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Knowledge work in the age of control: capitalising on human capital

The main claim that I aim to substantiate in this article is that power in the form of control is exerted in a more insidious manner now that knowledge work has become 'networked'. To this end, I first describe societal control in the current epoch. Given the fact that my focus is on knowledge work, I next revisit the human capital literature with the aim of coming to a more precise understanding of what knowledge work is. The literature on "leveraging human capital" (Burud and Tumolo 2004) evidences how human capital theory draws on the conditions of free-floating control to optimally capitalise on knowledge workers. Models of overt management have come to be replaced by more expansive and insidious models of control that extend beyond the sphere of work into the intimate recesses of private life. Control operative at the societal level (Castells 1996) extends beyond the macro-level (neoliberal), to the meso-level (organisational), and the micro-level (self-governance). Next, I critically consider the implications of these conditions of control for the (self-)governance of the knowledge worker by drawing on Han's (2017) further specification of control as "smart power". I come to the conclusion that under the conditions of apparently greater autonomy and discretion that is so pervasive in the management literature discussing knowledge workers, governance as "control" induces constant work erasing the boundaries between work and private life. Neoliberalism with its mantra of investment in human capital has succeeded in

producing an optimally efficient, ever-working subject. Throughout my analyses are informed by Foucault's (2008) concept of "governmentality", which fuses the presiding rationality (knowledge) with governance (power as control) to throw light on how human conduct is being conducted (orchestrated) for optimal efficiency.

Keywords: Knowledge work; control; human capital; organisations; neoliberal governmentality

Introducing the problematics

In this paper I critically consider the phenomenon of knowledge work and the concomitant emergence of the knowledge worker and the macro- and micro-level of governance to which they are subjected, while taking cognisance of the fact that variations and nuanced differences are sure to exist in different contexts. My intention here is neither to plot the historical-sociological evolution of (knowledge) work into its present form, nor to suggest that knowledge work in its present incarnation is entirely new or different from previous forms of "white-collar" work with a significant knowledge component. Rather, I draw on authoritative existing studies on how knowledge work may generally be construed in order to come to some broad understanding of how technologies of power as control operate, to determine not only how they work, but also how they are, act and think. I also consider specific sets of conditions within which knowledge workers conduct their work – conditions which enable them to work while pre-designing how their work may be conducted in networked societies. In short, the main claim that I aim to substantiate in this article is that power in the form of control is exerted in a more insidious manner now that knowledge work has become 'networked'.

In the most general sense, present-day knowledge workers may be understood as a modern brand of employee that evolved in response to our technology-dependent and information-driven economy. They play a valuable role in deciding the economic success of organisations and indeed of countries, but there are specific requirements for them to be able to do their work well – they have a unique set of needs that must be met for them to thrive and to be as creative and efficient as possible. This implies that the rise of the networked knowledge worker as a decisive element in organisational success in the information age necessitates a new organisational culture, one tailored to the specifications of knowledge work. Importantly, knowledge work cannot be divorced from the worker, and the worker cannot be divorced from the person – life and work have thus become an indivisible whole, precisely because human capital is *human*. Being human, the worker's value and efficiency cannot be divorced from every other aspect of

human life – be it mental, physical or emotional. Hence, the ideal organisational culture for a knowledge worker needs to be cognisant of the worker as a whole person, whose work, being networked, is no longer spatially bound – no longer place-specific – but has been transformed into a world of work. This requires the reach of the organisational culture to extend beyond any formal workspace too.

To deploy my argument on the stealth control exerted over knowledge workers, I proceed in the following manner: First, in section 2, I sketch the broader context of societal control in which knowledge workers are embedded, and which infiltrates knowledge work organisations and further succeeds to erase the boundaries between work and life. To be sure, here I do not engage directly with the management of knowledge work in particular. Instead, I depart from the premise that the work and life of the knowledge worker have become an indivisible whole subject to conditions of macro-level control that has infiltrated the micro-level. Then, in section 3 I consider the emergence and evolution of the knowledge worker to come to a more precise understanding of what knowledge work is. In section 4, I draw on the research of Burud and Tumolo (2004) to survey the human capital literature to come to a critical understanding of how the literature proposes to leverage human capital to ensure the optimal efficiency of knowledge workers. Understanding this is critical to throw into relief how the subjection of knowledge workers operates under the auspices of greater discretion. In section 5, I attempt to plot the implications of the conditions of control for the (self-) governance of the knowledge worker by employing Han's (2017) further specification of control as "smart power" that operates in a benevolent guise. In the final section, I conclude that under conditions of greater autonomy, flexibility and discretion outlined in the human capital literature, governance as "control" insinuates constant work into every aspect of the life of the knowledge worker. The central insight I arrive at is that neoliberalism with its insistence that human capital requires investment has succeeded in spawning an optimally efficient, ever-working subject central to the success of the knowledge economy.

The age of control

I start my argument by outlining the broader context of societal control in which knowledge workers are embedded as the decisive driver of the knowledge economy. This is a form of power, as we shall see, that infiltrates both the organisational and private existence of the knowledge worker. One thing that sets the present-day knowledge worker apart from previous incarnations of knowledge workers is that s/he is continuously connected. The knowledge work environment is set within the context of what Castells (1996) has characterised as

the “network society”. Castells (1996) maintains that the invention of electronic and nuclear technologies since the 1940s has coincided with the expansion of an increased number of international corporations beyond physical national boundaries, spreading into hitherto uncommodified areas. Globalised markets, coupled with computer technologies, have transformed the world of work into a deterritorialised network of nodal interfaces, mass consumption, and liquid multinational flows of capital.

In the 1990s, even prior to the current hegemony of the Internet, Deleuze predicted that we were moving from a disciplinary society to a society of control. Disciplinary societies, as defined by Foucault (1975), keep individuals “institutionalised” – in the family, schools, barracks, factories or prisons – turning them into docile bodies because of the presence or threat of constant surveillance. The difference, according to Deleuze (1992: 5), is that in disciplinary societies one is always in a position of beginning again. Another institution, the school, for example, takes over from the former (the family) to organise productive labour by distributing bodies in space and ordering them in time. Societies of control extend the environments of discipline (e.g. the hospital) into continuous free-floating flows of control (operative in and through neighbourhood clinics, hospices, and day care facilities, for example) “where one is never finished with anything” (Deleuze 1992: 5). A person under control or “dividual” is “undulatory, in orbit, in a continuous network” (Deleuze 1992: 6). He thus links control to the technological revolution, and this in turn must inevitably coincide with a “mutation in capitalism” therein that it is now primarily focused on the flow and fluctuations of “stocks”, which are nothing more than “coded figures – deformable and transformable”, the fluctuations of which imprison the profit-seeker (Deleuze 1992: 6). Deleuze (1992: 4), in short, postulates that the operation of this market made of fluctuating flows of financial capital has become an instrument of social control that is short-term but constant, subject to rapid rates of turnover.

