at Wilfrid Laurier University in Canada. At the time, led by the work of Richard Flacks (1978), sociology was addressing central themes in neo-Marxism, including world systems theory, the state, labor, and culture. Our articles, published in such journals as *Media, Culture and Society* (1980) and *Theory and Society* (1981), addressed these areas and indicated their relevance for communication research. I would continue with this approach over the next two decades by refining it to foreground political economy theory and demonstrating how to integrate it with communication studies. This extended to reimagining the political economy of labor to include the work of communication laborers, the labor of audiences, the process of commodifying both, and the resistance that results in class, gender, race, and other forms of social structural relations (Mosco 1996/2009).

Alongside this project, I was determined to put labor on the map of communication research or at least extend it beyond the minor presence labor and the workplace occupied. The year 1983 proved to be eventful in this regard because it included the book *Labor, the Working Class, and the Media*, coedited with Janet Wasko. The first in our series of books on critical communication research, it contained chapters on media workers, the impact of communication technology on labor, and the representation of labor in the media, including contributions by trade unionists. In addition, I published “Critical Research and the Role of Labor” (1983a) in the *Journal of Communication’s* celebrated “Ferment in the Field” issue, a presentation and subsequent inclusion in the conference book of the 1982 Telecommunications Policy Research Conference on “Communication and Information Technology: The Stakes for Labor” (1983b), and an essay in the book review journal of the American Sociological Association on “Media Sociology and Media Workers” (1983c).

I have always believed that teaching and research are forms of labor and provide opportunities for praxis, the integration of thought and action. However, there is more to praxis and, for someone interested in empowering workers and in democratizing workplaces, that translates into building ties to workers and to the unions that represent them. In the late 1970s and early 1980s, I worked with large traditional unions such as the International Association of Machinists and Aerospace Workers and the AFL-CIO research department, which was formulating policies on technological change in the workplace. I was especially interested in the Machinists because the union had conducted the first national study of how working people are represented in media. For our book, Wasko and I incorporated a chapter written by the union leader who headed the groundbreaking project (Rollings 1983). In addition, we included a chapter on

technological change clauses in collective bargaining agreements by cultural labor researchers at the AFL-CIO (Chamot & Murphy 1983).

I also worked with organizations outside the orbit of mainstream trade unions such as 9to5, the National Association of Working Women. Founded in 1973 by feminist activists, 9to5 represented primarily women office workers whose job security and labor were deeply affected by technological change. Celebrated in a successful Hollywood movie, the movement and subsequent union caught my attention, and I invited its leader, Karen Nussbaum, to give the featured address at the 1983 Telecommunications Policy Research Conference, which I chaired. A contentious choice (I relegated the chairman of AT&T to a lunch talk) among the mainstream policymakers and researchers that typically filled the invite-only conference, I chose Nussbaum to help raise the profile of this important organization whose work continues today. It is important to recognize that the National Association of Working Women also laid the foundation for current efforts to organize Big Tech workers today such as the Tech Workers Coalition. The 1983 conference was memorable for another reason: I learned two days before it was to open that the upscale conference hotel, where all events were to take place and where participants would stay, was being picketed by striking hotel workers. To support these workers and especially to respect their picket lines, I spent the next 48 hours moving the entire event to a more downscale but strike-free hotel nearby.

