

# **Society at the Edge: AI, the End of White-Collar Work, and the Reimagining of Human Purpose**

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## Preface

This report, *Society at the Edge: AI, the End of White-Collar Work, and the Reimagining of Human Purpose*, investigates the changes underway as artificial intelligence begins to surpass human ability not only in routine tasks but also in intellectual, creative, and relational domains. Grounded in recent scholarship, what begins as an exploration of generative AI's rapid ascent becomes a reflection on the economic, psychological, and moral foundations of its impact on contemporary society.

The opening chapter introduces the stakes: automation is no longer limited to the factory floor but is encroaching upon offices, studios, and even the caregiving professions. The second chapter places this shift in historical context, contrasting it with previous industrial revolutions and showing how AI differs by targeting the symbolic and cognitive core of white-collar work. For the first time, cognition and value-production are being uncoupled from human subjectivity — marking an epistemic break, not just a technological one. The third chapter challenges the assumption that creativity is intrinsically human, presenting research that demonstrates how AI can convincingly replicate poetry, artwork, and musical composition — forcing us to rethink what creative value really is. The fourth chapter examines the remaining sectors of human labour — physical and emotional work — and concludes that even these are under threat from robotics and affective computing, with even care work likely becoming vulnerable. The fifth chapter revisits David Graeber's theory of "Bullshit Jobs", arguing that AI is revealing how much of today's employment is ritualised and redundant, and that society should seize this moment to discard pointless labour. Building on this, the sixth chapter explores Universal Basic Income and post-scarcity models like The Venus Project as serious policy responses to a world where human effort is no longer economically necessary. Yet the seventh chapter warns that income alone cannot address the psychological role of work. Without structure and meaning, people risk slipping into despair or distraction. The eighth chapter offers hope, describing how societies might consciously construct new sources of purpose through learning, care, creativity, and civic participation. The final chapter reflects on this crossroads, referencing the novel *Dune*'s fictional war against thinking machines as a symbolic warning: if we do not shape the systems we create, they may reshape or erase us.

As the global South enters this transformation with different stakes, the path forward is not to destroy intelligent machines, but to ensure they help us serve lives of depth, dignity, and meaning. This report thus calls for a collective reimagining — not just of work, but of what it means to live well.

**Dr J M Ostrowick**  
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## References

- Bostrom, N. (2014). *Superintelligence: Paths, dangers, strategies*. Oxford University Press.
- Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton & Company.
- Graeber, D. (2018). *Bullshit jobs: A theory*. Simon & Schuster.
- Tegmark, M. (2017). *Life 3.0: Being human in the age of artificial intelligence*. Penguin.



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# 1. Introduction: The Rise of AI and Its Implications for Society

The rapid emergence of generative artificial intelligence (AI) in recent years marks a pivotal moment for labour and society. Generative AI refers to algorithms (particularly advanced machine learning models like large language models (LLMs) and image generators) that are capable of producing new content — text, images, audio, and code — that resemble human creations. The public release of generative AI systems such as OpenAI's ChatGPT in late 2022 dramatically demonstrated these capabilities, as the model could engage in fluent dialogue, compose essays, write computer code, and create other human-like outputs. Within months, generative AI tools achieved unprecedented adoption: ChatGPT became the fastest-spreading technology platform in history, reaching 1 billion monthly visits four months after its launch (Kinder et al., 2024). This astonishing diffusion highlights both the intense societal interest in AI and the relative ease with which these tools can be accessed and deployed. As generative AI systems proliferate in workplaces and daily life, they carry profound implications for the future of work, the economy, and the social fabric.

A key characteristic of the generative AI boom is its potential impact on cognitive labour and knowledge work. Unlike earlier waves of automation that primarily affected routine manual jobs, the current generation of AI is encroaching on “white-collar” and creative occupations once thought to be the exclusive domain of human intelligence (Brynjolfsson et al., 2025). Early analyses suggest that a significant share of work tasks could be either automated or augmented by large-scale AI models. For example, one study estimated that about 19% of jobs have at least 50% of their tasks exposed to automation by today's generative AI technology, with some impact in as many as 80% of occupations (Eloundou et al., 2023). Another assessment found that over 30% of all workers might experience at least half of their job tasks disrupted (Kinder et al., 2024). Such figures, while preliminary, underscore that AI's reach extends well beyond the factory floor into offices, classrooms, and studios. Middle- and high-skilled professions in fields like finance, law, education, marketing, and software development are all expected to face significant change as AI systems become capable of performing complex reasoning, writing, and design tasks previously requiring human judgement (U.S. BLS, 2025). In short, generative AI has shifted the frontier of automation from physical work into the realm of cognition, posing both opportunities and threats to white-collar employment.

The implications of this shift are wide-ranging. On one hand, generative AI promises substantial productivity gains. Early evidence indicates that when AI is used as a complement to human workers, it can enhance efficiency and output. For instance, a field experiment with customer service agents found that access to an AI assistant boosted worker productivity by 14% on average, with especially large gains for less-experienced employees (Brynjolfsson et al., 2025). Such improvements hint at a future in which humans partnered with AI can achieve more in less time, potentially enabling faster problem-solving and creative ideation. Optimists argue that generative AI could help drive

economic growth, lower the costs of goods and services, and free workers from menial or administrative tasks to focus on higher-order goals (Smith, 2023).

On the other hand, there are serious concerns that generative AI will substitute for human labour in many functions, leading to widespread job displacement. Throughout history, technological revolutions have triggered fears of automation-induced unemployment, but generative AI strikes at a particularly sensitive area: the symbolic and communicative domains that many associate with identity, social status, and meaning. Unlike the mechanisation of agriculture or manufacturing, today's AI can draft legal briefs, generate marketing content, produce reports, and even create artistic works. Tasks once considered too complex or expressive for machines are now being performed by systems trained on large-scale datasets, raising fundamental questions about human uniqueness (Koivisto & Grassini, 2023; Köbis & Mossink, 2021). Some analysts warn of a profound reconfiguration of labour: not total job loss, but task erosion and fragmentation. One person may now do the work of five; high-skilled roles may be broken down into microtasks or partially automated workflows, lowering pay and deskilling entire fields (Acemoglu & Restrepo, 2019; Bommarito et al., 2023). In aggregate, this may lead to stagnant wages, job precarity, or permanent unemployment in middle-class sectors.

More fundamentally, the rise of generative AI also raises socio-economic and political questions. One major concern is the unequal distribution of benefits. If productivity gains accrue primarily to capital owners and technology firms, while ordinary workers face displacement or degraded working conditions, then generative AI may widen inequality (Acemoglu & Johnson, 2023). Without new forms of redistribution, the traditional link between work and income — and between effort and dignity — may break down. The result could be a bifurcated society in which a small class owns and controls intelligent systems, while the majority face eroded bargaining power and diminishing economic security. As Varoufakis argues, under the current dominance of capital, especially under the control of Big Tech platforms, we are facing "technofeudalism". He argues that this new system departs from classical capitalism by replacing markets with digital fiefdoms controlled by platform owners, turning users into serfs who generate value without formal employment contracts or traditional wage relationships. Proposals such as digital service taxes, sovereign AI models, or universal basic income have been floated to redress this imbalance (Susskind, 2023), but these remain contested and underdeveloped.

Equally urgent are the qualitative implications of AI on the nature of work and human identity. Work is not merely a means of survival. For many, it serves as a framework for meaning, mastery, and social connection. As generative AI encroaches on the expressive, interpretive, and relational domains, it threatens the sense of irreplaceability that once underpinned professions like writing, teaching, and design. Surveys reveal growing anxiety among creative and cognitive workers that their roles are becoming redundant — or worse, simulated. This disruption carries psychological consequences: impostor

syndrome, alienation, and an erosion of self-worth as people watch machines replicate their outputs with uncanny fluency (Koivisto & Grassini, 2023; Köbis & Mossink, 2021).

***The issue, then, is not just economic, but existential: if machines can do our work, what remains for us to do? And if they can do it better, what remains of our dignity?***

In summary, the rise of generative AI is a double-edged development for society. It promises efficiency and innovation, but also disruption, alienation, and inequality. This report therefore aims to map the key fault lines of this transformation. It begins by contrasting the current wave of cognitive automation with previous industrial revolutions, before examining the vulnerability of white-collar and creative work, the shrinking scope of uniquely human labour, and the broader psychological, economic, and philosophical implications. The goal is not to predict collapse, nor to celebrate disruption, but to prepare for a world where intelligence is no longer exclusively human — and to ask how we might adapt our institutions, values, and expectations accordingly.

## References

- Acemoglu, D., & Johnson, S. (2023). Rebalancing AI: The case for human-centric automation. *Finance & Development*, 60(2), 30–33.
- Acemoglu, D., & Restrepo, P. (2019). The wrong kind of AI? Artificial intelligence and the future of labor demand. *Cambridge Journal of Regions, Economy and Society*, 13(1), 25–35. <https://doi.org/10.1093/cjres/rsz022>
- Bommarito, M., Katz, D. M., & Zelnar, J. (2023). GPT as a legal research assistant. *SSRN*. <https://doi.org/10.2139/ssrn.4459397>
- Brynjolfsson, E., Li, D., & Raymond, L. (2025). Generative AI at work. *Quarterly Journal of Economics*, 140(2), 889–942.
- Eloundou, T., Manning, S., Mishkin, P., & Rock, D. (2023). GPTs are GPTs: An early look at the labor market impact potential of large language models. *arXiv preprint arXiv: 2303.10130*.
- Kinder, M., de Souza Briggs, X., Muro, M., & Liu, S. (2024). *Generative AI, the American worker, and the future of work*. Washington, DC: Brookings Institution.
- Koivisto, M., & Grassini, S. (2023). Best humans still outperform artificial intelligence in a creative divergent thinking task. *Scientific Reports*, 13, 13601. <https://doi.org/10.1038/s41598-023-40361-z>
- Köbis, N., & Mossink, L. D. (2021). Artificial intelligence versus Maya Angelou: Experimental evidence that people cannot differentiate AI-generated from human-written poetry. *Computers in Human Behavior*, 114, 106553.
- Smith, R. (2023). *AI and the reinvention of productivity*. Oxford University Press.
- Susskind, D. (2023). *Growth: A history and a reckoning*. Allen Lane.
- U.S. Bureau of Labor Statistics. (2025). Incorporating AI impacts in BLS employment projections: Occupational case studies. *Monthly Labor Review*, 118(1).