Deleuze wrote at the time of the Third Industrial Revolution; the 21st century is the time of the *Fourth* Industrial Revolution. Davis (2016) explains the difference: the Third Industrial Revolution began in the 1950s with the development of digital systems, communication and rapid advances in computing power, which enabled new ways of generating, processing and sharing information. The Fourth Industrial Revolution has inaugurated entirely new capabilities for people and machines with the advent of “cyber-physical systems” that embed technology within societies and even within human bodies “Examples include genome editing, new forms of machine intelligence, breakthrough materials and approaches to governance

that rely on cryptographic methods such as the blockchain”¹ (Davis 2016: n.p.). Human subjectivity – our every action and mode of being in networked societies – has therefore become chained to the technology that opens new frontiers of human capability, transcending previously immutable limits, but also insinuating control into the most intimate recesses of human action and being by means of digital surveillance and algorithmic management.

Davis (2016) stresses that all industrial revolutions are ultimately driven by the individual and collective choices and desires of people. And it is not just the choices of the researchers, inventors and designers developing the underlying technologies that matter, but, even more importantly, those of investors, consumers, regulators and citizens who adopt, adapt and employ these technologies in daily life. An important implication of this insight is that knowledge workers operating under the conditions of the Fourth Industrial Revolution find themselves in a world of their own making – a world that humans have created and that is simultaneously creating them and forcing them to create themselves in unpredictable ways in order to function and thrive within it. What this implies, as we shall see, is the active self-inscription of knowledge workers in systems of control.

Understood through the heuristic lens of Foucault's notion of “governmentality”, we are not simply dealing with the power of technocratic experts and institutions, but also with the way in which human conduct is being conducted (orchestrated), as well as with the methodological application of “an analytical grid” for assessing the efficacy of this conduct (Foucault 2008: 186). This, then, refers to the relationship between power relations and the conduct of the subject, both in terms of the body of knowledge that provides the criteria for the ideal subject, and in terms of the precise ways in which the actual subject is led to practise itself in satisfying these criteria.

The form of control that operates within and through networks replaces the top-down model associated with the state and institutions (a model which is static and linear) with a form of control (a model which appears open, informal, non-linear); importantly, this new model augurs the spontaneous

1 To be sure, as Davis (2016, n.p.) points out, in many parts of the world, aspects of the Second and Third Industrial Revolutions have yet to be experienced. This situation is complicated by the fact that new technologies are in some cases able to “leapfrog” older ones. In 2013, the United Nations reported that more people in the world have access to a mobile phone than basic sanitation. In the same way, the Fourth Industrial Revolution is beginning to emerge at the same time that the Third (digital) Revolution is spreading and maturing across countries and organisations. As the novelist William Gibson is reported to have said: “The future is already here – it’s just not very evenly distributed” (quoted in Davis (2016, n.p.).

self-organisation of individuals themselves (Törnberg and Uitermark 2020: 1–2). Here self-organisation should be understood as a political ideal that denotes an array of governance arrangements in which private actors act autonomously and undertake initiatives of their own volition, in pursuit of public, collective or organisational objectives (Mattijsen et al. 2018).

Törnberg and Uitermark (2020: 1) conceive of this form of control as “complex control”. Complexity science defines self-organising systems as systems in which the components are relatively independent and thus autonomous in their behaviour, while undergoing direct and indirect interactions (Heylighen et al. 2006: 125). In the process, complex systems are capable of sophisticated feats of organisation without centralised leadership (Mitchell 2009; Ball 2012). The ingenuity of complex systems is that their mass of less functionally differentiated components makes each component of the same class (drones or workers, for example) inherently disposable, and easily replaceable. Hence, the organisation is extremely resilient. These systems are malleable and adaptive, since modifying functionality does not require redesigning the entire system (Törnberg and Uitermark 2020: 3).

Neoliberal governmentality operates as such a form of complex and decentralised “network governance” (Jones, Hesterly and Borgatti 1997: 911). This signals a departure from bureaucratic structures within firms and formal relationships between them, to “organic” or “informal” connected relationships. Unlike natural complex systems, however, neoliberal complex systems, although self-organised, are neither organic nor informal. Like worker ants, the connected individual nodes are fundamentally individualised. Also, like worker ants, neoliberal working subjects serve the interests of the colony/economy, except that neoliberal subjects *believe* that they do so in the name of self-interest, first and foremost. Bauman (2000: 135) describes the “individual enterprise” as a form of control or governance that expects individuals themselves and individually to use “their own wits, resources and industry to lift themselves to a more satisfactory condition”. This form of complex control is powerfully bolstered by the digital revolution which allows “distributed (self-)control, i.e. bottom-up management [...] to create [a] resilient social and economic order by means of self-organisation, self-regulations, and self-governance” (Helbing 2015: 2). Thus what appears to be “organic” and “informal” is in fact only the individual’s “freedom to choose” from a curated series of options that are actively rewarded or disincentivised, depending on the extent to which they serve the purpose of furthering the objectives of neoliberal society. This “designed self-organisation” signals an important transition from the kind of control Deleuze described: “[P]ower is now expressed as the subtle tuning of some technical code of a performance indicator, which brings about a cascade of change among

[...] networks of interacting players” (Törnberg and Uitermark 2020: 8). Bauman (2000) theorises this form of self-organised control in terms of the *Synopticon*. Unlike the model of the Panopticon, which Foucault (1975) describes as the model of disciplinary power where the one watches or guards the many – the Synopticon signifies the many watching or admiring the few, an evolution that came with mass media and television. This form of control operates by enticing the many to emulate the few. It operates not by coercion or explicit command, but by presenting enviable, seductive exemplars.

Törnberg and Uitermark (2020: 5) add a further evolutionary modification of control, one which came with the advent of the Internet and pervasive inscription of every aspect of work and personal life in digital platforms. They call this the *social Synopticon*, which is comprised of social media platforms that provide ways to “share”, interact and give feedback through comments and likes – an immensely powerful feedback mechanism through which the formation of compliant and “productive” identities is validated and other identities are actively discouraged.

The efficacy of this form of control resides in the fact that it mobilises the freedom of the individual subject. Pettman’s (2016) definition of social media offers an excellent illustration of how power as control or the “conduct of conduct” operates in conjunction with its luminous shadow, freedom:

‘[S]ocial media’ names the simultaneously limitless and circumscribed ways we interact via newly enmeshed communications and entertainment technologies. *Limitless* because no two people will navigate the same branching pathways social media affords in the same way ... and *circumscribed* because these are all conducted within the vectors provided by those (increasingly few) entities that own the cables, the satellites, the channels, the sites, the providers, and the applications that funnels us all toward each other, so that we may congregate in the bright light of voluntary and compliant commerce (Pettman 2016 xi).