Having determined with my partner that we did not wish to raise our young daughters in Ronald Reagan's America, we moved to Canada in 1984, a decision that would have, among its many significant impacts, a profound consequence for my labor and technology research. Over the years I have learned the importance of research funding and the Canadian government, recognizing the power of social democratic forces in the country, was supportive of critical research. On my arrival, I immediately contacted the Communications, Energy and Paperworkers Union (CEP) (now Unifor) and began a long relationship, working closely with Union President Fred Pomeroy and Research Director Patricia Blackstaffe. At the time, Canadian workers and their unions were powerful enough to pressure a conservative government to launch a multimillion-dollar research program that supported research led by trade unions and their university partners. Along with my colleague, Elia Zureik, at Queen's University, I teamed with the union to propose the first national study on the impact of technological change on telecommunications workers. With funding from the government, we were able to carry out interviews with telephone operators, installation, and repair workers in addition to completing a national survey of the workforce. Our findings unearthed massive discontent in the ranks of female operator services workers, who were among the first employees subjected to surveillance technology abuses and later to job-destroying automation. We produced a report that pointed to the workplace upheavals that were to come and recommended policies to address them (Mosco & Zureik 1987). Even though neoliberalism would ultimately mean the end of such funding, I continued working with the union by writing reports, speaking at events, and producing testimony for union appearances before regulatory bodies (Mosco 2005; Mosco et al. 1989). I would do the same for the more radical Telecommunications Workers Union from British Columbia, which had once shut down telephone service in Vancouver when the union took over phone exchanges during an extended work stoppage. My decades-long

friendship with the union's former research director Sid Shniad, whom I liked to call its "agitator in chief," was one of the great joys of my working life (Mosco 1999, 2002).

Throughout the rest of my career, the Canadian Social Sciences and Humanities Research Council and the Canada Research Chairs program provided ample funds to support my research, including two editions of *The Political Economy of Communication* (1996/2009). This funding also supported publications on labor and technology with my partner in life Catherine McKercher, including a special issue of the *Canadian Journal of Communication* (2006) devoted to labor, technology, and convergence as well as the books *Knowledge Workers in the Information Society* (McKercher & Mosco 2007), *The Laboring of Communication* (Mosco & McKercher 2008), and *Getting the Message: Communications Workers and Global Value Chains* (Mosco et al. 2010). The latter arose from our close association with one of Europe's leading critical labor scholars, Ursula Huws. This funding also trained numerous graduate students, many of whom helped to form a new generation of digital labor scholars.

Labor Convergence

Thanks to this funding and my partnership with Catherine McKercher, I was able to build a set of projects that specifically addressed labor, technology, and communication. After a career as a reporter and editor, including a stint as a Washington correspondent, McKercher took a position in the journalism program at Carleton University in Ottawa and decided to pursue the PhD. Her dissertation took the concept of "convergence," which had entered the discourse around communication and information technology, and creatively applied it to labor, specifically to the changing landscape of newspaper unions in North America. What were once discretely separated computer, telecommunications, broadcasting, and journalism industries were now converging into one large marketplace. Following this pattern, the unions that had represented employees in these sectors were also converging into multimedia organizations to make them stronger (McKercher 2002). Eventually this led to our collaboration on a project that produced a series of case studies on trade union convergence in North America and then internationally. The North American portion, which occupied us for the first three years, involved in-depth studies of how unions responded to convergence in the information technology industries.

We carefully chose a set of case studies starting with the Communication Workers of America (CWA), which had merged with the Newspaper Guild and represented employees at Canada's national broadcaster. We documented how these Canadian workers benefited enormously from the CWA's help during a strike action. In addition, we studied the CWA's counterpart in Canada, the CEP, the first union to represent workers throughout the media production process, including lumber workers and paper producers, journalists, and media workers, as well as workers for the major telecommunications company in Canada. Television and film workers were also in upheaval and so we decided to examine the relationship between the Screen Actors Guild (SAG) and the American Federation of Television and Radio Artists (AFTRA),

whose failed attempts to merge weakened workers in these industries. Years later, McKercher and I chronicled their successful convergence to produce one big television and film union in North America (McKercher & Mosco 2019). We were both pleased to see that when SAG-AFTRA went on strike in 2023 against the oligopoly that dominates the audio-visual industry in the streaming age, labor unity contributed mightily to major gains for its members.

Finally, although we knew that labor representation was weak in the technology sector, we chose to examine an insurgent movement at the giant Microsoft Corporation, an organization called WashTech, which had achieved some success in providing representation and benefits for the freelance workforce at the company.