## 2. The Displacement of White-Collar Labour

Technological revolutions have historically redefined the structure of labour. From the agrarian shift to industrial mechanisation, each epoch introduced a new logic of value production. Today, cognitive automation — enabled by generative artificial intelligence (Gen AI) — is transforming white-collar employment in ways that are both quantitatively vast and qualitatively distinct. Unlike past waves that primarily displaced physical or routine work, this transition affects the cognitive core of professional life. This chapter traces the historical arc of labour reallocation, explores the mechanisms by which AI is fragmenting knowledge work, and examines the depth and pace of disruption facing white-collar employment.

### 2.1 Historical Context: Industrial Revolutions and Labour Reallocation

The First Industrial Revolution (c. 1760–1840) introduced steam-powered machinery and centralised factory production, displacing artisanal and craft labour in favour of mechanised manufacturing. The Second Industrial Revolution (c. 1870–1914) extended automation through electricity, mass production, and the assembly line. The Third, beginning in the mid-20th century, saw the introduction of digital computing and robotics, which automated many repetitive and rule-based processes. Despite widespread fears, each of these transformations eventually led to the creation of new job categories and sectors (Mokyr, 2018). Labour was reallocated, not eliminated.

David Autor (2015) noted that these transitions were often slow, taking decades to unfold, and they frequently resulted in workers moving “up” the skill ladder. That is, jobs lost to automation were often lower-skilled, and new jobs demanded more cognitive input. The economy adjusted through retraining and educational expansion, and the net result was frequently positive — albeit unevenly distributed and often delayed.

### 2.2 What Makes This Revolution Different?

The current disruption, driven by Gen AI, is unlike its predecessors in several ways. First, it targets non-routine cognitive tasks — the domain once thought immune to automation. These include analytical reasoning, natural language composition, visual design, and other professional competencies traditionally linked to human judgment. Second, AI development is advancing at an exponential pace, enabled by breakthroughs in deep learning, large language models, and neural architecture optimisation.

This upheaval is occurring in an era already marked by labour precarity: wage stagnation, insecure gig work, and uneven access to retraining resources (International Labour Organization, 2023). Unlike the steam engine or assembly line, which mechanised physical effort, AI replicates mental functions — manipulating symbols, composing legal briefs, generating visual art, and even writing software. As Brynjolfsson, Li, and Raymond (2023) observe, this shift moves automation from the factory floor into offices and studios, unsettling the centuries-old conventional hierarchy of labour.

### 2.3 Task-Based Displacement and the Modularisation of Cognitive Work

Unlike previous waves of mechanisation, AI does not eliminate jobs in whole units. Instead, it targets discrete tasks within roles. This task-based framework, pioneered in labour economics by Acemoglu and Restrepo (2019), highlights how modern automation erodes jobs incrementally. For example, a junior financial analyst may spend 60% of their time preparing reports, 30% in meetings, and 10% on risk modelling. Generative AI can now automate the bulk of report generation, reducing the human portion of the role to fragmented tasks such as requesting the report, refining its input parameters, or giving a general list of authors to cite.

Legal work offers another illustration. Tools like Harvey and Lexis+ AI can accelerate contract review and legal research, diminishing the billable hours once performed by junior associates (Bommarito, Katz, & Nguyen, 2023). This trend gives rise to what might be called "task erosion" — the slow encroachment of machines on the parts of a job for which humans are compensated.

Over time, this leads to **role compression**, where one individual performs what five once did; **job fragmentation**, where salaried roles are broken into gig-style microtasks; and **downskilling**, as workers are paid less to merely supervise or clean up AI outputs. Unlike past eras, where displaced workers could shift into newly created sectors, today's cognitive automation achieves productivity without proportional demand for human labour. This challenges the assumption that technological innovation inevitably creates compensatory employment elsewhere.

### 2.4 Software Engineering as a Case Study

Software development illustrates this disruption vividly. GitHub Copilot and similar tools now generate up to half of the code written by developers, particularly in junior roles (Zhou, Chen, & Reiss, 2022). Productivity gains are real — completion times for some programming tasks have dropped by over 50% (Vaithilingam, Xu, & Bernstein, 2022) — but they come at a cost. Traditional entry-level roles, which once provided a learning curve and path to seniority, are being eroded.

The irony is stark: the very profession creating AI tools is among the first to feel their disruptive effects. While new roles such as "prompt engineers" are emerging, they are far fewer in number, and do not require extensive training or skills. Training pipelines — particularly in regions with underdeveloped technical infrastructure — are struggling to keep pace with these rapid changes.

### 2.5 The Scale of Impact

Empirical studies suggest the magnitude of AI's labour effects is substantial. The OECD (2023) estimates that 27% of jobs in its member countries are at high risk of automation. Eloundou et al. (2023) found that higher-wage jobs are now more exposed to AI than

lower-wage ones, a reversal of previous automation trends. In the U.S., up to 80% of workers are expected to have at least 10% of their tasks exposed to generative AI.

This inversion of the historical automation pattern — where machines threatened routine manual labour — is one of the defining features of the current transition. White-collar fields such as IT, finance, law, and education are now among the most exposed, whereas low-skill jobs are — for now — safer.

## **2.6 Institutional Lag and Policy Failures**

Labour institutions are not evolving fast enough to accommodate this shift. Educational systems remain geared toward preparing students for roles that likely will no longer exist. The existing education curriculum has barely changed since the 1990s, and what is covered in Information Technology courses is now hopelessly out of date, as of just five years ago, with the advent of Blockchain — never mind Gen AI, which makes the academic curriculum of schools even more outdated. Retraining initiatives, where they exist, tend to be reactive and fragmented. According to the World Bank (2023), there is a persistent mismatch between what educational institutions provide and what employers demand in a digitally transformed economy.

The consequences are already visible. Workers displaced from cognitively complex roles already face downward mobility, unable to find work at comparable skill or pay levels. Because these losses are task-based and incremental, rather than driven by factory closures or large layoffs, they are often invisible in public discourse — but no less economically or psychologically damaging.

## **2.7 Summary and Implications**

This is not simply another phase of industrial progress. *It is a redefinition of what constitutes skilled human work.* Generative AI is reshaping the cognitive workplace by dissecting jobs into modular components, automating those modules, and eroding the labour value of expertise. The impact is asymmetric — hitting junior and mid-level roles hardest; invisible — replacing functions rather than positions; and rapid — moving faster than institutions can adapt. Ironically, the very professionals whose jobs are under threat are precisely those enthusiastically using Gen AI; perhaps hoping to hold out for a few more years before their employers notice that their productivity and output is not theirs.

Unlike previous transitions, there may be no uncharted frontier of human-exclusive work to absorb displaced labour. This necessitates a rethinking of policy assumptions and a readiness to experiment with new labour models. Without decisive intervention, we risk a future in which automation outpaces our collective ability to adapt, fragmenting not just work, but the very social contract that links employment to identity, dignity, and economic security.



## References

- Acemoglu, D., & Restrepo, P. (2019). The wrong kind of AI? Artificial intelligence and the future of labour demand. *NBER Working Paper No. 25682*. <https://doi.org/10.3386/w25682>
- Autor, D. H. (2015). Why are there still so many jobs? The history and future of workplace automation. *Journal of Economic Perspectives*, 29(3), 3–30. <https://doi.org/10.1257/jep.29.3.3>
- Bommarito, M. J., Katz, D. M., & Nguyen, P. (2023). GPT as a legal assistant: Initial evaluations and implications. *SSRN*. <https://doi.org/10.2139/ssrn.4434419>
- Brynjolfsson, E., Li, D., & Raymond, L. (2023). Generative AI at work. *Stanford Digital Economy Lab Report*.
- Eloundou, T., Manning, S., Mishkin, P., & Rock, D. (2023). GPTs are GPTs: An early look at the labor market impact potential of large language models. *arXiv preprint*. <https://arxiv.org/abs/2303.10130>
- International Labour Organization. (2023). *World Employment and Social Outlook 2023*. Geneva: ILO.
- Mokyr, J. (2018). *A culture of growth: The origins of the modern economy*. Princeton University Press.
- OECD. (2023). *Automation and labour markets: New data insights*. Paris: OECD Publishing.
- Vaithilingam, P., Xu, A., & Bernstein, A. (2022). Do users write more insecure code with AI assistants? In *IEEE Symposium on Security and Privacy Workshops* (pp. 123–130).
- World Bank. (2023). *World Development Report 2023: Rethinking education and training in the age of AI*. Washington, DC: World Bank.
- Zhou, Y., Chen, J., & Reiss, S. P. (2022). The impact of GitHub Copilot on the productivity of novice programmers. *ACM Symposium on Software Engineering Education and Training*.







### 3. The Illusion of Irreplaceability in Creative Work

#### Introduction

Creativity has long been considered the final bastion of human uniqueness — an ineffable capacity tied to intuition, emotion, and lived experience. From the Romantic idea of the “divine spark” to modern conceptions of the “creative class” (Florida, 2002), creative work has occupied a privileged space in the humanist imagination and economic value chain. However, advances in generative AI — specifically large language models (LLMs), text-to-image generators, and neural music synthesizers — have eroded the belief that creativity is uniquely human. This section interrogates the “illusion of irreplaceability” in creative labour and surveys empirical findings on AI’s performance in domains such as art, literature, music, and design. It also explores the psychological, economic, and philosophical implications of this shift.

#### 3.1 What Is Creativity?

Creativity, broadly defined, involves the generation of novel and valuable ideas or artefacts (Runco & Jaeger, 2012). It has traditionally been classified into four levels: Big-C creativity (groundbreaking contributions such as those of Beethoven or Picasso), Pro-C creativity (professional-level innovation), Little-c creativity (everyday expression), and Mini-c creativity (personal insights and early-stage discovery). Contemporary cognitive psychology links creativity to divergent thinking, analogical reasoning, and domain-specific expertise (Sawyer, 2011).

