19. Beyond Underpaid Women and Robots: Towards a Better Future of Care Work

Kathryn (Kate) Boydell & Sharmi Surianarain

Abstract

This chapter interrogates the myth that the future of work, and specifically the future of care work, is a choice between low-value and underpaid work, and automation. The chapter reviews global data and case examples that suggest that there are huge opportunities for investment in care work and technology that could not only foster innovation to meet growing needs, but also create higher-paying, higher-value jobs, and safeguard against exploitation. The chapter makes a case for investing in care work and technology, with inclusion at the core—moving away from a scarcity and fear-based lens—towards an approach that emphasizes innovation, opportunity, and decent work.

Keywords: carework, future of work, gender, innovation, platform work

In her book, *The Age of Dignity: Preparing for the Elder Boom in a Changing America*, Ai Jen Poo (2015) says that the current approach to caring for the elderly comes from "a place of scarcity and fear," a lens which constrains everything from discussion, to innovation, to investment in solutions for the future of care. As a result, we are stuck litigating the same questions of how we can afford social care and who will do it. And, because this same flawed lens of scarcity and fear distorts our understanding of the future of work, we are also stuck returning the same answers: underpaid women or robots.

The dominant narrative of the "fourth industrial revolution" has long been one where digitization drives job and wage attrition (Mishel 2022) and compromises worker conditions (Min et al. 2019). The automation of thinking

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as well as doing—fuelled by the rise of machine learning and robotics and the synthesis of the two—will destroy jobs in the manual and knowledge work sectors alike, we are told (West 2018). In the service sector, which makes up a growing proportion of employment globally, digital advances will accelerate "platformization" of many types of service work, rendering workers functionally self-employed and without protections from employers, unions, or governments. In a simplistic narrative that pits robots against humans, we must be replaced entirely, or prop up human-centred jobs at the expense of progress.

In thrall to this binary, we are over-indexing on automation and under-indexing on human-centred activities such as caring. In the process, we risk overlooking real opportunities that lie at the nexus of the two—where productive innovation (technological or otherwise) meets an essence of care work that is deeply, enduringly human. Evidence from the adjacent healthcare space suggests that new approaches to both work and caregiving can augment one another (Kamineni 2022). Clearing the way for these "nexus opportunities" to scale requires challenging the prevailing narrative.

Recent data helps: it doesn't bear out the narrative of outright job destruction.[1] The doom-mongers of the early pandemic had warned that since robots don't fall ill, bosses would turn to them instead of people (Casselman 2021). Two years on, evidence for automation-induced unemployment is scant. The Organisation for Economic Co-operation and Development (OECD) faces a worker shortage, and wage-growth for low-skilled workers (thought to be replaceable by robots) is high.[2] A growing view is emerging that, in fact, across industries, automation doesn't destroy jobs: it changes them (WEF 2020). While the nature of work itself might change, the future of work is still very human. One 2020 study (Adachi, Kawaguchi and Saito 2020) from Japan suggests that as robots become more widespread and cheap, a positive correlation between automation and employment emerges: an increase of one robot per 1,000 workers boosts firms' employment by 2.2 per cent. Beyond the factory floor, artificial intelligence (AI) may have more to learn from humans than the other way round, as some argue that the new standard for artificial general intelligence should be work tasks

1 L. Rafael Reif, President, Massachusetts Institute of Technology, *How to Survive the Fourth Industrial Revolution*, World Economic Forum online, January 2018. https://www.weforum.org/agenda/authors/l-rafael-reif

2 https://www.economist.com/finance-and-economics/2022/01/22/economists-are-revising-their-views-on-robots-and-jobs

such as those required of a home health aide—including the physical aid of a fragile human, observations of their behaviour, and communications with family and doctors (Mindell 2019).