Professional life and work are inscribed in and constructed through networking platforms, such as the widely used LinkedIn. Academic networking and sharing platforms such as ResearchGate and Academia.edu similarly function to validate or invalidate, and even benchmark the self’s entrepreneurial efforts and incite constant self-improvement through self-investment. Human capital, after all, requires constant (self-) investment. These professional platforms provide opportunities for almost instant peer evaluation as they “congregate” experts from around the globe and provide individual users with constantly updated reports on “reads”, “downloads” and citations. This development has been variously dubbed the “sharing economy” (Puschmann and Alt 2016) and a “commons-based peer economy” (Benkler 2002).

Zuboff (2018) uses the term “surveillance capitalism” to emphasise behaviour modification as an aspect of this digital platform-based control. She maintains that “surveillance capitalism” is a “new economic order that claims human experience as free raw material for hidden commercial practices of extraction, prediction, and sales; [comprising a parasitic economic logic in which the production of goods and services is subordinated to a new global architecture of behavioral modification” (Zuboff 2018: 8). Through its “instrumentarian power”, “surveillance capitalism” mines online users’ personal experience, either unbeknownst to them, or without their explicit permission, in the form of “behavioural data” which comprise the basis for predicting users’ future online behaviour across a broad spectrum of services and products (Zuboff 2018: 16). Arguing along the same lines as Foucault in his contention of the “conduct of conduct”, Zuboff (2018) stresses that in addition to using technical instruments such as algorithms to anticipate users’ behaviour, predictive data are not only based on *monitoring* online behaviour, they are generated by actually *directing* it, for example, Facebook’s use of “subliminal [online] cues” to influence users’ emotional states and behaviour. These inventions were celebrated by their architects for being both “effective and undetectable” (Zuboff 2018: 16).

With the era of “surveillance capitalism” came the imperative to be omni-visible and omni-accessible via virtual spaces afforded by advanced communication and information technology. Omni-visibility and omni-accessibility made possible a full cycle of exploitation: it starts with a company’s “incursion” into an unexploited domain of behaviour; it continues with the “habituation” of users to that incursion; and finally proceeds, unimpeded, with the mining of online behaviour by “adapting” and “redirecting any attempts at critique or reform”. “Nudges” in choice architecture, including surveillance-friendly default settings, take advantage of the fact that users’ time and attention are limited. Zuboff (2018) argues that companies such as Facebook and Google are able to do all this because they have monopolised how they are viewed. Here Zuboff (2018) borrows from Émile Durkheim’s (1893) work on the division of knowledge production and specialisation, to shed light on how the operation of power in producing knowledge is cut off from how power achieves this knowledge production. The work of digital platforms such as Google and Facebook is hidden in proprietary closed-source code; the platforms use non-disclosure agreements and vertical organisation to obfuscate their practices. The resulting divisions make it hard for anyone other than surveillance capitalists themselves to make authoritative pronouncements about what exactly they do. It is precisely the operation of such an imperceptible, micro-level biopolitical technology of power that Foucault’s critical toolkit is designed to take as its object.

As a form of critique, Foucault's theory of governmentality allows for an epistemologically indirect analysis of social institutions, organisations, and societies focusing less on the analysis of its form and more on the abstract "technology of power" which gives it its functional coherency (Foucault 2007: 117). To understand how working subjectivity is being governed (subjection) and governs itself (subjectivisation), we need to consider the precise nature of work in this neoliberal network society. Within this context, "knowledge workers" have become the key propellant of the economy. Their role differs from that of workers in natural complex systems in that these knowledge workers, unlike social insects of the same class, are functionally differentiated. However, their specialised expertise does not make them irreplaceable, as the imperative of continuous (self) investment in human capital can call on a reserve army of experts ready to step in if any individual knowledge working node fails to deliver. Hence, the resilience of the network remains intact. But what exactly is knowledge work? A review of central literature on the topic proves instructive here.

Knowledge work(-er)

To specify what constitutes knowledge work, this section plots the emergence and evolution of the knowledge worker. As I have pointed out elsewhere (Hofmeyr 2021: 250–251), the term "knowledge worker" was initially formulated by Peter Drucker in *The Landmarks of Tomorrow* (1959). The notions of knowledge work and knowledge workers became noticeable in the literature in the following decade or so (Machlup 1962; Drucker 1969; Bell 1973), and became more pervasive thereafter with the neoliberalisation of economic and political thinking from the end of the seventies. The phenomenon took on its various present forms with the revolutions in information technology and the Internet

Importantly, Soete (2001) points out that the pervasiveness of knowledge work in Western labour markets plays a definitive role in what sets globally competitive economies apart from less competitive economies. The growth of knowledge work bespeaks a profound transformation in the mode of capitalist production. Traditional industrial production based on cheap labour and energy, and on heavy material investments, is no longer the main means of economic productivity. Pyöriä (2005: 117) points out that business success now relies on improving efficiency, defined specifically as the maintenance of "an unbroken flow of human capability to innovate and embody new ideas and knowledge throughout the economy". Material (matter/energy) outputs have been supplanted by immaterial (information/knowledge) outputs. Schement (1990) explains that knowledge workers, unlike traditional workers, organise and manipulate information as an end in itself, which means it is the informational

content of a job that defines the task, the product, and ultimately the worker. In the evolving definitions of informational labour, key characteristics include a high level of education and skills and the use of information technology (Schement 1990: 117).

Even at the start of the Third Industrial Revolution, Drucker (1959) defined knowledge workers as high-level workers who apply theoretical and analytical knowledge, acquired through formal training, to develop products and services. He already foresaw that knowledge workers would be the most valuable assets of a 21st century organisation, because of their high level of productivity and creativity. Similarly, Bell (1973) interpreted the increasingly symbolic and interactive content of work as the fundamental fact about work in a post-industrial society. He postulated that the axial principle of the social, political and cultural logic that marks the end of industrialism is theoretical or abstract knowledge. Post-industrial society, then, is organised around knowledge for the purpose of *social control*, that is, it is mobilised to organise decision-making and the direction of change (Bell 1973: 20).

Closer to the end of the 20th century, Manuel Castells (1996) stressed the application of Weberian rationalisation to the production of knowledge itself. He maintains that the virtuous cycle of knowledge accumulation is the key to prosperity. What I find instructive in his argument is his claim that what is new in this informational mode of development is the “action of knowledge upon knowledge itself as the main sources of productivity” (Castells 1996: 17).