Our studies in this our most sustained period of labor and communication technology research ran from 2004 to 2011 and featured several central points. First, we adopted a broad definition of knowledge labor to include all those who are involved in the chain of producing and distributing information products and services. This is important analytically because it recognizes that information is significant in all knowledge labor, not just among those who directly produce content for the cultural sector. Workers in a Taiwanese chip fabrication factory are knowledge workers alongside those who write on the devices driven by those chips. It is also of considerable political significance because insisting on distinctions between creative, cultural, and industrial or line workers promotes a stratified workplace and makes building large, powerful worker organizations more difficult. We also demonstrated that it is essential to credit knowledge workers with agency and not see them simply as defenseless in the face of a tsunami of technological change. Creating unions, worker associations, and other forms of worker mobilization demonstrates the capacity of workers, to paraphrase Marx, to make their own history, even if under conditions that are not of their own making. Furthermore, we showed that trade unions that agreed to come together in this rapidly converging industry were more successful in organizing, bargaining, and in political activism than those that went it alone. Admittedly, labor convergence also involved the risk of losing a union's identity, particularly those that came out of a radical tradition. In addition, while traditional trade unions have an important role to play in the knowledge and information industries, it is important for scholars to examine the growth of all types of worker associations. Decades of attacks from corporations and governments have made it hard for workers to organize formal unions. For many employees, especially in the technology sector, worker associations are the only alternative to complete capitulation. They also represent a potential first step to full unionization.

Finally, given technological convergence, the expansion of global supply chains, and the rise of large transnational businesses, what might be called corporate convergence, it is vital to situate digital labor research in a global context. In addition to examining the political economy of global supply chains and the new international division of labor, we paid particular attention to global labor organizations pursuing convergence. These included the International Federation of Journalists, which brought together a diverse collection of workers within one media industry; the Union Network International, then a new organization growing rapidly to meet the need for a worldwide body supporting the convergence of media labor across all the communication industries; and the International Labor Organization, the exemplar for how labor convergence operates within a United Nations organization (Mosco 2011).

Expanding what began as a North American project into the international arena does not just mean studying global organizations. It also involves addressing the convergence process within non-Western societies. To accomplish this, through field research, interviews, and document analysis, we examined two labor federations in India. The first was a major participant in information technology-driven global supply chains, the New Trade Union Initiative (NTUI), which brought together some 300 trade unions representing more than 500,000 Indian workers. The Union for IT Enabled Services (UNITES) was the second. It organized workers across the information and communication technology sectors and ran successful contract drives with a major outsourcing firm as well as with an international call center in Hyderabad. We focused on these organizations because they represented new efforts to transcend traditional political party-oriented trade unionism in India. Furthermore, they each responded with different approaches to convergence in the knowledge sector—NTUI was broad-based, whereas UNITES was limited to information technology. Finally, each had relationships with the organizations in the three international organizations mentioned above, particularly in attempts to build global labor networks to meet the challenge of outsourced communication and knowledge labor. Our project examined this new burst of trade union activity in India and assessed how it faced the challenges of convergence (Mosco & Stevens 2010).

Laboring Dialectically

Decisions about research are often fortuitous. One may have an overall perspective and a sense of what needs to be done, but choosing specific projects depends vitally on circumstances, from available time and funding to interpersonal relationships. Nevertheless, when I look back over the twists and turns of my research, I recognize an underlying dialectical approach. Examples include moving back and forth between empirical policy research and critical theory, from political economy to cultural studies (and back!), and from a focus on labor resistance to the painful challenges that workers and their organizations face. It has never been a question of either one or the other. I have often said that the best answer to the either/or question is *both*. This means that research decisions are better considered a choice about what to place in the foreground and what sits in the background. The decision to focus on labor resistance over labor exploitation is thereby really an issue of what to emphasize at a particular point in time, based on the understanding that the exploitation of labor is also present but given less emphasis. Both mutually constitute the experience of labor.