David Autor, labour economist at the Massachusetts Institute of Technology (MIT), notes that "machines both substitute for and complement human labour. Focusing only on what is lost misses a central economic mechanism by which automation affects the demand for labour: raising the value of the tasks that workers uniquely supply" (2015, 5). In their 2022 book, *The Work of the Future: Building Better Jobs in an Age of Intelligent Machines*, Autor and his co-authors even see a vitalized role for labour unions in helping to make sure that the gains from technology adoption are evenly distributed—though, as we'll see, the nature of labour organizing itself may change, too.

In this context, the future of work and the future of care are inextricably linked. The pandemic has foregrounded the extent to which care work—unpaid or low paid, informal or formal—underpins all other work. Care work also represents a growth sector globally. The International Labour Organization (ILO) estimates that over 2 billion people will need care by 2030—as a result of a growing and ageing population (Addati et al. 2018). At the same time, we have seen an acceleration of the use of technology in global responses to the pandemic, creating momentum for the adoption of digital and automation solutions in support of human health workers. In the 2021 report, "Switched On," from the UK non-profit, The Health Foundation, the authors argue that "automation and AI can significantly enhance human abilities, such as with information analysis to support decision making, with the dividends accruing through combining human and machine input" (Hardie et al. 2021, 2). They are at pains to point out that this potential exists in social care as well as clinical roles; among their conclusions is a recommendation that the United Kingdom's (UK) Department of Health and Social Care support the founding of a Royal College for Carers to professionalize the care workforce, "so they can use technology to augment their vital skills of emotional intelligence and creative problem solving."

There is increasing openness to the idea that growing demand for care and the rapid spread of digitization can converge into a sustainable growth driver and be net positive for societies, and women in particular. Governments, venture capitalists, and social entrepreneurs alike are looking at the future of care work through a new lens of economic opportunity. Caregiving contributes a staggering $648 billion to the United States (US) economy—more than the big pharma, social networking, and car industries

combined.[3] According to the International Trade Union Confederation, an investment of two per cent gross domestic product (GDP) in care in India would create 11 million jobs, of which 32.5 per cent would be undertaken by women.[4]

Research suggests that global investments in the care sector could generate 206 million to 326 million jobs globally, and up to 475 million indirect jobs by 2030.[5] Many of these jobs, and the systems of recruitment, training, compliance, and payment that underpin them, will be enabled by digital technology. These are the first wave of the "nexus opportunities" we describe, and they span all sectors of the economy: public, private, and hybrid.

The first nexus opportunity: Investing to shape the evolution of care marketplaces. Online marketplaces aim to solve market failures by connecting supply and demand. In the care space, this means connecting families with professional caregivers and the benefits and payment infrastructure to support them. Care.com,[6] a US-based company operating in seventeen markets worldwide, is one such online marketplace where families looking for care can connect with caregivers across the spectrum of child, elder, and special needs care. The company was founded by former recruitment executive Sheila Marcelo, who had struggled to find care for her ailing father and her young children, and realized that this problem was widespread among working families in the "sandwich" generation. Marcelo built a data-driven company by looking at key care verticals across major metros in the US, latent demand and supply, and the challenges people reported in securing care. Since launching in May 2007, the service has expanded into enterprise care benefits, and claims to have made over 1.5 million successful matches between care seekers and care providers, and has signalled a shift from simply matching, to facilitating transactions and related employment services.

With employment marketplaces come legitimate concerns about safety, precarity, and possible exploitation, especially in economies and labour markets already marked by these. On this, the evidence is mixed. Research indicates that when these platforms emerge in previously opaque and

3 https://www.pivotalventures.org/newsroom/648-billion-reasons-why-care-economy-serious-business

4 https://www.thehindubusinessline.com/opinion/columns/care-economy-uncharitable-to-women/article29619795.ece

5 *Care Work and Care Jobs for the Future of Decent Work*, International Labour Organization, cited by Valeria Esquivel, ILO Employment Policies & Gender Specialist, in remarks at the first IAFFE panel discussion on care in 2022. http://www.iaffe.org/