Hence, one might derive that what sets post-industrial society apart from industrial society is the importance attached to knowledge as an economic resource. Although information technology facilitates the informationalisation of work and organisational processes, the diffusion and use of that technology is not in itself a sufficient condition for classifying work as informational. Knowledge work also entails a qualitative difference – it is symbolic-analytical; in other words, it involves problem-solving, problem-identifying and strategic brokering activities that are non-standardised (Reich 1991). If creativity is emphasised in knowledge work at the expense of routines, then the most decisive and knowledge-intensive part of the job description may refer to cognitive processes that are independent of the time or the place where the work is performed, and even of the tools used (Pyöriä 2005: 122).

Importantly, the shift described above implies that individual creativity and innovativeness comprise the scarcest and arguably the most valuable resources in an information society. Reich (1991) maintains that the key to the new work processes lies in flexibility, interdisciplinary cooperation, and rapid learning, reskilling and upskilling at the interface between new technology and human

interaction. More than occupationally defined norms and practices, the work of knowledge workers is primarily defined by the nature of their work, which is relatively unstructured and organisationally contingent in response to the changing demands of organisations (Scarbrough 1999). Non-routine problem-solving is the core of knowledge work that, along with the education criterion, allows one to distinguish knowledge workers not only from traditional workers, but also from routine information technology users, on the basis of the design component in the job (Choi and Varney 1995).

An ideal-typical knowledge worker is expected to use knowledge creatively. Therefore, knowledge workers as a class include traditional professionals, but the class is not limited to them (see Fincham 1996). McDermott (1995) points out that like craftwork, knowledge work in teams is largely individual, *ad hoc*, and it is often invisible. Moreover, because the life span of advanced knowledge and new technologies is becoming shorter, the most important skill knowledge workers can possess is the ability to build continuously upon their previous state of expertise. The requisite life-long learning often builds on extensive formal expertise, although such expertise may have been attained by informal learning, as Hilton (2001) points out. The knowledge worker has access to, learns and is qualified to practise a body of knowledge that is formal, complex and abstract (Thompson, Warhurst and Callaghan 2000).

Who, then, is a knowledge worker, and who is not? Departing from Machlup's (1962) and Porat's (1977) reliance on occupational classifications, more recent studies do not place knowledge workers in any particular industry or occupational category. In this regard, Winslow and Bramer (1994) conclude that a knowledge worker is simply someone who interprets and applies information to create and provide value-adding solutions, and to make informed recommendations. We might conclude from this that knowledge workers are far from evident to pin down in a straightforward definition since they do not fit within an empirically homogenous category. What we might say is that more generally and by way of summary is that particular aspects of work might be classified as knowledge work if it requires extensive formal *education* and *continuous on-the-job learning* and transferable *skills*. The *nature of knowledge work* is characterised by a low level of standardisation, working with abstract knowledge and symbols. *Organisationally*, it ranges from professional bureaucracies to self-managing teams, job and task circulation; and the *medium of work* consists of symbols and/or people (Pyöriä 2005: 124). To my mind, however, these characteristics, while they are useful and informative, do not touch on the heart of the matter, which is crucial in determining to how to "manage" [read *control*] knowledge workers for the purposes of maximising their motivation to work and their efficiency.

I would argue that the incisive definition of knowledge work offered by Kelloway and Barling (2000) trumps the definitions summarised above. They describe the aspect of a job that might be construed as knowledge work as “discretionary organizational behavior” based on the use of knowledge (Kelloway and Barling 2000: 10). This definition appears to be very broad, but it does draw a line between “white-collar” workers who manipulate information as part of their job description, and knowledge workers that have to be fully present and ply their creative problem-solving skills to generate knowledge and knowledge-based solutions from the information at their disposal. Specifically, it encompasses, first, the *creation* of new knowledge and innovation; second, the *application* of existing knowledge to current problems; third, the *transmission* of knowledge; and fourth, the *acquisition* of knowledge through teaching and learning (Kelloway and Barling 2000: 10). If knowledge work is indeed “discretionary behaviour”, it is work that may be encouraged, but not demanded. Employees are likely to engage in knowledge work only to the extent that they have the ability, the motivation, and the opportunity to do so (Kelloway and Barling 2000: 10). Whether or not an employee “chooses” to engage in knowledge work depends on whether or not s/he can and wants to do so when the need arises.

This implies that the advent of knowledge work substantially challenges the managerial and organisational practices of the past. Drucker (1999: 84) suggests that increasing knowledge worker productivity “requires that knowledge workers want to work for the organisations in preference to all other opportunities”. This “wanting to work” is an affective commitment (Meyer and Allen 1997). If this argument is correct, then simply increasing the stock of knowledge is not enough. Rather, organisations need to elicit the discretionary use of knowledge actively in a way that maximises it efficiently, which is easier said than done, given the challenges that come with working with people. If knowledge work depends on the disposition and inclination of the working subject, then knowledge workers are not organisational assets, but investors in the organisation (Pfeffer and Sutton 2000). So how then do organisations get knowledge workers to invest in them voluntarily?

Capitalising on human capital

To gain some insight into how organisations orchestrate the voluntary investment of knowledge workers, in this section I draw on the research of Burud and Tumolo (2004) to survey the human capital literature. What I seek to understand here is how the literature proposes to leverage human capital to ensure the optimal efficiency of knowledge workers. Human capital is an intangible asset, yet indispensable to organisational success. As is evident from the discussion above,

it is indispensable because it is the definitive *investment* that secures a company's economic growth in the post-industrial information age. Value is vested precisely in workers' ability to perform knowledge work most effectively by being optimally creative, flexible, knowledgeable and responsive to the changing demands of the problem-solving task at hand. When one understands that human capital cannot be divorced from the human and that knowledge work is discretionary, it is clear that rather than mere assets, knowledge workers are themselves investors whose investment needs to be elicited and cannot be commanded.

Collins's *Good to Great* (2001) analyses companies that reported 15 years of returns at or below market norms, followed by 15 years with cumulative returns at least three times the market average. One of the main reasons these companies went from good to great is that their managers not only understood how important people are to success, but took this awareness one step further by first "getting the *right* people on the bus, the wrong people off the bus, and the right people in the right seats – and then they figured out where to drive it" (Collins (2001: 13) [my emphasis]).

What Collins (2001) fails to mention is that apart from getting the right people on the bus and in the right seats, one needs to get the right people to *want* to take the bus to bigger and better places. Seven years earlier, Pfeffer (1994) already argued that the right employees are increasingly the best way for companies to achieve and sustain a competitive advantage. Why? Because the neoliberal business world is one in which deregulation drives prices down, resulting in fiercer competition – one in which communication technology continues to fuel the growth in globalisation, increasing consumers' access to information about products and services around the world (Ohmae 1990). Communication technology puts these products and services at consumers' disposal, irrespective of physical location, by creating Internet-based marketplaces that facilitate e-commerce. In such a world, it is the skills, relationships and motivation of employees that determine long-term competitive and sustainable success. Continuous innovation and readiness and responsiveness to changes in existing and potential markets are required to gain a competitive advantage, and people are the only way to achieve that. Although computers accumulate data and generate information, only people can make the information usable and turn it into the knowledge sources needed to make impactful business decisions.