Historically, creativity has been considered the province of sentient beings — tied to consciousness, experience, and emotional life. But AI systems, trained on vast cultural corpora, can now simulate the formal properties of human expression. Their outputs raise difficult questions: If creativity is judged by novelty and perceived value, can the generator’s consciousness be considered irrelevant?

Colton, Cook, and Ventura (2022) argue that algorithmic creativity, though lacking intent, can nevertheless meet operational definitions of creativity. Their framework treats creativity not as an intrinsic property but as a relational judgment — based on how audiences interpret and value outputs.

#### 3.2 Empirical Evidence: Can AI Be Creative?

Recent studies demonstrate that AI systems can replicate and, in some constrained tasks, even outperform humans in creative domains:

- **In poetry and prose**, AI-generated texts are increasingly difficult to distinguish from human-authored ones. In controlled experiments, participants misattributed machine-generated poems to human authors and sometimes rated them as more moving or polished than those by humans (Köbis & Mossink, 2021).

- Visual art produced by Generative Adversarial Networks (GANs) — a type of Gen AI — and diffusion models — such as DALL·E or Midjourney — has been sold at major auctions, including a 2018 portrait sold for over \$400,000 (Cascone, 2018). More recently, Hong, Kim, and Oh (2023) found that human evaluators rated AI-generated images as equally creative as human art in blind tests.
- In music, tools like MuseNet and MusicLM can compose multi-instrument pieces across genres. While critics note limitations in emotional coherence, many listeners are unable to distinguish AI compositions from those of human composers (Yang, Wang, & Yu, 2023).
- Even in advertising, GPT-4 and its peers have outperformed human copywriters in A/B testing, creating slogans and product descriptions with higher engagement rates (OpenAI, 2023).

These findings suggest that while AI lacks subjective experience, it can produce outputs that functionally meet human expectations of creativity.<sup>1</sup>

### **3.3 Creativity as Pattern Recognition**

One reason AI performs so well is that creativity, as Boden (2004) notes, often involves structured recombination. Artists and writers typically draw on established forms, genres, and cultural motifs, recombining them in novel ways. AI systems, especially those trained on immense datasets, are optimised for precisely this kind of recombination.

GPT-4, for example, can mimic the voice of canonical authors not through understanding, but through probabilistic pattern-matching. DALL·E does not comprehend beauty or symbolism — it reassembles visual motifs statistically. Yet these approximations are often sufficient to deceive or impress human viewers.

This undermines the belief that creativity is intrinsically human. If it can be simulated convincingly, then the distinction between authentic and artificial creativity may blur — at least in the marketplace and public reception.

### **3.4 Professional Implications: Devaluation of Skill**

The economic consequences are already evident. Graphic designers, illustrators, copywriters, and musicians report falling wages, fewer commissions, and increased competition from AI-generated alternatives (Smith & Nguyen, 2023). On platforms like Upwork, clients now hire “prompt engineers” to generate images or texts rather than commissioning original human work.

Journalism has also been affected: automated systems already produce routine news summaries, sports recaps, and earnings reports. In a 2023 UK survey, 68% of creatives

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<sup>1</sup> Indeed, the philosophical doctrine of Functionalism claims that an intelligence that behaves as if conscious and functions as if conscious, is to all intents and purposes, conscious. This idea lies behind the Turing Test.

expressed concern that AI would devalue their skills within five years (Creative UK, 2023). In the U.S., Pew Research (2023) found that nearly half of media executives anticipate using LLMs to replace some human roles by 2026.

These trends represent not just displacement but professional compression. As entry-level work becomes automated, human creatives are pushed “upstream” into niche or supervisory tasks, while the bulk of output is machine-generated.

### **3.5 Psychological Consequences: Demoralisation and Displacement**

For many creative workers, this transition has produced emotional and existential strain. Creative work is often tightly bound to self-concept. When AI equals or surpasses human output, it can evoke feelings of redundancy, loss, or self-doubt.

Artists and writers report **impostor syndrome** — questioning whether their outputs are truly valuable, and specifically, better than a machine’s. Others describe alienation from audiences that increasingly value surface-level outputs over labour or intention (Sennett, 2006). The growing indistinguishability of AI content also challenges authenticity itself: if viewers or readers cannot tell the difference, does it matter who made it?

These concerns echo classical critiques of industrialisation — updated for a digital, algorithmic era in which alienation extends beyond the factory floor to the studio and the page.

### **3.6 Creativity Beyond Output: Can AI Have Intent?**

A frequent objection is that AI lacks intent, consciousness, or emotional depth. Philosophers like Bringsjord, Govindarajulu, and Ghosh (2022) argue that true creativity requires not just output, but authorship grounded in meaning-making. By this view, AI may mimic the surface of creativity but not its inner logic.

Yet this distinction may be losing traction in practice. As Hong et al. (2023) show, audiences increasingly respond to AI-generated art as emotionally resonant, regardless of its source. From a market standpoint, it is the effect — not the origin — that matters. And in algorithmically mediated culture, reception may override authorship in determining value.

### **3.7 Summary: A Crisis of Human Exceptionalism**

Generative AI does not eliminate creativity, but it decouples it from the human subject. Much of what was once thought inimitable now proves replicable. This transition carries several implications:

- Originality is no longer the sole domain of humans.
- The market value of creative labour is declining, except at elite tiers.

- Authenticity may need to be reconceptualised — not as output alone, but as process, intent, or context.

The illusion of irreplaceability is giving way to a more ambivalent reality. The central challenge for the creative economy is not just to defend existing roles, but to redefine the human contribution in a world where machines can compose, illustrate, and write — and increasingly, be celebrated for it.

## References

- Boden, M. A. (2004). *The creative mind: Myths and mechanisms* (2nd ed.). Routledge.
- Bringsjord, S., Govindarajulu, N. S., & Ghosh, R. (2022). Can machines really be creative? *Philosophy & Technology*, 35, 89. <https://doi.org/10.1007/s13347-022-00590-1>
- Cascone, S. (2018, October 25). An AI-generated artwork just sold for \$432,500 and sparked a debate. *Artnet News*.
- Colton, S., Cook, M., & Ventura, D. (2022). Creativity and artificial intelligence: A conceptual blending framework. *Journal of Artificial Intelligence Research*, 74, 1–40.
- Creative UK. (2023). *State of creativity report 2023*. London: Creative Industries Federation.
- Florida, R. (2002). *The rise of the creative class*. Basic Books.
- Hong, J., Kim, J., & Oh, Y. (2023). Can AI make art? A human-centred evaluation of creativity in visual design. *Journal of Creative Behaviour*, 57(2), 205–224.
- Köbis, N., & Mossink, L. D. (2021). Artificial intelligence versus Maya Angelou: Experimental evidence that people cannot differentiate AI-generated from human-written poetry. *Computers in Human Behavior*, 114, 106553. <https://doi.org/10.1016/j.chb.2020.106553>
- OpenAI. (2023). *GPT-4 technical report*. <https://cdn.openai.com/papers/gpt-4.pdf>
- Pew Research Center. (2023). *AI in the workplace: Trends and employer intentions*. Washington, DC.
- Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal*, 24(1), 92–96. <https://doi.org/10.1080/10400419.2012.650092>
- Sawyer, R. K. (2011). *Explaining creativity: The science of human innovation*. Oxford University Press.
- Sennett, R. (2006). *The culture of the new capitalism*. Yale University Press.
- Smith, H., & Nguyen, T. (2023). Generative AI and the freelance economy: Emerging patterns of disruption. *International Journal of Digital Labour Studies*, 1(1), 22–39.
- Yang, L., Wang, R., & Yu, H. (2023). Audience perception of AI-generated music: Evidence from cross-modal affective analysis. *Music Perception*, 41(1), 51–71.







## 4. Remaining Bastions: Physical and Relational Work

### Introduction

Despite the steady automation of white-collar and creative fields, a set of occupations remains — for now — less susceptible to replacement. These jobs involve physical dexterity, embodied social presence, or emotional nuance. Roles in nursing, early childhood care, construction, sanitation, therapy, and education have long been considered “hard cases” for automation. The reasons are practical: unpredictable environments, context sensitivity, and interpersonal complexity. But recent developments in robotics and affective computing suggest that even these roles may not be as immune to AI as once believed. This chapter examines why certain jobs have persisted, whether that persistence is temporary, and what broader social and ethical questions are raised by their gradual erosion.

### 4.1 Why Have These Jobs Persisted?

Jobs that resist automation tend to combine sensorimotor coordination, contextual awareness, and emotional interaction. Moving a patient, cleaning a cluttered home, de-escalating a classroom or suicidal patient — require responsiveness that doesn't fit clean abstractions or fixed rules.

AI models excel at structured environments with stable inputs. But real-world care and physical labour happen in disordered spaces, where priorities shift, bodies move unpredictably, and emotions must be read without being explicitly stated. As of now, these conditions remain a barrier to full automation (Folbre, 2022; World Economic Forum, 2023).

### 4.2 Care Work and Empathy Simulation

Care labour — especially in elder support, nursing, and social work — is often cited as irreplaceable due to its emotional demands. However, the field of affective computing is explicitly aimed at mimicking emotional sensitivity. Facial analysis tools are already embedded in call centres, airports, and classrooms. In Japan and Scandinavia, elder care robots like PARO have reduced reported loneliness and agitation in nursing homes (Wada et al., 2021).

Conversational agents such as Replika and Woebot, originally designed for companionship or cognitive behavioural therapy (CBT), have shown evidence of therapeutic effect in controlled trials. Fitzpatrick et al. (2017) found that users of Woebot experienced reduced symptoms of depression and anxiety, even without any human therapist involved.

This doesn't mean AI feels emotion — it doesn't. But it can now simulate many behavioural markers of empathy with enough accuracy to satisfy, or at least pacify, some users. That

raises a practical question: will institutions settle for “good enough” simulations in contexts of labour shortage? Or indeed, is this the very cause of the labour shortage?