6 https://www.care.com

informal marketplaces, they can make a positive impact on the quantity and quality of work. Some gig workers themselves report greater flexibility and higher earnings: for instance, in South Africa, workers on the platforms SweepSouth and Smartmaid say they earn on average R3500 per month (approximately $239), which appears to be higher than the average of R2600 (approximately $178) earned by off-platform contract workers, and greater than the R3000 (approximately $205) minimum monthly for full-time domestic workers.[7] One study on platform work in the Global South (Heeks et al. 2020, 3) suggests that this is because "Southern labour markets are characterised by information failures. [...] For example, potential clients are often unable to identify who or where relevant workers are or what their typical costs should be." By addressing these information failures, platforms can increase employment and improve safety, earnings, and even inclusion. The study cites disabled workers in the Philippines, migrant workers in South Africa, rural workers in Pakistan, lower-caste workers in India, and women in multiple locations all reporting "having been excluded from local labour markets on what they perceived to be discriminatory grounds but then included in what they saw as the level playing field of platform-based labour markets" (Heeks et al. 2020, 6).

Inclusion at scale will not happen automatically as a happy side-effect of platformization, however—especially in the care sector. Research among gig-based care workers in Thailand, both on and off digital platforms, showed that the labour platforms tend to "reproduce gendered divisions of labour by intentionally recruiting women into care work, discriminating against men, gay and transgender individuals," yet, despite this, "many platforms do not have policies that account for the needs of women workers" (Just Economy and Labor Institute 2022). The researchers outline sixteen recommendations for platform companies to address this in the design of the technology. Initiatives such as Fairwork, a collaboration between the University of Oxford and the University of Cape Town, provide annual ratings of digital platforms on principles related to worker conditions—from fair pay, conditions, contracts, management, and representation. In addition to rewarding companies for inclusion and good working conditions, Fairwork shines a light on good employer practices in an industry that, at its worst, can certainly be exploitative. These initiatives also capitalize on a growing trend—where both investors and consumers increasingly care about ethical consumerism and fair work practices.

Also, social enterprises serving hybrid public-private markets can lead the way here. Harambee, based in South Africa, has made inclusive

7 https://restofworld.org/2021/global-gig-workers-on-demand-cleaner-south-africa/

recruitment a key design principle of its youth employment network that was first developed and proven among private employers. During the COVID-19 pandemic, this network became central to the government's rapid recruitment of more than half a million young people for stipended jobs as school assistants, approximately 300,000 of whom were new, first-time labour market entrants—formerly "invisible" young people, mostly women, who had not been reached by any government programmes since leaving formal education.[8]

Even as platforms solve information asymmetries between worker and client, they can create new ones between worker and platform. Yet, here we see the platforms themselves enabling a new kind of digital labour organizing. Take the case of Handy,[9] an online marketplace for domestic workers in the US. After two years of negotiation, advocates for domestic workers won an agreement that includes $15-an-hour minimum pay and paid time off for domestic workers on the Handy platform. This was to be paid for by the company and includes occupational accident insurance, and a formal process to address workplace concerns, with anti-retaliation protections. These are huge protections for a vulnerable category of workers who have been previously left out of specific employment legislation like social security. These conditions are legally enforceable through a private agreement—worker advocates literally wrote protections into a private contract with input directly from domestic workers, something they could not count on politicians to do. Even in places where the industrial-era labour movement is barely established, this new kind of digital organizing is gaining momentum. Reporting on a mass strike among platform food delivery workers in Thailand, the *Bangkok Post* reports that "[…] these drivers in Thailand have been organising for years through a number of Facebook and Line groups exclusive to drivers of the platform. One of largest of such groups […] has over 40,000 members" (Hicks 2020). Recent landmark shifts in the recognition of delivery and transportation platform workers' rights in Europe (Rankin 2021) underline the potential power of this kind of labour organizing in the platform era.