After completing our research program that explicitly addressed labor convergence, I decided in 2012 to return to my interest in the social relations of technology and the political economy of the media industry. This decision was prompted by the arrival of a new set of converging technical systems: cloud computing, big data analytics, artificial intelligence (AI), algorithmic decision-making, the Internet of Things, and 5G wireless telecommunications. Specifically, my strongest interest lay in how these facilitated the

return of American media imperialism embodied in the five dominant global corporations, which came to be the most valuable businesses in the history of capitalism—Google, Apple, Facebook, Amazon, and Microsoft—and the consequences of these developments for labor. To put the labor issue in the most basic terms, my emphasis shifted from Will Knowledge Workers of the World Unite to Will Knowledge Workers of the World Disappear. Of course, this is an oversimplification. Many information- and culture-rich jobs are still able to elude elimination from automation. But on carrying out research for the three books I wrote since completing our labor convergence project, *To the Cloud* (2014), *Becoming Digital* (2017), and *The Smart City in a Digital World* (2019), it became clear that digital labor is under siege from neoliberal capitalism and the powerful technical systems largely under its control.

To understand this new phase in the capital-labor relationship, it is useful to turn to the classic work of Harry Braverman (1974), who forecast the transformation of the labor process in what we now call knowledge labor. Like most work, including agricultural and industrial labor, the production and distribution of knowledge involve the human capacity to conceive of a task and then to execute it. Capitalism secures its growth by first separating conception, the ability to imagine a task, from execution, the capacity to carry it out. The system then concentrates the power to conceive in a managerial class, leaving most workers with the job of execution. When capitalism succeeds, the economic system secures control over workers and of the workplace, a fact that enables it to acquire increasing shares of the value or profit from work. For Braverman, the rise of monopoly capitalism deepened this tendency, a fact made all the stronger during the more recent period of neoliberalism.

Braverman's contribution, based on a deep reading of Marx and on his own experience as a metal worker, political agitator, and editor at Grove and then Monthly Review press, formed one of the pillars of the 1970s movement known as Western Marxism. Over the years, a minor industry developed around the critique of Braverman's work, most substantially over his relative lack of attention to class struggle and worker agency. McKercher and I joined that critique in our own work on labor activism and trade union convergence. Nevertheless, in my estimation, there is no more powerful analysis of capitalism's power at the point of production than *Labor and Monopoly Capital* (Braverman 1974). In the spirit of this book, I took up the impacts of an array of technical systems that, in Braverman's time, were only the hazy visions of science fiction writers, but which deepened the political economic and social tendencies that he so clearly identified. In *To the Cloud* (2014), I focused on the relatively new development of large-scale cloud computing, which marked a turn from laptop-based distributed processing to centralized storage and distribution. The move to the cloud enhanced the power of Big Tech companies like Amazon and Microsoft, which became leaders in cloud storage, processing, and distribution. It also increased the power of corporations by leveraging new information resources and tools against knowledge workers.

This capability increased markedly with the growth of big data analytics, which enabled companies to take the information stored in cloud data centers and use it to produce new decision-making tools or algorithms, which rendered obsolete the decision-making skills of many knowledge workers. As one analyst for the private think tank Gartner put it, "the long run value proposition of IT is not to support the human workforce—it is to replace it" (Mosco 2015).

Having chronicled this process in *To the Cloud*, I extended the analysis in *Becoming Digital* (2017) by examining what happens when cloud computing is hitched to the Internet of Things, a class of intelligent sensors embedded mainly in objects, but also in people. These devices provide feedback and carry out commands that vastly expand opportunities for control, particularly with the arrival of next-generation wireless telecommunications. In essence, the Internet of Things expands the powers of the internet from desktops, laptops, and phones to anything (or anyone) into which an intelligent device can be embedded. With it, ubiquitous computing had arrived. But as evidence from China to the United States documents, so too had surveillance capitalism. Whether in an office, a factory, or “zooming” in from home, workers are monitored all the time. Some are even being “chipped” with implants that make the work process easier (no more work passwords), but which permit constant surveillance.