#### **4.3 Robotics in the Physical World**

Progress in virtual intelligence has far outpaced progress in robotics. Manipulating the physical world remains hard: materials are non-uniform, spaces are cluttered, and human bodies are fragile. Yet the capabilities of robots have expanded noticeably in the past five years.

Boston Dynamics’ *Atlas* demonstrates coordinated motion over terrain. OpenAI’s *Dactyl* system achieved fine-motor dexterity in manipulating a Rubik’s cube, and commercial robots like *Whiz* and *Flippy* are already deployed in airports and fast-food kitchens (World Economic Forum, 2023). Amazon’s fulfilment centres now operate with over 750,000 robots, most focused on narrow logistical tasks.

While general-purpose robotics remains out of reach, specific task automation — vacuuming, lifting, flipping burgers — is viable and spreading. Each incremental gain reduces the time or cost of human labour, compressing roles without replacing them outright.

#### **4.4 Hybrid Automation and Role Compression**

In many service roles, humans now work alongside machines. In education, for instance, AI handles personalised pacing or lesson review, while teachers focus on behaviour and pastoral care. In elder care, robots assist with lifting or reminders, while humans manage emotional and ethical dimensions.

This hybridisation sounds collaborative, but in practice it often leads to what Spencer (2022) calls “intensification”: the parts of the job left to humans are those most demanding in emotional or ethical energy. What automation removes is the routine; what remains is the difficult. The net result is fewer staff handling more complex or draining interactions. The promise of partnership can become a form of labour compression, shifting responsibility without adequate support or compensation.

#### **4.5 Are These Jobs Actually Secure?**

Jobs seen as “safe” are nonetheless still subject to wage suppression, surveillance, and partial automation. Algorithmic scheduling, task tracking, and predictive performance systems are already used in nursing, delivery, and janitorial work. These tools reduce worker autonomy and increase stress — without reducing workload.

Japan’s national health ministry is funding robotic elder care to address population ageing. South Korea is trialling AI-assisted preschool classrooms. These aren’t speculative use cases; they reflect public investment in replacing human labour where it is expensive or politically vulnerable (World Economic Forum, 2023).

That trajectory suggests these jobs persist not because of deep human uniqueness, but because their full automation hasn't yet become cost-effective. As that changes, so may their perceived immunity.

#### 4.6 Gender and Class Inequalities

The remaining “human-centred” jobs are disproportionately held by women, migrants, and racialised workers. Cleaning, caregiving, and domestic support are among the lowest-paid professions globally. As Dzieza (2023) notes, automation in these sectors often intersects with existing precarity — amplifying rather than resolving inequalities.

When care work is made machine-compatible, it risks being further devalued. Employers may invest in robotic solutions not to supplement human care, but to reduce wages and union exposure. Surveillance tools embedded in service robots or scheduling apps disproportionately affect workers with the least power to resist them.

Furthermore, workers displaced from white collar work and document management work due to the demonstrated effectiveness of LLMs, may be forced to take up care work, and the consequent loss of status and income; or face redundancy.

#### 4.7 Ethical Limits of Simulated Empathy

Even if machines could simulate empathy flawlessly, many ethicists argue this still poses risks. Sharkey and Sharkey (2020) warn that entrusting vulnerable individuals to non-sentient systems could erode social trust. Elderly people receiving “care” from robots may not realise the extent of automation and be misled as to the extent of empathy present. Malfunctions or misread emotions could have consequences that are not just technical, but existential.

There is also the risk of redefining what care is. If efficiency becomes the metric, and “feeling cared for” is reduced to compliance or affect display, then the ethics of human dignity will become secondary to throughput. These concerns are no longer hypothetical. Several trends and documented phenomena suggest real psychological consequences are emerging:

- **Artificial intimacy:** Some users develop emotional or romantic attachments to AI companions and LLMs. Indeed, artificial “girlfriends” are currently being advertised on Instagram, promising you emotional intimacy with a very attractive female avatar. Studies on “affective computing” show that realistic emotional simulation can create asymmetrical emotional dependencies, particularly among socially isolated individuals (Turkle, S., 2017; Taillon, K., & Zhao, Y., 2024).
- **Obsessive dependency:** Preliminary clinical literature documents users who compulsively return to conversational agents for affirmation, often reporting higher loneliness and disassociation (Lee, Y., Park, J., & Choi, S., 2023).

- **Delusional misattribution:** There are growing reports of individuals attributing divine identity to AI systems—believing ChatGPT to be a messianic figure or conduit to spiritual truth. While rare, such phenomena are beginning to be analysed through the lens of digital religiosity and techno-transcendence (Tirosh-Samuelson, H., 2021).
- **Unregulated therapy:** Despite disclaimers, many users treat conversational AI as a mental health support system. However, AI models are not trained or licensed to offer psychotherapy, and can generate inaccurate or even harmful suggestions without accountability. This has raised legal and ethical concerns about liability and malpractice (Luxton, D. D., 2016; Fulmer, R. et al., 2021).

The risks here are not limited to technical failure, but epistemic confusion: the misvaluation of simulation as substance. If emotional care becomes defined by responsiveness or compliance, then the essence of dignity is subordinated to interaction metrics.

Ethical design must therefore go beyond accuracy or realism. Without robust legal and philosophical frameworks distinguishing simulation from intention and expertise, the dangers of psychological misattribution and dependency will grow, as will the culpability for deploying such systems with misleading promises. As machines gain emotional fluency, the burden falls on society to prevent them from being mistaken for moral agents.

#### **4.8 Summary: Not Immune, Just Not Yet**

Physical and relational work remains less automated than office work — not because it is sacred, but because it is hard. But that difficulty is shrinking. As robotics and emotional AI develop further, the grace period for these jobs may soon end. The real question is not therefore whether such work can be automated, *but whether we are willing to allow it*. These roles are not simply economic functions — they are often the connective tissue of society. To reduce them to code or a robot is to wager that simulation can replace solidarity. Whether that wager is worth making — and who gets to decide — is a political question, not a technical one.

Jeff Goldblum's character, in Jurassic Park (1993), Dr. Ian Malcolm, says:

“Your scientists were so preoccupied with whether or not they *could* that they didn’t stop to think if they *should*.”



## References

- Dzieza, J. (2023). The ghost workers powering AI. *The Verge*. Retrieved from <https://www.theverge.com>
- Fitzpatrick, K. K., Darcy, A., & Vierhile, M. (2017). Delivering cognitive behavior therapy to young adults with symptoms of depression and anxiety using a fully automated conversational agent (Woebot): A randomized controlled trial. *JMIR Mental Health*, 4(2), e19. <https://doi.org/10.2196/mental.7785>
- Folbre, N. (2022). *The rise and decline of patriarchal capitalism*. Verso Books.
- Sharkey, A., & Sharkey, N. (2020). Granny and the robots: Ethical issues in robot care for the elderly. *Ethics and Information Technology*, 14(1), 27–40. <https://doi.org/10.1007/s10676-010-9234-6>
- Spencer, D. A. (2022). The return of the long-hours job: AI and the intensification of care work. *Work, Employment and Society*, 36(1), 20–38.
- Wada, K., Shibata, T., Saito, T., & Tanie, K. (2021). Psychological and social effects of robot therapy in the elderly: A pilot study using PARO. *International Journal of Social Robotics*, 13(4), 895–909.
- World Economic Forum. (2023). *Future of Jobs Report*. Geneva: WEF.



## 5. Bulls\*\*t Jobs and the Redundancy Crisis: Revisiting Graeber

### Introduction

In his influential 2018 book, *Bulls\*\*t Jobs*, the late anthropologist David Graeber argued that much of modern white-collar employment is functionally meaningless, existing primarily to preserve appearances, hierarchies, or social norms. These so-called “bulls\*\*t jobs” — which even those performing them often recognise as pointless — include roles such as middle managers, corporate lawyers, and PR specialists. Once a provocative thesis, the rise of generative AI and large-scale automation has given Graeber’s argument new empirical relevance. As AI assumes many symbolic and administrative tasks, it highlights just how many modern roles may be redundant by the sheer fact that they were not especially useful in the first place.

### 5.1 Defining a Bulls\*\*t Job

Graeber (2018) defined a bulls\*\*t job as

**“a form of paid employment that is so completely pointless, unnecessary, or pernicious that even the employee cannot justify its existence.”**

These roles are not low-status or unpleasant *per se*, but somewhat structurally vacuous. Graeber categorised them into types:

- *Flunkies*, who exist to make others appear important.
- *Goons*, such as lobbyists or PR agents, who operate through manipulation.
- *Duct Tapers*, who fix avoidable problems.
- *Box Tickers*, who simulate compliance or productivity.
- *Taskmasters*, who manage unnecessarily.

What unifies these roles is their disconnection from substantive output. Because many exist in bureaucratic or symbolic environments, they often escape scrutiny by traditional productivity metrics.

### 5.2 AI and the Exposure of Redundancy

Generative AI has begun to automate many routine and symbolic functions at scale. Roles that involve summarising meetings, composing internal reports, responding to low-priority emails, or maintaining administrative workflows are now handled by tools such as ChatGPT, Jasper, and Copy.ai. A McKinsey & Company (2023) analysis projects that by 2030, up to 40% of administrative and middle-tier management tasks in corporate settings may be automated.

The technology not only performs these tasks more efficiently, but also reveals that in many cases, the outputs were never meaningfully used. AI does not engage in performative labour. Its efficiency casts into relief the ceremonial nature of many human



roles that exist primarily to maintain institutional image or internal hierarchy. The author can attest, anecdotally, that in one of his roles, he wrote approximately 21 reports per quarter, of varying lengths, some of which had duplicate information in the form of meeting annotations and Presentations / “slide decks”. If we assume sixty days per quarter, and that each report took a day or two to write, these 21 reports used up about 42 working days of the 60, leaving 18 days for the author to actually do his work. In essence, he spent approximately 70% of his time writing reports that no-one really read or did anything about. It is clear that LLMs can replace this work and it is also clear that the work was not useful.