If well-designed marketplaces can solve a significant demand challenge (where and how to find care), and if well-regulated and protected, they can also address the chronic under-payment of care workers. But it isn't just about addressing existing demand and solving challenges for the labour market. We can leverage technology and innovation to unlock new approaches to care delivery in neglected spaces, creating entirely new sectors such as

8 https://www.harambee.co.za/breaking-barriers-november-2021/

9 https://www.thenation.com/article/society/domestic-workers-handy-labor/

"FemTech" and "AgeTech," which can spur job creation with huge growth potential while they address widespread health and care challenges.

FemTech investments are sparking a revolution in how feminine health and care services are delivered. There is a growing number of investments in technology platforms that can have direct and indirect impact on women's health, including fertility platforms that provide resources and information to those trying to grow their families, women-friendly health systems that target specific women's health issues such as preeclampsia, menopause, and period trackers. These are not rich-world lifestyle innovations. Cervical cancer detection, for example, is impeded by an extreme shortage of doctors trained to detect it in the developing world, where eighty per cent of global cases occur. The EVA system, an assistive AI tool from FemTech company, MobileODT, addresses this gap by enabling midwives to capture and analyse scans for accurate diagnosis without specialist training.[10] The company is adapting the same basic technology to assist in sexual assault forensic documentation. By investing in innovations that support women's health issues and requirements in an integrated way, we can target unmet needs, create new livelihoods, and enable women to manage their health, family, and work requirements more easily. The growth potential is massive: while $14 billion has been invested in FemTech globally to date, in 2020, the sector still attracted only three per cent of total healthtech funding globally[11]—suggesting a huge opportunity for additional investment and innovation. Many of the health conditions targeted are vastly under-researched and under-funded areas that, unlike male-targeted conditions, affect all or most women—who are seventy-five per cent likelier than men to adopt digital tools for healthcare. That makes for a huge potential market.

Likewise, AgeTech pioneers are reinventing senior care delivery. In India, a multigenerational household is the prevalent form of family and serves as the main care support system for a family's elderly relatives. However, this is changing fast as younger generations are moving farther away and are seeking other alternatives to ensure their elderly parents are well cared for. India has an endless supply of elderly care providers; however, a majority of them are focused on providing physical care, leaving a gap in the market for other unmet needs of the elderly—a gap spotted by new models like Khyaal.[12]

10 https://www.bbc.co.uk/news/av/magazine-41553186

11 https://www.economist.com/business/2021/10/16/femtech-firms-are-at-last-enjoying-an-investment-boom

12 https://khyaal.com/

Khyaal—"care" in Hindi—is a subscription-based service that includes nutritional guidelines and dietary suggestions by nutritionists, medical care such as teleconsultations, appointment booking, and medication reminders, essential care such as online ordering for food, medicine, groceries, and digital literacy, and empowerment via online community events and learning sessions. To keep up with India's fast-growing elderly population—predicted to be 300 million by 2050—Khyaal aims to partner with fifty different organizations across the country to provide senior citizens with holistic care.

Cases like these suggest that technology can augment our ability to deliver care at the scale of the growing need. Of course, there is a shadow side to all new technologies, and this may be especially true in a sector historically shaped by systems of gender-, class- and race-based oppression. Questions about the control of sensitive data, AI bias, algorithmic transparency, and more, are still emergent, and these must be met with answers that go beyond an assumption that the market will self-regulate. But remedies to those problems exist—not least in the hands of the engineers themselves. In their book (2022, 51), David Autor and his co-authors recognize the responsibility of their own MIT students in designing technology that can either empower or disempower workers, writing that, "engineers encode social relationships and preferred futures into the machines they build." Some of that responsibility will be enacted through new disciplines and practices, such as ethical AI or by designing for inclusion, as Harambee's labour market platform for excluded youth in South Africa demonstrates—a platform that is co-created by the government and the private sector. Indeed, Autor argues, progress will come from institutional and state leadership that looks beyond the frame of commercial success: "the goal is not merely to win, but to nudge innovation in directions that will benefit the nation: among them complementing workers, boosting productivity, and providing a foundation for shared prosperity" (MIT Task Force report 2019, 45).