In 2022, I decided to research the growing field of virtual and augmented reality, widely called the Metaverse, including examining its impact on the workplace. A year earlier, with its social media revenues slowing appreciably, Facebook announced a major strategic change that would take advantage of Web 3.0 technologies to deepen its investment in virtual reality systems. In addition to an enormous shift in personnel and budgeting, company CEO Mark Zuckerberg renamed the business he founded Meta and asserted that the Metaverse is about “a time when basically immersive digital worlds become the primary way that we live our lives and spend our time” (Canales 2022). Meta’s new strategy was quickly followed by Microsoft, as well as by gaming businesses and other Fortune 500 firms that planned to boost profits by investing in, and shifting some of their operations to, the Metaverse. By the end of 2022, Meta’s lofty aspirations appeared less likely to be realized than they were a year earlier. Nevertheless, it is important to focus less on the failures of a specific company and more on the appeal of virtual world technologies, particularly those enhanced by AI systems. As Satya Nadella, Microsoft’s CEO put it, “The metaverse is here, and it’s not only transforming how we see the world but how we participate in it—from the factory floor to the meeting room” (Hoban 2022).

Zuckerberg and Nadella were joined by elites in the public and private sectors who view the Metaverse as an opportunity to cut costs and expand products and services. In 2022, the prestigious World Economic Forum gave its blessing to the virtual world. Aside from a few caveats, the WEF argued that the Metaverse has a potential to play a broader role in society “through its ability to open our horizons, interact with those that we could not have met in the real world, experience new places, access public services and healthcare, and, overall, create an extension of the real world that we live in, to help us discover ways to make it better” (Tatavarti 2002).

The global financial company Citibank forecast that by 2030 the Metaverse would be worth between US\$8 trillion and \$13 trillion, and up to 5 billion users would live, work, and play in these new immersive spaces (Canny 2022). Even discounting for the hyperbole that often inflates financial forecasts for new technologies and understanding that new systems can easily turn into vaporware, the promise of applying virtual and augmented reality technologies to the workplace is worth serious consideration. Digital labor scholars also need to pay close attention to AI-based content production systems. We are

only beginning to understand, for example, the potential impact of ChatGPT on cultural workers (see chapter by Casilli et al. in this volume).¹ Meanwhile, breakthroughs in quantum computing, which are leading to the bottom-up reinvention of computing as we know it, should start attracting the attention of critical scholars.

Suffice it to say that the latest round of information technology has the great potential of extending employer control and facilitating piece-rate pay systems that would be the envy of Frederick Winslow Taylor and other supporters of what was once euphemistically called scientific management. Nevertheless, the dialectic continues as workers, including in the technology and service industries, rebel against the renewal of Taylorism with major organizing drives at icons of new economy labor. Among these are employees in Apple stores, software workers employed by Google, Amazon warehouse laborers, Starbucks baristas, and video game developers at Microsoft (Scheiber & Browning 2022).

Passing the Torch

One of my most gratifying aspects of a life in academia has been the opportunity to train generations of students, some of whom have gone on to produce important critical work on digital labor. It has also been wonderful to work with younger colleagues and scholars around the world who continue the legacy of critical labor studies research.

Among my former PhD students, Enda Brophy, a professor at Simon Fraser University in British Columbia, writes critically about new forms of worker organizations and resistance in the digital labor industries of Europe and North America. His book *Language Put to Work: The Making of the Global Call Centre Workforce* (2017) examines the spread of call centers with a focus on resistance and collective organizing led by workers in Canada, Ireland, Italy, and New Zealand. Andrew Stevens, professor at the University of Regina, drew on extensive field research in India to write *Call Centers and the Global Division of Labor: A Political Economy of Post-Industrial Employment and Union Organizing* (2013). Jianhua Yao, a professor at Fudan University in Shanghai, where he heads up a digital labor research program, extended the knowledge worker project that McKercher and I initiated, by incorporating the impact of information technology on knowledge workers in China. His major book *Knowledge Workers in Contemporary China: Reform and Resistance in the Publishing Industry* (2014) charts the tensions felt by frontline editors and journalists as they try to negotiate the fine line between opening markets and observing government controls. My final PhD student, Davina DesRoches, now a professor at the University of Winnipeg, focused on cultural workers by examining the pressures felt by museum workers in Canada, the United States, and Scotland, as their institutions increasingly succumbed to putting profits before the public interest. Her publication "The Marketized Museum: New Museology in a Corporatized World" (2015) broke new ground in the study of neoliberalism and cultural labor in the art world. Other former doctoral students who have made their mark in digital labor studies include Andrea Hunter, professor at Concordia University in Montreal, on broadcast journalism; Patricia Mazepa, retired professor at York University, on the laboring of culture at the Canadian Broadcasting Corporation; and Chris Bodnar, who proved invaluable in the