### **5.3 The Bulls\*\*t-isation of Work**

Graeber argued that automation rarely eradicates jobs; instead, it alters them — often into forms that are more alienating. When a role is partially automated, what remains may be a series of oversight, correction, and bureaucratic rituals. Spencer (2022) refers to this as the “bulls\*\*tisation” of work: the transformation of useful labour into hollow routines through layers of administrative control, such as the anecdote given above with endless mandatory reporting. This shift towards “bulls\*\*tisation” is reinforced by performance metrics and surveillance systems, which turn formerly autonomous work into a sequence of checkboxes of compliance. Indeed, deploying AI does not make the “bulls\*\*tisation” go away. It just transfers it to AI. Employees may find themselves, then, managing AI rather than producing value — simulating output in order to remain legible to systems that no longer require them. And similarly, upper management may well use those same AIs to summarise the reports so as to avoid reading them!

### **5.4 Why Bulls\*\*t Jobs Persist**

Even when a job’s functional necessity is removed, or could be replaced by AI, it may persist, even in a useless AI form as described above, due to:

- Institutional inertia, where eliminating roles threatens internal stability, or external threats such as union action.
- Symbolic status, as in the case of managerial or government positions that signify hierarchy.
- Ideological attachment to employment as a moral good, as we see in many Western-system societies.
- Political optics, where governments and firms prefer inflated employment statistics.

As Graeber observed, many such jobs exist to reassure others that things are under control. In this context, AI poses a cultural threat: it questions the premise that work is intrinsically virtuous and causes humans to conceal that their work they have been doing all along has been socially useless, aka bulls\*\*t.

### **5.5 Cultural and Psychological Effects**

The psychological cost of meaningless work is well-documented. A longitudinal study in the UK labour market found that employees who viewed their jobs as socially useless reported significantly higher levels of depression, stress, and anxiety (Chandola, Griffiths,



& Smith, 2019). Graeber warned that the “spiritual violence” of pointless employment can erode both morale and dignity. And Generative AI may deepen this tension. As workers witness their tasks replicated — or improved — by nonhuman systems, many face a crisis of identity. Some respond with anxiety; others, with relief. Either way, the confrontation with redundancy is unavoidable.

## **5.6 Towards Post-Productivism**

Graeber and other post-work theorists have argued that societies must eventually detach social value from formal employment. A post-productivist approach would:

- Elevate unpaid but socially essential activities (e.g., caregiving, education, creativity).
- Reduce the centrality of GDP in policy discourse.
- Reimagine identity as rooted in meaningful processes rather than output.

AI may accelerate this transition. If vast swaths of employment can be automated without economic loss, the logic of compulsory work begins to fray. The prospect of universal basic income or work-sharing is not merely utopian — it becomes pragmatic.

## **5.7 Summary: Bulls\*\*t Jobs in the Mirror of AI**

Generative AI does not merely displace labour; it diagnoses dysfunction. It reveals which roles created genuine value and which simulated it. If used deliberately, this revelation could be productive:

- Bureaucracies might shrink without compromising service quality, or indeed, even improve it. Anecdotally, this author found that his engagement with ChatGPT on a technical problem relating to cellular USSD codes was far more useful than the official call centre of the telecommunications provider concerned.
- Essential but undervalued labour — like care and education — might be re-centred. As argued previously, those affected by the loss of socially futile jobs may be compelled out of necessity to enter social care roles.
- Policy frameworks might finally acknowledge that not all work is worth preserving.

Graeber’s thesis, once a cultural provocation, now gains traction through LLMs and their recent impact. As AI illuminates the structural absurdities of the modern job market, the case for rethinking the relationship between work, worth, and well-being becomes harder to ignore.

## References

- Chandola, T., Griffiths, D., & Smith, D. (2019). Is job quality associated with mental health? A longitudinal study of the UK labour market. *Journal of Epidemiology & Community Health*, 73(6), 533–540.
- Graeber, D. (2018). *Bullsh\*\*t jobs: A theory*. Simon & Schuster.
- McKinsey & Company. (2023). *Generative AI and the future of work in America*. McKinsey Global Institute.
- Spencer, D. A. (2022). Work after automation: Labour, value and technology. *Cambridge Journal of Economics*, 46(3), 487–504.





## 6. Basic Income and Post-Scarcity Economics

### Introduction

As automation accelerates, traditional notions of work, income, and social value are being destabilised. The displacement of human labour by artificial intelligence (AI), robotics, and algorithmic management threatens not only livelihoods, but also the legitimacy of the wage-based economic model. In this context, Universal Basic Income (UBI) has re-emerged as a serious policy proposal: a guaranteed, unconditional payment to all citizens, regardless of employment status. Simultaneously, utopian visions such as The Venus Project propose a more radical restructuring of society based on post-scarcity, decentralised automation, and resource allocation by need rather than market forces. This section explores UBI as a pragmatic near-term response to labour displacement and assesses the viability of post-scarcity economic models as longer-term alternatives to capitalism in the age of machine productivity.

### 6.1 Defining Universal Basic Income

UBI is a cash transfer policy characterised by its universality, i.e. — where all citizens receive it regardless of income, wealth, or employment; it is unconditional — with no work requirement or means testing; it is regular and predictable in delivery — typically monthly or annually; and it is individually distributed — paid to persons, not households. Unlike targeted welfare, UBI decouples income from labour, recognising that participation in society does not require market productivity (Van Parijs & Vanderborght, 2017).

### 6.2 Economic Justifications for UBI

As automation increasingly decouples productivity from employment, UBI serves multiple economic functions. It acts as an income floor that protects individuals from poverty without requiring labour (specifically given that now we are seeing the end of labour due to robotics and AI). UBI helps stabilise consumer demand by maintaining purchasing power in a job-light economy. It also facilitates economic transition by enabling retraining, entrepreneurship, and voluntary care work. Modelling suggests that UBI can be economically feasible under progressive tax regimes. A microsimulation study by the UK Institute for Policy Research found that a modest UBI, funded through income tax reform, could halve poverty while being broadly revenue-neutral (Martinelli, 2022).

### 6.3 AI as a Trigger for UBI Adoption

The political urgency of UBI is rising, as AI disrupts employment landscapes. Prominent technology leaders, including Elon Musk and Andrew Yang, argue that widespread automation will necessitate a social safety net untethered from jobs. The Swiss Federal Chancellery (2023) concluded that automation-induced unemployment will likely rise sharply by the 2030s and recommended pilot UBI schemes. Empirical evidence from Finland's national trial (2017–2018) showed that recipients experienced slightly higher well-being and confidence, though employment effects were modest (Kangas, Jauhiainen, Simanainen, & Ylikännö, 2020). Though AI has not yet replaced all jobs, it is steadily



undermining job security, stagnating wages, and increasing precarity — conditions that strengthen the case for income decoupled from specific labours.

#### **6.4 Criticisms and Counterarguments**

Common critiques of UBI include its projected cost, with national schemes potentially requiring 15–25% of GDP. Another frequent concern is the potential for work disincentives, although most trials have shown negligible effects on labour force participation (Hoynes & Rothstein, 2019). A third worry is inflation, particularly in housing markets, as increased demand might outstrip supply. However, these concerns often rest on assumptions of static productivity or a continued capitalist economic regime. As AI reduces production costs, some inflationary pressures may be offset by technological deflation and improved distribution efficiencies (Mason, 2016). Indeed, recent demonstrations of robots producing houses render the question somewhat moot. Furthermore, as white collar workers are retrenched due to AI replacement, the increasing availability of construction roles may mitigate some job losses and housing supply issues.

#### **6.5 The Venus Project and Post-Scarcity**

The reader may have encountered The Venus Project. The Venus Project is a futurist vision for a post-scarcity society based on automated systems, resource-based economics, and sustainable city design. It was founded in the 1970s by industrial designer and social theorist Jacque Fresco, who served as its chief proponent until his death in 2017. The project gained wider attention in the early 2000s, especially through the 2008 documentary *Zeitgeist: Addendum*, and promotes the idea that technological abundance, if managed intelligently, can eliminate the need for money, politics, and war. The proposal is more radical than UBI. In short, it proposes that robots can produce goods, and AIs can produce cultural artefacts, hence, humans can seek meaning freed from the burden of work. However, since there would be no actual work in such a post-scarcity society, due to the abundance of goods produced by AIs and robots, humans would not need to earn money to pay for or procure such goods and services. Hence, the entire notion of “earning a living” would be redundant.

The economic transformation at hand is not merely technical. We are witnessing the undermining of the very routine that has structured human life since the advent of industrial capitalism several hundred years ago. For centuries, individuals rose each day to earn wages and maintain productivity. This rhythm was so embedded that school systems evolved to prepare children for it.

AI disrupts this cultural pattern. Machines now perform economically valuable tasks across a widening range of domains. Daily labour routines, once thought immutable, are becoming obsolete. During the COVID-19 pandemic, a preview of post-work society emerged: people were detached from driving to work in offices, but the outcomes were mixed. Some reported greater connection and creativity, but rates of depression, domestic

violence, and anxiety rose sharply — particularly among those who lost time-based daily structure and purpose (Pfefferbaum & North, 2020).

The implications of AI suggest the risk of psychological destabilisation as it will certainly cause time allocation on work to become unstructured. It will also cause some cultural confusion, as meritocratic ideals lose relevance. It may also cause relational stress in overburdened households, as it will be unclear as to whether each person in the household is able to, or required to, provide or go to work, to contribute meaningfully. Furthermore, political volatility may become evident, as people search for lost meaning; and spiritual voids as labour-based identity dissolves. Existing labour gaps, such as the near 40% levels seen in South Africa, will be exacerbated. The loss of income in an upper stratum of white-collar workers, who provided tax revenue and low-income jobs, will have knock-on effects on those eligible only for low-income jobs, further exacerbating unemployment and the ability of the State to provide even a UBI in a declining revenue scenario of work losses to AI.

Societies must therefore proactively replace the validation and structure that wage labour once provided. If not, the result may be widespread destruction of society — not due to poverty alone, although that will be the first effect — but due to *purposelessness*. History shows that meaning can emerge from non-economic domains — learning, care, spirituality, and art — but only if new institutional frameworks are built to support them — and only if these things have not been replaced. And it is precisely AI which looks set to replace these very things.