When it comes to the future of care work, we are falling short of this aspiration. The new models and innovations described here hold promise, but many operate in a care context that lacks large-scale, coordinated, sector-level planning and investment.

There are many reasons for this. One is simply a failure of dominant political and economic imaginations shaped by a cultural inability to see caregiving as work. Like all work primarily done by women, care work is tarred with the pernicious low-skill label which lowers the status of those who do it and those who study it. Historically neglected by mainstream economics, care work has, as a result, been under-counted, under-valued,

and under-invested. In Anne-Marie Slaughter's words, "care feminism has taken a backseat to career feminism." As care feminists, we would go further and say that care feminism has not even been in the same car. Many of us baulk at terms like "marketplace," "platform," and "investment" in the context of caregiving. Economic geographer Julie MacLeavy puts this succinctly in her expansive review, "Care Work, Gender Inequality and Technological Advancement in the Age of COVID-19": "The emotions and connection involved mean that it is difficult to approach care as a standard commodity. Hence decisions around care and socially reproductive work are seldom made on the basis of economic cost and the reality of marketized care may not conform to standard economic assumptions" (MacLeavy 2020, 144). But the truth is that care is already a commodity, traded in currencies hard and soft, in highly unregulated and unprotected ways, in transactions between often desperate people who have few options. Nancy Folbre (2012), in her seminal work, *For Love or Money*, suggests that we ought to challenge the ways in which love and money historically combine and intersect—and urges us to reject the use of the word "commodification," a pejorative term applied to any service provided for money, implying that such service is stripped of emotion.

It is time for care feminism to engage with economics head on. Economists bring precision and broad consensus to how economic activity is counted and reported. They develop models that value it properly, including wider systemic effects. And they propose new investment mechanisms to shape and unlock that value. In other words, they define economic levers and how to use them. If we are to shape the economic landscape of care and care work in the coming decades, we must get to grips with these levers ourselves. We must develop and spread new ways to count, value, and invest in care. Over 16 billion hours are spent on unpaid care work every day.[13] If this work—as priceless as it is—was counted in real GDP estimates, it would be valued at over $11 trillion—three times the size of the world's tech industry.[14] It is this reduction to hard numbers in our economic accounting that, first, reveals its value, and second, gives us a language with which to describe its many dimensions, and to label, categorize, and regulate it. Quantifying care this way may make us feel queasy, but it is necessary for care work to be situated within a broader framework of workers' rights. It is also necessary for terms like "the infrastructure of care" to be understood as more than metaphor.

13 https://www.globalcitizen.org/en/content/womens-unpaid-care-work-everything-to-know/
14 https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620928/bp-time-to-care-inequality-200120-summ-en.pdf

Giving and receiving care is both a human and an economic act—perhaps the only truly universal one. Demographic trends of ageing and population growth suggests that over 400 million jobs could be generated across the world.[15] A new narrative is emerging: one that sees this growing need as an opportunity, not a threat. One that sees the care economy as vital, investable infrastructure that can leverage technology to create good jobs at scale. One that is already yielding new models for care and new frameworks for worker inclusion and rights. The path to a better future of care and to a better future of work lie beyond scarcity and fear, in the same direction.

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15 https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_713372.pdf

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About the Authors

Kathryn (Kate) Boydell (Kateboydell@me.com) is a writer and advisor with twenty-five years' experience using the power of strategic stories to help leaders, movements, and organizations bring about systems change. She has a focus on the future of work and of education, gender, and parenthood, and purpose-driven leadership. She is an RSA Fellow, an Unreasonable Impact Mentor, and a former Head of Strategy at change consulting firm SYPartners and former WPP Fellow.

Sharmi Surianarain (sharmi@Harambee.rw) serves as Chief Impact Officer, Harambee Youth Employment Accelerator, which develops African solutions for the global challenge of youth unemployment. Sharmi is an activist for opportunity creation for young people, particularly women. She is an Aspen African Leadership Initiative Fellow, an RSA Fellow, and serves on the Boards of Emerging Public Leaders, Metis, and Instill Education.