The key to maximising knowledge is *human collaboration*. What is called "social capital" or "relationship capital" is the sum of the "trust, mutual understanding, and shared values and behaviors that bind members of human networks and communities and make cooperative action possible" (Cohen and Prusak 2002: 4). Knowledge work in particular is performed in the context

of relationships, since relationships support collaboration, creativity, and interaction, while enhancing commitment and initiative. This is a reminder that *what* one knows cannot be divorced from *whom* one knows: efficiency depends on knowing who knows whom, who knows what, and who can be relied upon. Optimal efficiency, moreover, relies on social synergy – something which arguably cannot be emulated or generated by means of screen-mediated meetings (the consequences of which will only become plain in the post-pandemic world after Covid-19).

Relationships depend on *trust*, and trust is honed over time through many experiences, which is why relationships are hard to replicate quickly. Mutual and meaningful connections enable people to gain a sense of purpose, which feeds their commitment, engagement, and initiative, creating a virtuous circle. Moreover, relations with others improve self-understanding (Walsh, Bartunek and Lacey 1998). While relational connections are distinctly individual, organisational culture can provide a habitat in which they either flourish or wither. Relational capital grows when an organisation is stable, and is destroyed through the volatility of mergers and rapid organisational changes. Relational capital grows in a hospitable work environment in which there is an ecology of trust, mutuality, shared meanings and goals, and common frames of reference shared by people (Cohen and Prusak 2002).

Like all forms of capital, human capital can grow or depreciate, depending on the level of investment made. It has become common parlance in the world of business that *investment in human capital* is non-negotiable for economic success. Likewise, human capital depreciates through unemployment, injury, mental decline, or the inability to keep up with innovation. Optimising one's human capital may take the form of employing highly educated, specialised and skilled employees (getting the right people on the bus) or "up-skilling" and investing in the continuous development, education and training of existing employees.

Of equal importance is knowing how to *manage* this form of capital, which is finely attuned to its environment. The creative, flexible, problem-solving ability of human capital is, in fact, a highly sensitive and fragile ecosystem. The optimal functioning of that ecosystem is a complex balance of cognitive, emotional, spiritual and material factors. Human resilience functions as a mainstay only for as long as this balance is maintained, and it declines, sometimes at an incremental rate, when this balance is off – even if only by a fraction.

Human capital is qualitatively different from machine capital and from financial capital. Drawing on Jean-Jacques Rousseau's 1762 treatise on the nature of man, *Emile, or On Education*, Burud and Tumolo (2004: 16) explain that humans

are more organisms than mechanisms. They are unpredictable. They are idiosyncratic [...] Most importantly, people have the innate capacity to 'self-assemble [...] change constantly, reproduce, learn and self-organize' (Ehin 2000:7). They have their own requirements as complex, whole, 'biological systems seeking to fulfil their needs and aspirations' (p. 8). Bio-logic and not machine logic prevails, which is why efforts to control people inevitably fail. Machine logic is mechanistic; you can dissect a machine into parts, and its inputs generate the same outputs every time. Bio-logic is organic: people don't all react the same way, nor do they just react; they act upon and co-create.

As living creatures, people are evolutionary beings, subject to the constant urge to transform progressively. They naturally resist. A coercive organisational culture that seeks to constrain, command or micro-manage people stunts the natural urge to transform, instead of bolstering positive self-organisation through spontaneous adaptation, but coercion can ultimately not suppress that urge completely.

Drucker et al. argue that seeking to manage human beings is the wrong approach (Drucker, Dyson, Handy, Saffo and Senge 1997). Ehin (2000) urges that organisations should give up any illusion of ruling over human capital, and should not confuse rule with order. The order in which human capital thrives arises naturally when self-organising humans are allowed to act spontaneously and to take initiative, in other words, to participate in the creation of the work project. It is this key insight that the human capital literature harnesses to argue against the overt management of knowledge workers in favour of stealth control.

Drucker (1999) identifies a host of characteristics of knowledge workers that shed light on how they should be "managed". Perhaps the most important is that they see themselves as the equals to their managers and behave like volunteers. This "entitlement" springs from the fact that on account of specialisation they often know their jobs better than their supervisors do. For them, work is more than a mere source of income – for them, work is a source of *meaning*. As a result, they seek a match between their values and those of the organisation. Moreover, knowledge workers tend to choose work that enhances their own capital. Finally, since knowledge workers carry the means of production with them, they are highly mobile – not confined or confineable to one place, to specific hours or age (Burud and Tumolo 2004: 25).

"The ideal worker in today's economy is a technically skilled individual willing to devote heart and mind – as well as hands – to drive results" (Burud and Tumolo 2004: 25). This description of the knowledge worker, along with the

aforementioned characteristics, reveals two sides of human capital. One side of the coin is that these ideal workers expect a lot – they are “high-maintenance”, if you will – in that their level of expertise makes them demanding and entitled, perhaps even insubordinate, in terms of the rules of the human resources game that applied during the industrial age. The other side of the coin is that everything is being demanded of them – complete devotion of their heart, mind and hands. Moreover, they now often have to work without the system of invisible support that takes care of their basic physiological needs, which in the Western industrialised world until around 1960 were often met by a non-working, homemaking spouse in a lower or middle-class one-income household, or by servants in wealthier households, and the psychological needs met by family. Burud and Tumolo (2004) describe this simultaneous preoccupation with work and the demands of the private life of the knowledge worker as a “dual-focus” mode.

I will return to this contention shortly, but first I want to come to a more precise understanding of this “bio-logic investor” called a knowledge worker and how the latest human resources management and development philosophy panders to the *people* behind products and services in such a way that it insinuates subjection ever more aggressively into subjectivisation. As we shall see, knowledge workers are subject not only to the complex control operative through social/digital platforms, but also to an organisational logic of “stealth” control that likewise seeks to co-opt and profit from self-organisation and the human urge towards self-actualisation.

What drives most knowledge workers is purpose, not profit. For them, profit is not in and of itself purpose. As Drucker explains: “Profits for a company are like oxygen for a purpose. If you don’t have enough, after a while you are out of the game.” However, “people who think life is about breathing have missed something” (Drucker cited by Burud and Tumolo 2004: 5). The same can be said for organisations that think that profit is their sole purpose. What they are missing is a purpose that generates the buy-in of their people, a purpose that engenders their people’s passion. In other words, organisations need to “tap the power to fully engage people, and, in turn, to command loyalty, commitment, patience, and perseverance” (Burud and Tumolo 2004: 5).