## **6.6 Compatibility and Transition Strategies**

UBI and post-scarcity projects are compatible. UBI could act as a transitional scaffold, easing resistance to automation, supporting experimentation in peer-to-peer and open-access economies, and buffering the shocks of employment disruption. Moreover, AI may itself be used to run such systems—optimising logistics, forecasting demand, and managing equitable resource distribution (Mason, 2016). Mason's book, *Postcapitalism*, is instructive in this regard.

## **6.7 Cultural Shifts Required**

For UBI and post-scarcity systems to function meaningfully, a *cultural* realignment is necessary. This includes abandoning the belief that work is inherently virtuous (Weber, 2001/1905), recognising care work, mentoring, and community contribution as valuable, and encouraging post-materialist values such as sustainability and civic solidarity rather than excessive reckless consumption, conspicuous wealth display, and idealisation of wealth and consumerism. Empirical research supports the idea that when people are freed from economic coercion, they often choose to contribute voluntarily. Stern and Taylor (2022) found that financially secure individuals engage in community and creative activity at rates equal to or greater than those in the formal labour market.

## **6.8 Summary: Rethinking Income and Value**

UBI and post-scarcity visions respond to the same reality: automation is decoupling productivity from employment. UBI offers a practical near-term safety net; post-scarcity models offer a long-term rethinking of economic architecture. Both require societies to dissociate survival from waged work. As automation outpaces our adaptation to it, clinging to 20th-century work and economic models is no longer just inefficient — it is socially and psychologically suicidal. The future will not only be defined by how we produce, but how we assign value, meaning, and dignity in a world where labour is no longer a necessity. We are at a crossroads now where we have to decide what work to automate, and what work to leave un-automated so as to ensure that humans have a meaningful existence.

## References

- Hoynes, H., & Rothstein, J. (2019). Universal basic income in the US and advanced countries. *Annual Review of Economics*, 11, 929–958. <https://doi.org/10.1146/annurev-economics-080218-030237>
- Kangas, O., Jauhiainen, S., Simanainen, M., & Ylikännö, M. (2020). *The basic income experiment 2017–2018 in Finland: Preliminary results*. Helsinki: Ministry of Social Affairs and Health.
- Martinelli, L. (2022). Assessing the fiscal feasibility of universal basic income in the UK. *Institute for Policy Research Working Paper*. <https://doi.org/10.1080/00346764.2022.2106542>
- Mason, P. (2016). *Postcapitalism: A guide to our future*. Penguin.
- Pfefferbaum, B., & North, C. S. (2020). Mental health and the COVID-19 pandemic. *The New England Journal of Medicine*, 383(6), 510–512. <https://doi.org/10.1056/NEJMp2008017>
- Stern, M. J., & Taylor, L. (2022). Voluntary engagement in the absence of work coercion: A cross-national study. *Social Forces*, 101(1), 295–319.
- Swiss Federal Chancellery. (2023). *Labour and automation in Switzerland: Scenarios and policy options 2030–2040*. Bern: Government of Switzerland.
- Van Parijs, P., & Vanderborght, Y. (2017). *Basic income: A radical proposal for a free society and a sane economy*. Harvard University Press.
- Weber, M. (2001). *The Protestant ethic and the spirit of capitalism* (T. Parsons, Trans.). Routledge. (Original work published 1905)
- The Venus Project. (n.d.). Overview. Retrieved from <https://www.thevenusproject.com>





## **7. The Psychological Fallout of Finding Meaning without Work**

### **Introduction**

Beyond economic displacement, the rise of automation and artificial intelligence (AI) presents profound psychological and existential challenges. For centuries, work has been a central organising principle in human life. It offers not only material sustenance, but also identity, purpose, structure, and social status. As AI decouples livelihood from labour, individuals and societies may face a crisis of meaning. This section explores the psychological consequences of widespread labour obsolescence, examining empirical research on work and well-being, the risks of purposelessness, and potential pathways for constructing meaning in a post-work world.

### **7.1 Work as a Source of Identity and Structure**

Modern psychology, sociology, and philosophy consistently underscore that work is not merely economic — it is existential. Studies have found that employment provides daily structure and routine (Jahoda, 1982), social integration through co-worker networks and shared goals, identity reinforcement via professional titles and roles, and self-efficacy derived from mastery of tasks and achievement. The “latent functions” of employment are so psychologically powerful that unemployment is often distressing even when basic needs are met (Paul & Moser, 2009).

### **7.2 Empirical Evidence: Worklessness and Mental Health**

Numerous studies link unemployment and underemployment with adverse mental health outcomes. Paul and Moser (2009), in a meta-analysis of 237 studies, found that unemployed individuals are more than twice as likely to experience psychological distress as employed counterparts. A longitudinal UK study found that even in cases of UBI-style income support, long-term worklessness was associated with lower self-reported life satisfaction, purpose, and social trust (Chandler et al., 2022). Retirees without post-work engagement often experience loss of identity, increased depression, and deteriorating cognitive function (Wang et al., 2011). These findings suggest that economic security alone does not guarantee well-being. Humans seek not just survival, but meaningful activity.

### **7.3 The Threat of Existential Emptiness**

The psychologist Viktor Frankl (1963) argued that the will to meaning is a fundamental human drive. In his logotherapy framework, individuals who lack purpose often suffer from an “existential vacuum,” manifesting as depression, anxiety, addiction, or apathy. In a post-labour society, this vacuum could become widespread. If work no longer structures life, and if AI outperforms humans at creative, intellectual, and productive tasks, individuals may ask: What is my role? Do I matter? What should I do with my time? This ontological insecurity — the sense that one’s being is not anchored in any stable role or value — could become a defining feature of AI-driven societies, and a cause of significant social problems such as crime, delinquency, and drug abuse in future.



## 7.4 The Risk of Pseudo-Activity

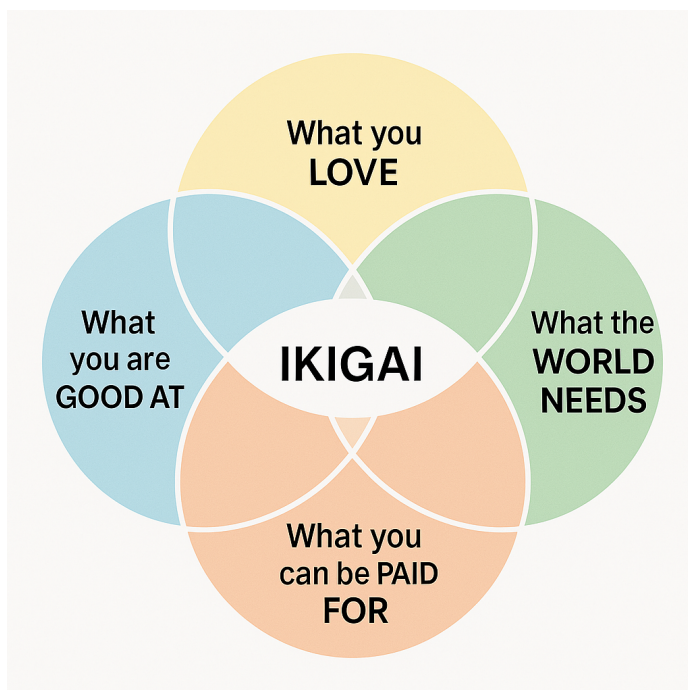
One response to purposelessness in the current milieu, is the rise of pseudo-activity — performative or trivial engagement designed to simulate purpose. Examples include obsessive social media use, gamified productivity tools such as habit trackers or virtual rewards, and superficial self-branding or entrepreneurialism. While these may provide temporary relief and daily structure, they often lack deep narrative coherence or communal validation. Han (2017) argues that such activities sustain *attention* without cultivating *meaning*, leading to a low-grade, chronic sense of burnout.

## 7.5 Rethinking Meaning: Intrinsic vs Extrinsic Purpose

Philosophers such as Albert Camus and Martha Nussbaum argue that meaning need not be externally conferred through wage labour or formal roles. Rather, it can be cultivated through:

- Relational connection – Family, friendships, and community,
- Creative expression – Art, music, and storytelling (but, specifically by rejecting, coordinating, disregarding, or supplementing, AI-generated creative outputs),
- Care work – Raising children, supporting others,
- Aesthetic experience – Nature, spirituality, the sublime, travel, exploration, and
- Atavistic simulation – Immersive experiences of “lost” worlds (e.g. Westworld-style environments).

If societies begin to support these activities — through income guarantees, reduced working hours, and cultural investment — meaning may be redistributed beyond market participation (Nussbaum, 2020), in anticipation of the upcoming effects of AI.



## 7.6 Case Study: Ikigai and the Post-Work Paradigm

The Japanese concept of *ikigai* — “a reason to wake up in the morning” — blends passion, mission, vocation, and profession. While traditionally applied to working life, it increasingly guides post-retirement and voluntary life planning.

Longitudinal studies indicate that individuals with a strong sense of *ikigai* live longer, enjoy better mental health, and maintain life satisfaction — even in the absence of employment (Sone et al., 2008). These findings suggest that

purpose is not contingent on occupation, but on the cultivation of meaning through aligned and supported life choices.

### **7.7 Social Solutions: Community, Learning, and Care**

To mitigate the psychological effects of widespread job loss, social frameworks must evolve. Suggested policy directions include establishing community hubs for shared learning, art/creativity, and volunteering; expanding life-long education programmes not tied to employment; increasing public funding for arts and culture to support participation and expression; and ensuring institutional recognition of care and relational labour. Such interventions enable individuals to rebuild identity, routine, and contribution outside of waged productivity.

### **7.8 Summary: Meaning Without Labour**

AI may eliminate the need for *labour*, but not the need for *meaning*. Without *conscious* cultural redesign, societies risk widespread psychological collapse. The challenge ahead is not merely economic; it is existential. The dissolution of work opens a space that must be deliberately filled with new forms of value, connection, and human flourishing.



