

# Trouble in paradise?

## Tech work and its discontents

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### ABSTRACT

Introducing this special issue, this article gives an overview of recent debates around tech workers in the global economy, with a focus on their subjectivities and labour conflicts. The role of IT professionals has gained new importance through the rise of big tech firms and the diffusion of tech business models across the economy. The more influential role of these new professions has not only created new investment and employment, but also conflict. Economic turbulence, political struggles and industrial disputes have transformed the once-hailed profession into a more contested field of employment. After a general introduction, the article gives an overview of the contributions to this special issue.

### KEY WORDS

tech workers; subjectivity studies; labour conflict; big tech; unionisation; worker orientations

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## Introduction

In March 2019, a scandal swept through China's rather curated news coverage. On Github, the world's largest developer platform and code repository, Chinese software workers had anonymously launched a viral protest site denouncing the '996 culture' in their companies (Li, 2019; Lin, 2020). The term '996' became an acronym for the increasingly common demand to work from 9 am to 9 pm, six days a week. With their rebellious statement on the Microsoft-owned platform, the workers were able to instigate a national debate on overwork and workplace health in China (Lin, 2020). Interestingly, the online campaign came only a few months after a series of 'walkouts' at Google offices around the world, in which office workers at the company demanded more workplace security and the end of sexual harassment (Tiku, 2019; Tarnoff, 2020).

Such events might seem paradoxical at first sight. After all, coding jobs have long been hailed as promising careers, particularly against the backdrop of technological hype around automation and digital transformation. Especially after the global financial crisis and during the Covid-19 pandemic, office jobs in tech seemed to offer promising, future-proof career choices. While the rise of the tech economy generated a major debate about the labour conditions and exploitation of gig workers or crowd workers (Surie & Koduganti, 2016; Huws, Spencer & Coates 2019; Altenried, 2022), the realm of software engineers and their white-collar colleagues was generally still considered a safe haven for workers. In a turbulent world, ridden with crises, the office jobs of developers, system administrators or user experience designers continued to promise relative stability, prestige and upward economic mobility. Indeed, tech firms are still among the highest-valued companies around the world today (Birch & Bronson, 2022).

Still, much has changed since the heyday of the digital economy, which took off in the 1990s and accelerated after the global recession of 2009. The industry has lost its exceptional and mystified status. Companies have faced an increasing number of regulatory battles (Mazzucato et al, 2023; Staab, Sieron & Piétron, 2022) and have been accused of political interference, accelerating discrimination and active involvement in war crimes (Lewis, 2018; Sainato, 2024; Bergengruen, 2024). The systemic risks of these ruptures became all too apparent in the context of Trump's re-election and his alliance with Elon Musk, who might shape the new administration in the United States to a substantial degree (Chafkin & Hall, 2024). At the same time, the tech industry is undergoing an economic downturn. In the United States, recent years have seen the largest number of layoffs in the sector since the dot-com bubble (Shin, 2023), and economic development is likely to stay turbulent.

All of this is far away from the 'digital utopianism' (Turner, 2008) symbolised by the Silicon Valley imaginaries that have captured the popular imagination since the dot-com boom. High expectations and aspirations have turned into what some commentators have described as a 'techlash', provoking political mobilisation, unionisation and regulatory demands from actors across the political spectrum (Viljoen, 2021; Golumbia, 2024). Meanwhile, the emergence of large language models and other generative 'artificial intelligence' applications such as ChatGPT and the rise of cryptocurrencies show that the practical implications of digital transformation are only starting to materialise in everyday life. Incumbent industries in all sectors see their

businesses transformed by the logics of digital technology and financial markets. For tech professionals, this also means that they play an increasingly vital role in changing company structures and value chains. Today, IT professionals are not a niche profession anymore. However, this has not translated into stability for many employees, but is increasingly tied to uncertainty and conflict.

The aim of this special issue is to capture and evaluate these transformations against the background of existing scholarship on IT professionals. The publication history of *Work, Organisation, Labour & Globalisation* alone illustrates well that aspects of the working lives knowledge of workers in the IT industry have been subject to a variety of scholarly analyses, ranging from their labour conditions and transnational mobility to their willingness to take collective action (see, for example, Boes & Kämpf, 2007; Rodino-Colocino, 2008; Mayer-Ahuja & Feuerstein, 2008; Hong, 2010; Stevens & Mosco, 2010; Mayer-Ahuja, 2012; Meil, 2012; Hollinshead & Hardy, 2012; Fisher & Fisher, 2019). This special issue considers two broad strands of relevant research: firstly, studies of worker orientations, subjectivities and self-understandings, and secondly, research on labour conflicts, unionisation and trade unions.