Apart from purpose, knowledge workers – as employees who consider themselves equals and who act like volunteers – require a very particular managerial style. This style mobilises influence, rather than positional power. It is driven by the insight that giving orders is an indication of leadership failure. As VISA International’s founding chief executive officer Dee Hock – cited by Burud and Tumolo (2005: 6) – puts it: “Ordinances, orders, and enforcement ... are an attempt to compel the kind of behaviour that organisations fail to induce” (Hock 1999: 89–90).

To manage equals or partners, traditional hierarchies have to make way for organic and flexible organisational structures (Burud and Tumolo 2004). Newel, Robertson, Scarbrough and Swan (2002) identify adhocracy (an *ad hoc* or fluid approach) to be the best structure for this purpose. An adhocracy de-emphasises bureaucracy and replaces it with a dynamic environment of self-formed and self-managed work teams with few formal roles and procedures, where decision-making is decentralised to the workers themselves (Mintzberg 1993).

Knowledge workers are primarily motivated by job quality and content. They are driven by job satisfaction rather than remuneration. They seek personal achievement and responsibility and prefer to make their own decisions, since they know their highly specialised jobs and how to structure them for the best results, even better than their supervisors do (Drucker 2003). Increased decision-making responsibility therefore empowers them by increasing their job knowledge, which is the key to their performance (Leach, Wall and Jackson 2003). The ability to think, process and internalise information as knowledge, and the ability to create new concepts, solve problems and make judgments are critical to their performance, so work processes and cultures should be designed to foster these outcomes. Work processes and cultures should act as an invisible support network that facilitates making connections and provides the required resources, rewarding outputs while refraining from constantly monitoring inputs. Getting the right people on the bus and in the right seats and getting them to want to get the bus to its destination makes overt authoritarian supervision superfluous and counter-productive (Davenport 2002). A hands-off flexible managerial approach insinuates work into life by transcending the traditional dichotomy between the professional and the personal. This integration allows for self-management of the worker's time, which affords the knowledge worker increased flexibility to tend to the myriad other dimensions of life beyond work (Burud and Tumolo 2004: 7-8, 35-54).

The idyllic picture that is held up for us is that of a sophisticated worker that does what s/he pleases, and what s/he loves to do, exempt from supervisory interference, with a large amount of freedom to self-manage work responsibilities and the execution of tasks. The reality of the neoliberal knowledge worker is far less utopian, however.

Ramifications

In this section, I attempt to plot the implications of the conditions of (self-) governance of the knowledge worker by employing Han's (2017) further specification of control as "smart power" that operates in a benevolent guise. Neoliberal knowledge workers often have a job that is meaningful, satisfying, and

absorbing,² but that job – especially the knowledge-intensive, problem-solving aspects – requires razor-sharp focus and complete attention. These workers appear to enjoy almost complete freedom in terms of where and when the job is done – that is, as long as the work is done by the deadline. This flexibility regarding where and when the work is done has been made possible by advances in information technology and the Internet revolution, which for better or worse, means that work is no longer bound to an office or office hours, and hence can be displaced into timeframes and spaces previously reserved for private commitments and leisure. This transposition of work into non-work timeframes and zones has been vastly accelerated by the “COVID-19-rapid” and is probably here to stay in the post-pandemic world of knowledge work, in which flexible hybrid models will become the norm rather than an exception or supplement to traditional models.³ Moreover, for all the freedom and flexibility neoliberal workers enjoy, they remain subject to a neoliberal economic rationality in which efficiency dictates that the employer gets more for offering less. As a result, these workers work all the time.

Subject to neoliberal governmentality, managerial style and philosophy have been adjusted to the demands of the most precious investor in organisational success, the knowledge worker. The aggregate of governance on the macro-level (neoliberal), the meso-level (organisational), and the micro-level (self-governance) has spawned the flexible, placeless (or “agile”), ever-connected, and hence also ever-working subject. Burud and Tumolo (2004) describe a “dual-focus worker”, but I contend that this is very much a single-focused worker who is ostensibly multi-tasking – a worker who is cognitively preoccupied with work

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- 2 This is not to discount David Graeber’s (2018) contention that many jobs that once involved meaningful and satisfying knowledge work have steadily deteriorated to include aspects that are now mere box ticking and bean-counting exercises, for example, formerly interesting work in the media and academia, where time is now increasingly taken up by completing compliance forms and time allocation surveys. More time is spent on reporting on work done than on doing the actual work. According to Graeber (2018), this accounts in part for why, instead of being enabled by technological advances to work a 15-hour week, as John Maynard Keynes predicted in 1930, many seem to be busier than ever. Graeber (2018) claims that real reason for keeping former knowledge workers employed in trivial jobs (or “bullshit” jobs, as he calls them) is political – a population kept fully occupied with “made-work” is less likely to revolt.
 - 3 Trengrove (2021) reports that many companies in South Africa (and elsewhere) had to re-invent what they do and how they work on account of the lockdown measures during COVID-19, and predicts that the practice of working flexible hours remotely in many instances is here to stay. This will increasingly change the priorities of how much and what type of space an organisation needs – organisations will prioritise ubiquitous connectivity and secure information technology services. Organisations reportedly no longer consider presenteeism as a measure of an employee’s value. In future, workspaces may well be designed to accommodate only 40% to 50% of employees simultaneously, Trengrove (2021) maintains.

while also tending to a kaleidoscope of everyday life tasks on the side. Multi-tasking has become the new routine. This worker is isolated – amid “teamwork”, family and friends – task-oriented, and depoliticised. One might argue, to use Hannah Arendt’s (1958) terminology, that in the form of the neoliberal knowledge worker, *homo faber* regresses to *animal laborans*.⁴ Richard Sennett explains this distinction as follows in *The craftsman* (2008: 7):

Animal laborans is, as the name implies, the human being akin to a beast of burden, a drudge condemned to routine. Arendt enriched this image by imagining him or her absorbed in a task that shuts out the world, a state well exemplified by Oppenheimer’s feeling that the atomic bomb was a “sweet” problem, or Eichmann’s obsession with making the gas chambers efficient. In the act of making it work, nothing else matters; *Animal laborans* takes the work as end in itself.

By contrast, *Homo faber* is [Arendt’s] image of men and women doing another kind of work, making a life in common. Again Arendt enriched an inherited idea. The Latin tag *Homo faber* means simply “man as maker”. [...] *Homo faber* is the judge of material labour and practice, not *Animal laborans*’s colleague but his superior. Thus, in her view, we human beings live in two dimensions. In one we make things; in this condition we are amoral, absorbed in a task. We also harbour another, higher way of life in which we stop producing and start discussion and judging together. Whereas *Animal laborans* is fixated in the question “How?” *Homo faber* asks “Why?”