## References

- Chandler, R. A., O'Connor, R., & Whelan, A. (2022). Purpose, security and belonging: Work, identity and mental health in a post-industrial UK context. *Social Psychiatry and Psychiatric Epidemiology*, 57(3), 445–456. <https://doi.org/10.1007/s00127-021-02098-w>
- Frankl, V. E. (1963). *Man's search for meaning*. Beacon Press.
- Han, B.-C. (2017). *The burnout society*. Stanford University Press.
- Jahoda, M. (1982). *Employment and unemployment: A social-psychological analysis*. Cambridge University Press.
- Nussbaum, M. C. (2020). *The cosmopolitan tradition: A noble but flawed ideal*. Harvard University Press.
- Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior*, 74(3), 264–282. <https://doi.org/10.1016/j.jvb.2009.01.001>
- Sone, T., Nakaya, N., Ohmori, K., Shimazu, T., Higashiguchi, M., Kakizaki, M., ... & Tsuji, I. (2008). Sense of “ikigai” (a feeling of life worth living) and mortality in Japan: Ohsaki study. *Psychosomatic Medicine*, 70(6), 709–715. <https://doi.org/10.1097/PSY.0b013e31817e7e64>
- Wang, M., Henkens, K., & van Solinge, H. (2011). Retirement adjustment: A review of theoretical and empirical advancements. *American Psychologist*, 66(3), 204–213. <https://doi.org/10.1037/a0022414>







# Post-Work Futures: Flourishing Without Jobs

## Introduction

As artificial intelligence and automation increasingly render vast segments of human labour economically redundant, conventional views of the future which to date have been framed in terms of loss of jobs, structure, identity, and social cohesion. But this ignores a deeper possibility: liberation from compulsory labour. The decline of wage-based work may paradoxically open space for human flourishing. This section explores models, practices, and proposals aimed at crafting meaning, purpose, and social connection in a world unstructured by traditional employment while confronting the broader civilisational question: what does it mean to be human when machines can do almost everything we can?

## The Edge of a Civilisational Shift

We are at a threshold more profound than any industrial revolution. AI and automation are not only transforming labor structures but also unsettling the premise that human effort is the foundation of value, identity, and social organisation. Domains once exclusively human — legal, design and creativity of all forms, emotion-driven caregiving — are increasingly modelled and replicated by algorithms (Brynjolfsson & McAfee, 2014; Russell & Norvig, 2021). This unsettling shift motivates a critical ethical choice: whether to react by accelerating automation uncritically or resisting it by rejecting technological progress. Consider Frank Herbert’s novel *Dune*, which warns of a “Butlerian Jihad”. In the novel, this “jihad” destroyed sentient machines (AIs) to preserve humanity (Herbert, 1965). But today, retreating from AI is neither possible nor desirable; pruning it to retain space for human endeavour requires reflective design of policy, so that automation supports, rather than displaces, human flourishing (Bostrom, 2014).

## Reclaiming Human Time and Purpose

With machines freeing humans from material necessity, many historical rhythms and structures — rooted in the Protestant work ethic — lose relevance (cf. Weber, 2002). Time-use research shows that when people relinquish coerced labour, they often turn to care, civic engagement, and personal growth (OECD, 2022). Lifelong learning, practiced on open platforms or through *makerspaces*, shifts the goal from credentialism to exploration and mastery (Sennett, 2008). Investments in digital and physical commons — such as community gardens, libraries, and open-source projects — build collective value outside wage systems and foster meaningful participation (Bauwens & Kostakis, 2020). If the reader is unclear on this, think of the vast impact that Linux alone has had on our world: every major cloud provider, every major website and online platform, every Android phone, and every AI chatbot — runs on Linux — a free and open source collaborative project started by one man (Linus Torvalds) in Finland in the 1990s. Where once the computer ecosystem was dominated by commercial players such as Microsoft, it is in reality free and open source software, such as Linux and the GNU tools — that power most major systems. The same can be said of Wikipedia. Prior to Wikipedia, there was no single,

reliable, open source, collaborative knowledge project. Knowledge was held ransom by universities and Encyclopaedia Britannica and similar books. But now Wikipedia is one of the most visited sites on earth.

### **Culture, Care, and the New Human Ethos**

As synthetic culture proliferates, the human-made cultural artefact becomes rare — and thus cherished. Cultural policy must support arts, music, and artisanal creation as essential elements of public life (Crouch, 2019). Care work, long undervalued, can become the moral centre of society when freed from financial compulsion (Folbre, 2001). Freed from economic pressure, individuals may devote time to relational labour — parenting, caring for elders, community support, mutual aid—redefining value as relational rather than transactional.

### **Inner Life, Deliberation, and Civic Renewal**

In a world untethered from employment, inner development becomes essential. Practices like meditation, journaling, peer therapy, and storytelling reclaim personal meaning (Yalom, 1980). At the same time, automation may permit deeper civic engagement: participatory democracy, town halls, citizen assemblies, and community science projects flourish when people have the time and agency (Fishkin, 2018).

### **Toward a New Ethic and Design Imperative**

The collapse of the wage-labour model demands an ethical renewal. Security via Universal Basic Income, post-scarcity resource allocation, and recognition of emotional and civic contribution can lay the foundations for a new social contract (Standing, 2017; Stern & Taylor, 2022). We are entering an era of design — not of goods, but of lives, relationships, values — and the question becomes: how do we live together with dignity, without the necessity of work? AI makes this imperative urgent, as time liberated from labour must be reclaimed not for more productivity, but for purpose (Crawford, 2021).

### **Closing Reflection**

If the twentieth century was marked by labour, then the twenty-first must be characterised by meaning. Our task is to build societies where machines generate wealth, but humans generate significance. This requires imagination to envision futures beyond capitalism; courage to relinquish outdated roles; and humility to accept that being human does not mean being at the centre of production, or being a consumer, or being a statistic in a board meeting's annual report. Amid the shadow of the machine, humanity can now rediscover itself, in conscious contrast to AI.



## References

- Bauwens, M., & Kostakis, V. (2020). *Peer to peer: The commons manifesto*. Westminster University Press.
- Bostrom, N. (2014). *Superintelligence: Paths, dangers, strategies*. Oxford University Press.
- Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton.
- Crawford, K. (2021). *Atlas of AI: Power, politics, and the planetary costs of artificial intelligence*. Yale University Press.
- Crouch, C. (2019). *Post-democracy after the crises*. Polity Press.
- Fishkin, J. S. (2018). *Democracy when the people are thinking: Revitalizing our politics through public deliberation*. Oxford University Press.
- Folbre, N. (2001). *The invisible heart: Economics and family values*. New Press.
- Herbert, F. (1965). *Dune*. Chilton Books.
- OECD. (2022). *How was life? Volume II: New perspectives on well-being and global inequality since 1820*. OECD Publishing.
- Russell, S., & Norvig, P. (2021). *Artificial intelligence: A modern approach* (4th ed.). Pearson.
- Sennett, R. (2008). *The craftsman*. Yale University Press.
- Standing, G. (2017). *Basic income: And how we can make it happen*. Pelican.
- Stern, M. J., & Taylor, L. (2022). Voluntary engagement in the absence of work coercion: A cross-national study. *Social Forces*, 101(1), 295–319.
- Weber, M. (2002). *The Protestant ethic and the spirit of capitalism* (T. Parsons, Trans.). Routledge. (Original work published 1905)
- Yalom, I. D. (1980). *Existential psychotherapy*. Basic Books.



## References

1. Acemoglu, D., & Johnson, S. (2023). Rebalancing AI: The case for human-centric automation. *Finance & Development*, 60(2), 30–33.
2. Acemoglu, D., & Restrepo, P. (2019). The wrong kind of AI? Artificial intelligence and the future of labor demand. *Cambridge Journal of Regions, Economy and Society*, 13(1), 25–35. <https://doi.org/10.1093/cjres/rsz022>
3. Autor, D. H. (2015). Why are there still so many jobs? The history and future of workplace automation. *Journal of Economic Perspectives*, 29(3), 3–30. <https://doi.org/10.1257/jep.29.3.3>
4. Bauwens, M., & Kostakis, V. (2020). *Peer to peer: The commons manifesto*. Westminster University Press.
5. Boden, M. A. (2004). *The creative mind: Myths and mechanisms* (2nd ed.). Routledge.
6. Bommarito, M. J., Katz, D. M., & Nguyen, P. (2023). GPT as a legal assistant: Initial evaluations and implications. SSRN. <https://doi.org/10.2139/ssrn.4434419>
7. Bommarito, M., Katz, D. M., & Zelner, J. (2023). GPT as a legal research assistant. SSRN. <https://doi.org/10.2139/ssrn.4459397>
8. Bostrom, N. (2014). *Superintelligence: Paths, dangers, strategies*. Oxford University Press.
9. Bringsjord, S., Govindarajulu, N. S., & Ghosh, R. (2022). Can machines really be creative? *Philosophy & Technology*, 35, 89. <https://doi.org/10.1007/s13347-022-00590-1>
10. Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton.
11. Brynjolfsson, E., Li, D., & Raymond, L. (2025). Generative AI at work. *Quarterly Journal of Economics*, 140(2), 889–942.
12. Cascone, S. (2018, October 25). An AI-generated artwork just sold for \$432,500 and sparked a debate. *Artnet News*.
13. Chandler, R. A., O'Connor, R., & Whelan, A. (2022). Purpose, security and belonging: Work, identity and mental health in a post-industrial UK context. *Social Psychiatry and Psychiatric Epidemiology*, 57(3), 445–456. <https://doi.org/10.1007/s00127-021-02098-w>
14. Chandola, T., Griffiths, D., & Smith, D. (2019). Is job quality associated with mental health? A longitudinal study of the UK labour market. *Journal of Epidemiology & Community Health*, 73(6), 533–540. <https://doi.org/10.1136/jech-2018-211408>
15. Colton, S., Cook, M., & Ventura, D. (2022). Creativity and artificial intelligence: A conceptual blending framework. *Journal of Artificial Intelligence Research*, 74, 1–40.
16. Crawford, K. (2021). *Atlas of AI: Power, politics, and the planetary costs of artificial intelligence*. Yale University Press.
17. Creative UK. (2023). *State of creativity report 2023*. London: Creative Industries Federation.
18. Crouch, C. (2019). *Post-democracy after the crises*. Polity Press.
19. Dzieza, J. (2023). The ghost workers powering AI. *The Verge*. Retrieved from <https://www.theverge.com>