The research on tech workers' orientations, subjectivities, values and self-understandings has a long history (Kunda, 1991; Barbrook & Cameron, 1995; Huws, 2001; Upadhyaya & Vasavi, 2006; Neff, 2012), and has been revisited in recent years since the rise of big tech (Wu, 2020; Dorschel, 2022; Ziegler, 2022; Browne, Drage & McInerney, 2024; Thaa et al, 2024). Researching tech workers' orientations seems particularly important not only in the light of their early adoption of entrepreneurial ideology (Irani, 2019; Chen, 2022) and the introduction of lean management principles (Pfeiffer et al, 2019; Daum, 2021), but also due to their 'inscription power' (Dorschel, 2022:302), which raises the question of which values and orientations these workers might inscribe into technology. These aspects raise the question of the self-understanding of tech workers in comparison to other groups of knowledge workers.

Another strand of literature focuses on tech workers' labour conflicts, which have taken place on a larger scale than ever previously experienced in the industry (Tarnoff, 2020; Tan et al, 2023). Several studies and reports have focused on the conflicts, protests and unionisation campaigns that recent crises have triggered (Li, 2019; Jaffe, 2021; Tan & Weigel, 2022; Roy, 2021; Niebler, 2023; Hughes & Woodcock, 2023). Such struggles might seem contradictory at first, given that IT professionals themselves often symbolise social divisions, for example, because their presence is seen as increasing income disparity or disrupting housing markets (Zukin, 2020; Mateescu & Kalb, 2024). These developments raise questions about their motivations, collective action strategies and interactions with conventional trade unions in the tech industry (Rothstein, 2022). An understanding of these issues can help provide insights into how the sector will be remade in the coming years.

This issue aims at continuing these debates on the socio-economic characteristics of the tech workforce, their working conditions and unionisation efforts and their subjectivities and orientations. The collection of articles includes both conceptual contributions and empirical analyses of tech work and its discontents. We ask how the tech workforce has changed in recent years and how workplace conflicts are unfolding

in the light of a surge in automation and digitalisation accompanied by multiple crises in the tech world and how these conflicts can be explained through tech workers' self-understanding and orientations. With more industries incorporating the logics of the tech workers, these questions become all the more salient.

Starting with an analysis of terminology, the article 'What is a tech worker, really?' by Valentin Niebler describes how today's popular use of the term 'tech worker' has evolved as part of unionisation drives by high-paid software workers in the IT industry. Niebler reconstructs the use and meaning of the term and reflects on its divergent use in labour movements and among researchers. Based on this analysis, he argues for an academic understanding of 'tech worker' that takes its political dimension and dynamic meaning-making into account.

Felix Gnisa, in 'How to understand tech workers as producers of technology in social conflicts', plots how technical experts and engineers and their political interests have been analysed by critical social scientists in the past, and how this history can help us understand contemporary forms of tech work today. The article distinguishes three research strands (proletarianisation studies, technology studies and professions studies) and discusses how these might be updated to investigate conflicts around technology in digital capitalism today.

The contribution by Kenzo Soares, 'Tech Workers from the South' looks at how a tech worker movement has evolved in Brazil. Soares highlights how tech workers in Brazil have developed collective action strategies around the topics of diversity and ethical technology development. His findings underscore the crucial role of grassroots initiatives, and raise important questions about differences in tech worker unionisation across the globe, focusing specifically on the particularities at play in the Global South.

In her article 'Computer says "no": On the materiality of software in organising tech work', Paula Bialski examines the materiality of software in shaping the organisation of software work, with a focus on how software's technical constraints impact daily workflows, decision-making processes, and power dynamics. From the perspective of science and technology studies, Bialski argues that the way software is designed actively organises labour by influencing how developers negotiate their tasks and assert power in relation to management, colleagues, and clients. Drawing on ethnographic fieldwork, the article highlights how the material properties of software mediate tech work practices and professional identities.

Lastly, two contributions to this special issue look at how automotive industries in Germany have changed through the new and more important role of tech workers in digital transformation. In their article 'An uncertain elite: Professional differences and similarities between engineers and tech workers in times of digital transformation', Martin Krzywdzinski, Sabine Pfeiffer, Martin Kuhlmann, Mario Ottaiano, Michael Heinlein, Tobias Ritter, Judith Neumer and Norbert Huchler examine how the influx of tech workers into automobile manufacturing creates both competition and cooperation among groups of engineers and IT professionals, with the former adopting some IT work methods, while the latter adjust to the strongly structured processes of the industrial sector. They argue that, despite growing overlaps, distinct professional identities remain.

From a similar perspective, *Nina Hossain* examines how traditional companies in Germany's automobile industries deal with the competition from start-ups and their agile workplace culture. The article shows how traditional work organisations and cultures reject new workplace organisation models. Her research raises the question of what might limit the spread of tech-related working models in traditional workplaces.

We hope that this special issue will contribute to the clarification of the term 'tech worker' as well as to empirical analysis of tech work's current development and discontents. The variety of perspectives and cases gathered in this special issue demonstrates not only the relevance of studying tech workers in today's global economy, but also the importance of a more nuanced understanding of tech workers' labour conditions and their orientations and subjectivities. As the articles on transformations of traditional economic sectors show, tech work is incorporated into more and more fields and has become a point of reference for work organisation. More exchange and research on tech work and tech workers will thus broaden our understanding of today's capitalist organisation of labour, labour conditions and conflicts.

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