The neoliberal knowledge worker thus in fact works all the time in the heterotopia of every other daily activity. It is a heterotopia in that it encapsulates in a single space several incompatible spatial elements (Foucault 1967). The knowledge worker is displaced, yet always localisable. Armed with a cognitive apparatus that continues working on the complex problems of the day and armed with smart devices constantly at hand, working continues while life happens. As a result, this ever-increasing segment of the workforce ends up *living for the sake of work*, as opposed to working to live. This might be construed as an overinvestment in work with no direct correlation to any increase in quality of life.

Quality of life might be measured in vastly diverse ways. It may generally be postulated that these workers may earn more, but the additional earnings do not correlate proportionally with any perceptible or apparent increase in well-being.

4 Classical modernists such as Adam Smith, Locke and Marx placed the notion of labour at the centre of their work. The resultant conflation of labour and work was famously challenged by Hannah Arendt in *The Human Condition* (1958).

In fact, various authors, such as Wilkinson (2005) and Wilkinson and Pickett (2010) have documented and compellingly argued that there is a causal relation between the conditions typical of neoliberal society on the one hand, and the severe and noticeable rise in mental and physical disorders on the other. The rise in mental and physical disorders has also been reported by Verhaeghe (2012) and Han (2017). The corrosion of social bonds is noted by Sennett (1998, 2003, 2006).

At what point and for what reasons did knowledge workers start to live for the sake of work? How has knowledge work – construed as “discretionary behaviour” – become compulsive? The short answer, I propose, is that neoliberal governmentality has found a way to turn “wanting to work” into “living to work”. Various factors play a role: the very *nature* of knowledge work, which is non-routine, engaging and satisfying, and the shrewd neoliberal insight that economic success requires *investment in human capital*. This awareness, coupled with an *organisational culture* that makes available the necessary resources and the requisite freedom for entrepreneurial activity, enables neoliberalism to succeed in eliciting this kind of discretionary behaviour.

Considered more holistically, there appear to be three linked reasons for this development. Neoliberal knowledge workers *have to* work – they overinvest in work to respond to the internalised coercion to be ever more efficient. They work all the time from anywhere, because it is *possible* to do so through connected smart technologies, giving the worker the capacity, and management the control. Most intriguingly, neoliberal workers paradoxically *want* to work all the time, deriving satisfaction from the challenge posed by their work, which requires non-repetitive problem-solving and hence ingenuity and creativity.

Neoliberal governmentality capitalises on all three of these factors combined. Overinvested knowledge workers find themselves in fully-fledged societies of control – chilling incarnations and perfections of Deleuze’s (1992) prophecy. An important aspect of this society of “free-floating” control, which has replaced the disciplinary society made up of environments of enclosure characteristic of every institution from the family to the school, is that what Deleuze (1992) calls the “dividual” who is made to believe that s/he can “do whatever s/he wants” (as long as the job gets done). Control presents itself as a kind of freedom, in fact, an “excess of freedom”. Herein the digital Panopticon differs in an important way from the Orwellian scenario of constant paranoia induced by Big Brother, as Han (2017: 69) explains. On the contrary, constant surveillance is supposedly not something to worry about, but something to welcome, knowing that it serves our best interests. It serves to monitor our behaviour in order to anticipate our needs. Above all, it serves to ensure our safety and security, be it in a time of global terror or a global epidemic. In the context of knowledge work, control is

accompanied by a *feeling of freedom*.⁵ The feeling of freedom that accompanies control blinds us to the fact that control disperses responsibility throughout life. In fact, a diffuse matrix or network of information-gathering algorithms track, code and interpret everything into patterns that are constantly being interpreted and adjudicated. Mobile devices equipped with GPS and connected to the Internet can track everything from our sleeping patterns to our Internet surfing behaviour. If you have nothing to hide, the argument runs, you have nothing to fear; hence the compulsion in societies of control to police oneself through self-responsibilisation and to “share”. We voluntarily “share” the most intimate details about ourselves on social media platforms to collect “friends”, “followers”, “reads” and “likes”. Törnberg and Uitermark’s (2020) social Synopticon emphasises the social dimension of this form of control that encapsulates a watching while being watched – more so than Han’s (2017) digital Panopticon – but both recognise that this form of control mobilises the freedom of the (in)dividual subject. Han’s (2017) notion of “friendly Big Brother” stresses the apparent leniency and benevolence of this form of control. By contrast, Zuboff’s (2018) notion of “instrumentarian power” alerts us to the embedded algorithms in social/digital platforms, designed to anticipate users’ behaviour and generate predictive data that do not depend only on *monitoring* online behaviour. These data are generated by actually *directing* online behaviour.⁶ Törnberg and Uitermark’s (2020) social Synopticon sketches the isolated, working, screen-bound subject sending out echoes in cyberspace in her/his search for self-affirmation. From the perspective of this subject, constant surveillance has become vital since it is the source of social “bonds”, but also of safety, security, well-being and health.

Importantly, coercion works differently from control, and the difference is instructive. Coercion (*you have to*) is an externally applied force that pushes or pulls, but does not incite. It may achieve the minimum amount of compliance, but only rarely conviction or whole-hearted buy-in.⁷ Quite the opposite: more often than not, it evokes passive resistance in the form of the pervasive phenomenon of procrastination. Control (*I can*), as we have seen, is not seen

5 This may change soon if privacy legislation fails to prevent employers from using the worker’s computer camera for surveillance. In many other types of work, digital surveillance and algorithmic management of productivity have already become common practice.

6 Consider, for example, *Cambridge Analytica* society, that is, algorithms that control the creation of our needs and the analysis of individual preferences obtained, for example, through the analysis of the presence of individuals on social media platforms.

7 If force of a physical or psychological kind can result in a kind of Stockholm syndrome, then invisible complex control may have the same effect, especially in those workers that derive great satisfaction from complete compliance. Workers that are likely to fall into this category may colloquially be described as people-pleasers.

as a limitation of freedom, but as empowering, benevolent, and beneficial. Once something is internalised as “what is good for me”, it becomes self-control, self-responsibilisation and self-care. As noted, Han (2017) emphasises the *positivity* and *permissiveness* of power in the neoliberal regime, which makes it an exceptionally efficient technology of power, since it ensures that people subordinate themselves to power relations *of their own volition*: “It proves so effective because it does not operate by means of forbidding and depriving, but by pleasing and fulfilling” (Han 2017: 36). Complex control that appears open, informal and non-linear operates to turn compliance into wholehearted conviction. Neoliberal working subjects do more than is required of them, and it feels good and right.