20. Eloundou, T., Manning, S., Mishkin, P., & Rock, D. (2023). GPTs are GPTs: An early look at the labor market impact potential of large language models. arXiv preprint. <https://arxiv.org/abs/2303.10130>
21. Fishkin, J. S. (2018). *Democracy when the people are thinking: Revitalizing our politics through public deliberation*. Oxford University Press.
22. Fitzpatrick, K. K., Darcy, A., & Vierhile, M. (2017). Delivering cognitive behavior therapy to young adults with symptoms of depression and anxiety using a fully automated conversational agent (Woebot): A randomized controlled trial. *JMIR Mental Health*, 4(2), e19. <https://doi.org/10.2196/mental.7785>
23. Florida, R. (2002). *The rise of the creative class*. Basic Books.
24. Folbre, N. (2001). *The invisible heart: Economics and family values*. New Press.
25. Folbre, N. (2022). *The rise and decline of patriarchal capitalism*. Verso Books.
26. Frankl, V. E. (1963). *Man's search for meaning*. Beacon Press.
27. Fulmer, R., Joerin, A., Gentile, B., Lakerink, L., & Rauws, M. (2021). Using psychological artificial intelligence (Tess) to relieve symptoms of depression and anxiety: Randomized controlled trial. *JMIR Mental Health*, 5(4), e64. <https://doi.org/10.2196/64>
28. Graeber, D. (2018). *Bullshit jobs: A theory*. Simon & Schuster.
29. Han, B.-C. (2017). *The burnout society*. Stanford University Press.
30. Herbert, F. (1965). *Dune*. Chilton Books.
31. Hong, J., Kim, J., & Oh, Y. (2023). Can AI make art? A human-centred evaluation of creativity in visual design. *Journal of Creative Behaviour*, 57(2), 205–224.
32. Hoynes, H., & Rothstein, J. (2019). Universal basic income in the US and advanced countries. *Annual Review of Economics*, 11, 929–958. <https://doi.org/10.1146/annurev-economics-080218-030237>
33. International Labour Organization. (2023). *World Employment and Social Outlook 2023*. Geneva: ILO.
34. Jahoda, M. (1982). *Employment and unemployment: A social-psychological analysis*. Cambridge University Press.
35. Kangas, O., Jauhiainen, S., Simanainen, M., & Ylikännö, M. (2020). *The basic income experiment 2017–2018 in Finland: Preliminary results*. Helsinki: Ministry of Social Affairs and Health.
36. Kinder, M., de Souza Briggs, X., Muro, M., & Liu, S. (2024). *Generative AI, the American worker, and the future of work*. Washington, DC: Brookings Institution.
37. Köbis, N., & Mossink, L. D. (2021). Artificial intelligence versus Maya Angelou: Experimental evidence that people cannot differentiate AI-generated from human-written poetry. *Computers in Human Behavior*, 114, 106553. <https://doi.org/10.1016/j.chb.2020.106553>
38. Koivisto, M., & Grassini, S. (2023). Best humans still outperform artificial intelligence in a creative divergent thinking task. *Scientific Reports*, 13, 13601.
39. Lee, Y., Park, J., & Choi, S. (2023). Human–AI relationships: Dependency, affective bias, and user vulnerability in chatbot use. *Computers in Human Behavior*, 142, 107668. <https://doi.org/10.1016/j.chb.2022.107668>



40. Luxton, D. D. (2016). *Artificial intelligence in behavioral and mental health care*. Academic Press.
41. Martinelli, L. (2022). *Assessing the fiscal feasibility of universal basic income in the UK*. Institute for Policy Research Working Paper. <https://doi.org/10.1080/00346764.2022.2106542>
42. Mason, P. (2016). *Postcapitalism: A guide to our future*. Penguin.
43. McKinsey & Company. (2023). *Generative AI and the future of work in America*. <https://www.mckinsey.com>
44. Mokyr, J. (2018). *A culture of growth: The origins of the modern economy*. Princeton University Press.
45. Nussbaum, M. C. (2020). *The cosmopolitan tradition: A noble but flawed ideal*. Harvard University Press.
46. OECD. (2022). *How was life? Volume II: New perspectives on well-being and global inequality since 1820*. OECD Publishing.
47. OECD. (2023). *Automation and labour markets: New data insights*. Paris: OECD Publishing.
48. OpenAI. (2023). *GPT-4 technical report*. <https://cdn.openai.com/papers/gpt-4.pdf>
49. Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior*, 74(3), 264–282.
50. Pew Research Center. (2023). *AI in the workplace: Trends and employer intentions*. Washington, DC.
51. Pfefferbaum, B., & North, C. S. (2020). Mental health and the COVID-19 pandemic. *The New England Journal of Medicine*, 383(6), 510–512. <https://doi.org/10.1056/NEJMp2008017>
52. Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal*, 24(1), 92–96. <https://doi.org/10.1080/10400419.2012.650092>
53. Russell, S., & Norvig, P. (2021). *Artificial intelligence: A modern approach* (4th ed.). Pearson.
54. Sawyer, R. K. (2011). *Explaining creativity: The science of human innovation*. Oxford University Press.
55. Sennett, R. (2006). *The culture of the new capitalism*. Yale University Press.
56. Sennett, R. (2008). *The craftsman*. Yale University Press.
57. Sharkey, A., & Sharkey, N. (2020). Granny and the robots: Ethical issues in robot care for the elderly. *Ethics and Information Technology*, 14(1), 27–40. <https://doi.org/10.1007/s10676-010-9234-6>
58. Smith, H., & Nguyen, T. (2023). *Generative AI and the freelance economy: Emerging patterns of disruption*. *International Journal of Digital Labour Studies*, 1(1), 22–39.
59. Smith, R. (2023). *AI and the reinvention of productivity*. Oxford University Press.
60. Sone, T., Nakaya, N., Ohmori, K., Shimazu, T., Higashiguchi, M., Kakizaki, M., ... & Tsuji, I. (2008). Sense of “ikigai” (a feeling of life worth living) and mortality in Japan: Ohsaki study. *Psychosomatic Medicine*, 70(6), 709–715. <https://doi.org/10.1097/PSY.0b013e31817e7e64>

61. Spencer, D. A. (2022). The return of the long-hours job: AI and the intensification of care work. *Work, Employment and Society*, 36(1), 20–38.
62. Spencer, D. A. (2022). Work after automation: Labour, value and technology. *Cambridge Journal of Economics*, 46(3), 487–504. <https://doi.org/10.1093/cje/beac013>
63. Standing, G. (2017). *Basic income: And how we can make it happen*. Pelican.
64. Stern, M. J., & Taylor, L. (2022). Voluntary engagement in the absence of work coercion: A cross-national study. *Social Forces*, 101(1), 295–319.
65. Susskind, D. (2020). *A world without work: Technology, automation, and how we should respond*. Metropolitan Books.
66. Susskind, D. (2023). *Growth: A history and a reckoning*. Allen Lane.
67. Swiss Federal Chancellery. (2023). *Labour and automation in Switzerland: Scenarios and policy options 2030–2040*. Bern: Government of Switzerland.
68. Taillon, K., & Zhao, Y. (2024). Attachment to artificial agents: The risks and benefits of simulated companionship. *AI & Society*. Advance online publication. <https://doi.org/10.1007/s00146-024-01764-2>
69. Tegmark, M. (2017). *Life 3.0: Being human in the age of artificial intelligence*. Penguin.
70. The Venus Project. (n.d.). Overview. Retrieved from <https://www.thevenusproject.com>
71. Tirosh-Samuelson, H. (2021). Transhumanism, AI, and the posthuman god: Religious themes in secular technologies. *Zygon®*, 56(3), 585–603. <https://doi.org/10.1111/zygo.12738>
72. Turkle, S. (2017). *Alone together: Why we expect more from technology and less from each other* (2nd ed.). Basic Books.
73. U.S. Bureau of Labor Statistics. (2025). Incorporating AI impacts in BLS employment projections: Occupational case studies. *Monthly Labor Review*, 118(1).
74. Vaithilingam, P., Xu, A., & Bernstein, A. (2022). Do users write more insecure code with AI assistants? In *IEEE Symposium on Security and Privacy Workshops* (pp. 123–130).
75. Van Parijs, P., & Vanderborght, Y. (2017). *Basic income: A radical proposal for a free society and a sane economy*. Harvard University Press.
76. Varoufakis, Y. (2023). *Technofeudalism: What killed capitalism*. Bodley Head.
77. Wada, K., Shibata, T., Saito, T., & Tanie, K. (2021). Psychological and social effects of robot therapy in the elderly: A pilot study using PARO. *International Journal of Social Robotics*, 13(4), 895–909.
78. Wang, M., Henkens, K., & van Solinge, H. (2011). Retirement adjustment: A review of theoretical and empirical advancements. *American Psychologist*, 66(3), 204–213. <https://doi.org/10.1037/a0022414>
79. Weber, M. (2002). *The Protestant ethic and the spirit of capitalism* (T. Parsons, Trans.). Routledge. (Original work published 1905)
80. World Bank. (2023). *World Development Report 2023: Rethinking education and training in the age of AI*. Washington, DC: World Bank.
81. World Economic Forum. (2023). *Future of Jobs Report*. Geneva: WEF.
82. Yalom, I. D. (1980). *Existential psychotherapy*. Basic Books.
83. Yang, L., Wang, R., & Yu, H. (2023). Audience perception of AI-generated music: Evidence from cross-modal affective analysis. *Music Perception*, 41(1), 51–71.

84. Zhou, Y., Chen, J., & Reiss, S. P. (2022). The impact of GitHub Copilot on the productivity of novice programmers. ACM Symposium on Software Engineering Education and Training.