first phase of our knowledge worker project but gave up an academic career after earning the PhD to devote his life to another form of knowledge labor—organic farming. My former supervisees who would go on to create research programs in digital labor are now building their own associations and networks to a point where it is no longer the case that labor, digital or otherwise, is a blind spot in communication studies.

My research on digital labor also benefited from joint work with international partners, especially in China where, for some time, I have held the position of Distinguished Professor in the New Media Centre in the School of Journalism and Communication at Fudan University in Shanghai. That is largely the result of my collaboration with Professor Cao Jin with whom I have worked to create a research program for over a decade. It began with the formation of a summer school “Academic Camp” for graduate students across China who came together for an intense two-week set of lectures, including topics on critical theory and digital labor. Along with Graham Murdock who has co-chaired the course, it has featured scholars from major universities throughout the world. In addition, Professor Cao and I have coedited a series of books that has brought the work of critical scholars from Western countries to students and scholars across China, including, in our most recent book, contributions from digital labor scholars Rafael Grohman, Nicole Cohen, Richard Maxwell, Benjamin Birkinbine, Mary Gray, Jaime F. Cárdenas-García, Toby Miller, Enda Brophy, and Tiziana Terranova. In addition, my former doctoral student and now professor at Fudan University, Jianhua Yao, has set up a publishing program that features the work of digital labor scholars.

In Europe, in addition to teaming up with Ursula Huws on an edited book about labor in global value chains (Mosco et al. 2010), I also built a relationship with Professor Christian Fuchs that brought together the work of scholars from around the world in two books on the relevance of Marxist theory for communication research, particularly for research on digital labor (Fuchs & Mosco 2015a, b). Finally, in Latin America, I teamed with scholars at Universidade Federal do Piauí in Teresina, Brazil, led by Professor Jacqueline Lima Dourado (2019), to publish the work of critical scholars in *The Political Economy of Journalism: New (and Old) Logics of Cultural Production and Consumption*.

Conclusion

When I began work on labor, it was, with only minor exceptions, a minor blip on the radar of communication research. That is no longer the case. It is enormously gratifying and uplifting to observe and participate in the extraordinary growth of research in the field, which is today manifested most extensively in digital labor studies. As always, there remains a great deal of work to be done in research but especially in activism. It is important for digital labor scholars in the West to build ties to scholars in less-developed parts of the world but especially in Africa where digital labor begins its journey through the international division of labor in the coltan mines that contain the rare minerals that power the digital world. Equally important is the need for scholars to join activist movements everywhere, from universities to Amazon warehouses, where some of the most important labor organizing is taking place today. There is a pressing need for committed

public intellectuals if we are to overcome the existential challenges our world and its workers face today. It will certainly be a struggle. It always is. But it is a very good way to live a life.

Note

1 It is difficult to predict exactly how AI will impact the demand for knowledge workers, as it will likely vary, depending on the industry and specific job tasks. However, it is possible that in some cases, AI and automation may be able to perform certain knowledge-based tasks more efficiently than humans, potentially reducing the need for some knowledge workers. This could include tasks such as data analysis, research and report writing. However, it is also worth noting that AI and automation may also create new job opportunities for knowledge workers, particularly in fields related to AI development and implementation.

The above is the answer Chat GPT gave to a *New York Times* columnist when he asked: “How will A.I. affect the demand for knowledge workers?” <https://www.nytimes.com/2022/12/06/opinion/chatgpt-ai-skilled-jobs-automation.html>

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