Han (2017: 37–38) identifies a few mechanisms of what he terms the “smart power” employed by neoliberal governmentality, which to my mind helps to explain – at least in part – how it succeeds in producing working subjects that *like* doing more than is required, that is, working subjects that volunteer discretionary behaviour. It does not operate openly, but instead covertly guides the working subject’s will to its own benefit. It does not rely on “free choice (*Wahl*)”, according to Han (2017: 38), but offers working subjects the opportunity of “free selection (*Auswahl*)”. Since it constantly invites our opinions, our needs, wishes and preferences, it is able to read and assess our conscious and unconscious thoughts. Based on this, and combined with its own agenda of ever-increasing productivity and the maximisation of profit, it presents the worker with a “menu”⁸ from which s/he can “freely” choose from a list of tailor-made options designed to engage voluntary self-organisation and self-optimisation. Hence, it manages to remain invisible. Power that remains invisible does not invoke any desire for resistance. Smart power therefore succeeds in getting workers to subjugate themselves by consuming and communicating as “they click Like all the while” (Han 2017: 38).

The overinvestment in work appears to be disproportionate to necessity or correlative gain. On the face of things, the overinvested worker seems to enjoy no perceived increase in quality of life⁹ even if s/he earns more. In 1905, Weber wrote about modern humanity (*Menschentum*) and its loss of freedom and referred to people as mere “cogs in a machine” (Owen 1994: 101). The present incarnation of the subjectivity of knowledge workers would appear qualitatively different,

8 This is exactly what Foucault (1982: 203) is referring to – and no doubt his discussion is the source informing Han’s argument – when Foucault contends that the exercise of power consists in guiding the possibility of conduct and putting in order the possible outcome.

9 What “an increase in quality of life” might mean to different individuals is obviously very different for each person. Here I refer to the fact that neoliberal knowledge workers work all the time, which results in less time for recreational activities and social interactions on the one hand, and a rise in stress-induced psychiatric disorders ranging from depression to burnout on the other.

as they are not bogged down by soul-destroying and mind-numbing routine work, but are challenged to be increasingly creative and innovative by every new work assignment. But like those cogs in the social machine, their entrepreneurial dedication betrays an almost vocational devotion. In the world of knowledge work, creativity appears to be the new conformity. This connected, creative cog might even be capitalism's most ingenious invention to date – content, self-controlled, self-motivated and the perfect consumer.

Conclusion

Under the conditions of apparently greater autonomy and discretion that is so pervasive in the management literature discussing knowledge workers, governance takes the form of “control”. Here “control” should be conceived along the lines of Foucault's conception of government as the “conduct of conduct” (Foucault 1982: 203). Control involves the exercise of power that guides the possibility of conduct and pre-designs the possible outcome, while allowing subjects to act (behave) within an apparently open field of possibilities. This implies that control as a form of government connects techniques of subjection to techniques of self-formation or subjectivisation (what Foucault calls *subjectivation*). Techniques of subjection, as Foucault explains, are not entirely exempt from techniques of subjectivisation, but are distinct from them in essential ways (Foucault 1982: 203). Building on from Foucault's argument, I contend that the intricate process of subject-formation within the power constellations of neoliberal governmentality is made possible by what Törnberg and Uitermark (2020) call “complex control”. Han (2017: 37) refers to it as “smart power” – power that mobilises freedom itself to control the subject's conduct, to orchestrate the self-organisation of individuals themselves. Zuboff (2018) theorises this phenomenon as “instrumentarian power” that monitors algorithmically directed “spontaneous” online behaviour.

Control, then, operates below the radar, as an insidious, indirect elicitation of workers' buy-in. It orchestrates a circumscribed guided set of possible actions below the veneer of limitless choices that pre-arrange the possible outcome. Knowledge workers are “managed” by offering them a myriad (but in fact limited number) of possibilities for organising their “work-life balance” in order to choreograph the desired outcome of optimal efficiency. This form of subjection is matched by unprecedented subjectivisation, which permits the working subject to actively enhance his/her own productive capacities. Subjectivisation – the government of the self by the self – holds the key to resisting subjection, but it now becomes a kingpin in the exhaustive execution of subjection. The wicked genius of the American brand of neoliberalism, or Anarcho-liberalism, associated with Milton Freedman and the Chicago School, as theorised by Foucault (2008),

relies on the realisation that all labour, including wage labour, can be understood as a *voluntary* investment or entrepreneurial activity carried out in the individual pursuit of some sort of surplus value, future return, or wage (Foucault 2008: 224). This is the basis of the theory of human capital, which is different from other forms of capital in that it requires the human to be present if it is to be converted into surplus wealth. An in-depth consideration of the neoliberal theory of human capital goes beyond the scope of this paper, so suffice it to say that this theory recognises that the worker is fundamentally conjoined with her/his capacities as a kind of assemblage with a dynamic productive potential. This kind of labour – conceived as “capital-ability” (Foucault 2008: 225) – is not merely a “factor of production”. Rather, it has a qualitative and dynamic aspect. That is, in neoliberalism, the worker is in a very real sense “an active economic subject”, not just at work but in everything s/he does (Foucault 2008: 223). This working subject is not a partner in a “process of exchange” as was traditionally conceived of, but a dynamic “entrepreneur of himself”, constantly balancing costs and benefits, and constantly mindful of the future impact of choices even in seemingly non-economic spheres. Han (2017) sees this subject as a “project” that in the hope of some return, pursues her/his own transformation by enhancing her/his basic physical capacities, mental skills and attitude through the market (Foucault 2008: 226, 229).

To capitalise on this form of labour, the active economic subject requires an organisational logic that controls the worker’s conduct *imperceptibly*, not just while that worker is at work, but in every aspect of the worker’s existence. The control needs to be imperceptible because human capital depreciates in the face of overt coercive measures, since human capital in the form of knowledge work requires the worker’s *voluntary devotion* in order to be optimally effective. The control needs to extend to every aspect of the worker’s existence, because the worker’s efficiency depends on his/her mental and physical well-being. This worker needs to buy into the neoliberal governance and accept the premise of the market, which in turn results in the constant development of her/his own human capital in order to survive and prosper. If s/he refuses to submit to the market rationality that inculcates an all-pervasive cost-benefit decision-making process, the worker will experience some measure of discomfort in the form of unemployment, job loss or insufficient income, for example, thereby allowing the market to correct the worker’s choice calculus. In this sense, the hegemony of neoliberal life appears to foreclose the possibility of any alternative mode of existence. It is this broad ontological power of neoliberalism that Foucault (2008) recognises. This power implies that

by virtue of the way neoliberalism extracts surplus today –
through the production of knowledge, desires and affects – the

question of power is not simply a question of the production of subjectivity but, rather, a question of the real and intense ways in which the 'commanding heights' of the economy have become immanent through the hegemony of immaterial labour (Kiersey 2011: 37).

In this way, neoliberalism succeeds in subsuming the volitional devotion of the hearts, minds and hands of knowledge workers not only in neoliberal production, but in the very reproduction of social life.

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