

# Anthropology Book Forum

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**HATIM A. RAHMAN**, 2024, *Inside the Invisible Cage: How Algorithms Control Workers*, Oakland: University of California Press, 276 pp., ISBN 9780520395541

**Key Words:** invisible cage, algorithm, freelance, platform, ratings

Work has long been shaped by shifting economic structures, technological advancements, and evolving forms of labor organization. From agrarian economies to industrial capitalism, each era has introduced new systems of production and control, redefining workers' roles and relationships with employers. The rise of bureaucratic management in the early 20th century formalized labor through fixed contracts and institutional oversight, offering stability but also embedding hierarchical power structures. In recent decades, however, globalization and digital technologies have transformed traditional employment models, leading to the rise of flexible, project-based work.

In this book, the author explores how digital platforms structure and control freelance work, introducing the concept of the "invisible cage" to explain a new form of algorithmic governance. Drawing from extensive ethnographic research, the book reveals how platforms mediate workers' experiences, shape their reputations, and restrict their agency through opaque and constantly shifting rules.

Digital labor platforms (Upwork, Fiverr, Freelancer, Toptal) are online systems that facilitate the connection between workers (freelancers, contractors, or full-time employees). They typically offer various tools for job posting, talent sourcing, communication, project management, and sometimes payment processing. This book is based on ethnographic research on one digital work platform, for which the author uses the pseudonym "TalentFinder."

Since the demand for digital work platform services has outgrown the capacity for manual matchmaking between clients and workers, they use algorithms that can be dynamic, opaque,

and speculative. “Dynamic” refers to the ability of algorithms to evaluate input and make decisions in real time, including when encountering new data or situations. “Opaque algorithms” function in a way that is only fully understood by their designers, leaving workers unable to see how decisions about them are made. “Speculative” refers to algorithms that use a set of procedures to accomplish a task by establishing a probabilistic relationship between social phenomena.

Max Weber’s concept of the ‘iron cage’ describes how bureaucratic organizations enforce control through rational, rule-based systems. In traditional workplaces, employees comply with these structures because they believe adherence will lead to career advancement, making control feel voluntary rather than coercive. In contrast, the “invisible cage,” a term coined by the author, refers to a system in which platforms embed rules within opaque algorithms that change unpredictably, without notice or explanation. While platforms appear to offer workers flexibility and autonomy, they simultaneously undermine stability and limit workers' ability to anticipate future opportunities.

The book examines how this reliance introduces new challenges, particularly through rating and ranking systems. On TalentFinder, workers' visibility and job opportunities are heavily influenced by an evolving algorithm. Originally, the platform used a simple 1-5 rating system, borrowed from eBay, to provide a transparent measure of a worker’s reliability. However, over time, this system was replaced by the "Project Success Score" (PSS), a proprietary metric introduced overnight without explanation. Because the PSS was opaque, workers struggled to understand how their performance was evaluated or how they could improve their scores. The platform’s refusal to disclose the algorithm’s criteria meant that workers lost agency over their reputations, reinforcing the “invisible cage.”

The book also identifies key concepts that emerge from this environment. The “cold start problem” refers to the challenge new workers face when entering a platform - they must build a reputation from scratch, regardless of their prior experience outside the platform. Workers attempt to navigate these constraints through two forms of “reactivity.” “Experimental reactivity” involves workers testing different tactics - such as taking on diverse projects or varying contract lengths - to improve their ranking. Meanwhile, “constrained reactivity” leads workers to limit their engagement with the platform, either by working exclusively with established clients or by finding ways to conduct business outside the platform altogether.

Beyond algorithmic control, the book explores how platforms exploit institutional gaps to maintain power. The author discusses the role of digital boilerplate agreements - shifting terms of service that allow platforms to extract workers' data, conduct experiments on users, and change labor conditions unilaterally. Even after workers leave a platform, they remain subject to reputational interdependence - a system where platforms share ratings and data with third parties without workers' consent. This interconnected surveillance further reduces workers' control over their professional identities.

The author offers several recommendations for mitigating algorithmic control. One proposal is "episodic transparency" - a system in which platforms periodically disclose insights into how their algorithms function without fully revealing proprietary mechanisms. Another suggestion is to involve more diverse stakeholders in algorithm design, including experts who can anticipate social consequences, rather than relying solely on data scientists and engineers. The book also proposes practical reforms, such as allowing new workers to hide their wages during their first few projects (to offset the "cold start problem") and setting clearer expectations about algorithmic errors.

By employing ethnographic methods such as participant observation, the author provides a first-hand account of platform dynamics from both worker and client perspectives. In addition to these immersive techniques, the research draws from 118 in-depth ethnographic interviews - 93 with workers and 25 with clients - conducted over six years. The author analyzes platform-generated content, including TalentFinder's discussion boards, websites, blogs, Terms of Service agreements, user policies, and help articles. The use of archival data is particularly valuable as it provides a longitudinal perspective on how platform rules and algorithms have evolved. The discussion boards play a crucial role in this analysis, serving as one of the few spaces where workers can openly share insights and interpretations of platform policies. Since most platforms restrict direct communication between workers, these forums become an essential venue for collective knowledge - sharing and resistance.

The book demonstrates how organizations design algorithmic mechanisms that systematically limit workers' agency such as routinely sharing users' data with third-party organizations which further entrenches workers' positions even when they stop using the platform. Moreover, the book critically examines algorithmic optimization strategies that prioritize corporate efficiency

while marginalizing workers. It also situates its findings within broader discussions on algorithmic governance and digital labor, drawing comparisons between high-skilled freelance work and lower-wage gig work. While much of the existing literature on digital labor focuses on platforms like Uber, Instacart, and Amazon Mechanical Turk, which cater to low-wage gig workers, this study highlights similar mechanisms at play in high-skilled digital labor platforms such as Upwork, TopCoder, and Gister. By doing so, the author challenges the assumption that algorithmic precarity is limited to low-income workers, showing instead that even highly educated professionals are subject to unpredictable, data-driven control mechanisms.

**Višnja Katalinić** (1996., Osijek, Croatia), graduated in Ethnology, and Cultural Anthropology and Information Sciences in 2022. During her studies, she volunteered with various organizations and participated in projects advocating for the human rights of minority communities. A year after graduating on the theme of *Women's Solidarity in Ethnological and Cultural Anthropological Perspective*, she was employed as the Head of the Central Library of the Roma in the Republic of Croatia, where she implemented projects aimed at integrating the Roma national minority into society by promoting reading and lifelong learning. She is currently holding a culture competence workshop and is employed at the National and University Library in Zagreb, working at the Center for Continuous Professional Development of Librarians.



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