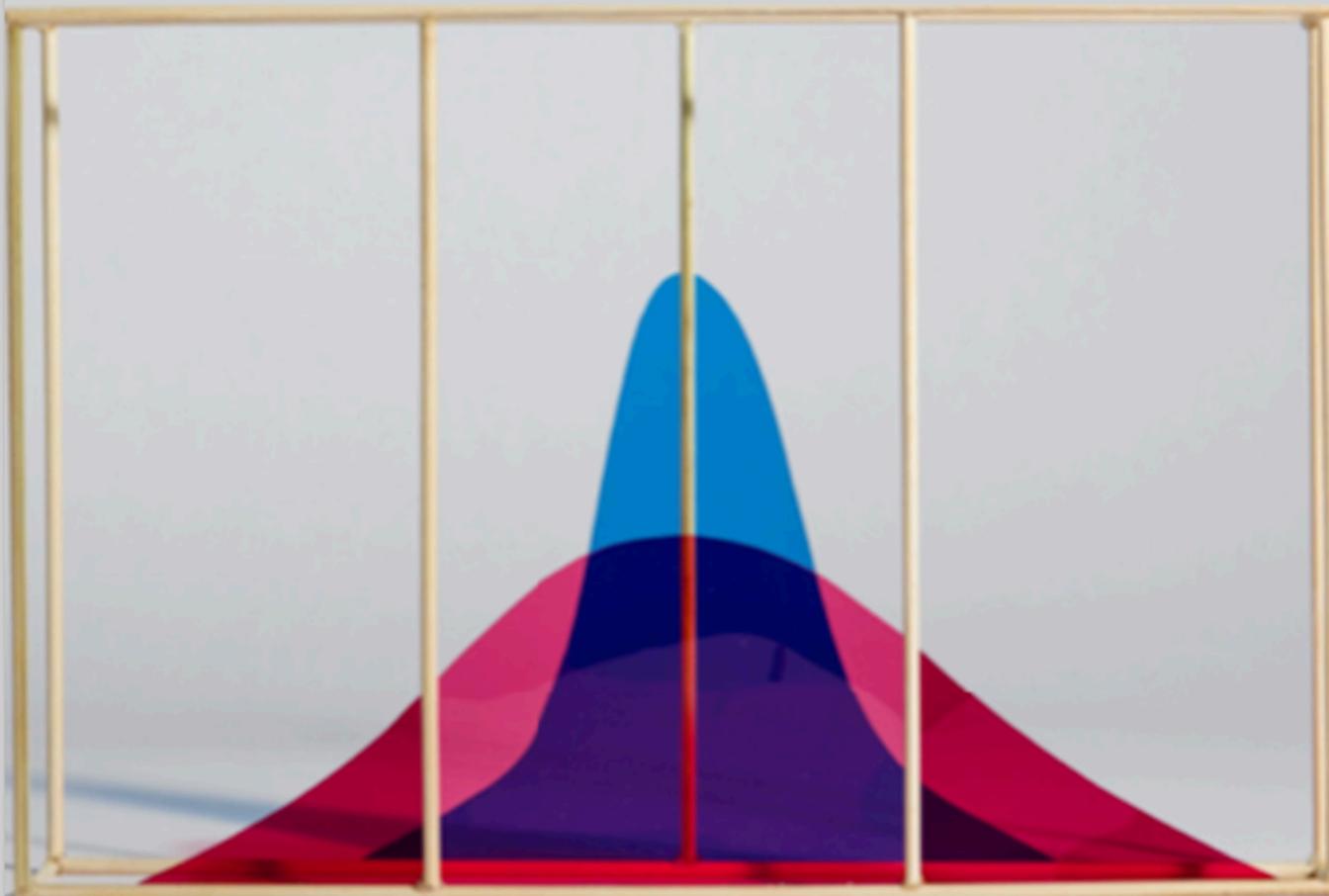


# Beyond measure



**ephemera:** theory & politics  
in organization

## **What is *ephemera*: theory & politics in organization?**

*ephemera* is an independent journal, founded in 2001. *ephemera* provides its content free of charge, and charges its readers only with free thought.

### **theory**

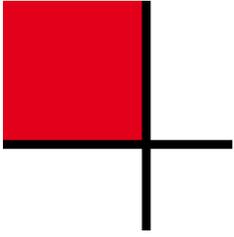
*ephemera* encourages contributions that explicitly engage with theoretical and conceptual understandings of organizational issues, organizational processes and organizational life. This does not preclude empirical studies or commentaries on contemporary issues, but such contributions consider how theory and practice intersect in these cases. We especially publish articles that apply or develop theoretical insights that are not part of the established canon of organization studies. *ephemera* counters the current hegemonization of social theory and operates at the borders of organization studies in that it continuously seeks to question what organization studies is and what it can become.

### **politics**

*ephemera* encourages the amplification of the political problematics of organization within academic debate, which today is being actively depolitized by the current organization of thought within and without universities and business schools. We welcome papers that engage the political in a variety of ways as required by the organizational forms being interrogated in a given instance.

### **organization**

Articles published in *ephemera* are concerned with theoretical and political aspects of organizations, organization and organizing. We refrain from imposing a narrow definition of organization, which would unnecessarily halt debate. Eager to avoid the charge of 'anything goes' however, we do invite our authors to state how their contributions connect to questions of organization and organizing, both theoretical and practical.



ephemera

*theory & politics in organization*

ephemera 20(3), Aug 2020

## **Beyond measure**

Nick Butler, Helen Delaney, Emilie Hesselbo and Sverre Spoelstra

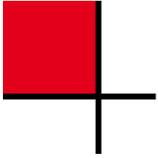
Published by the *ephemera* editorial collective: Bernadette Loacker, Birke Otto, Christian Garmann Johnsen, Christos Giotitsas, Ekaterina Chertkovskaya, Emil Husted, Justine Grønbbæk Pors, Jette Sandager, Karolina Mikołajewska-Zajac, Kenneth Weir, Lena Olaison, Lisa Conrad, Márton Rácz, Mie Plotnikof, Nick Butler, Ozan Nadir Alakavuklar, Randi Heinrichs, Rowland Curtis, Yousra Rahmouni Elidrissi.

First published for free online at [www.ephemerajournal.org](http://www.ephemerajournal.org).

ISSN (Online) 1473-2866

This work is licensed under the Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 Unported. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/3.0/> or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.

Front cover: artwork by Richard Ibghy and Marilou Lemmens from the series *Each number equals one inhalation and one exhalation* (2016-17). *ephemera* wishes to thank the artists for kindly allowing us to use the image.



## Table of Contents

### Editorial

Beyond measure	1-16
<i>Nick Butler, Helen Delaney, Emilie Hesselbo and Sverre Spoelstra</i>	

### Exhibit

Concrete abstractions	17-45
<i>Richard Ibghy and Marilou Lemmens</i>	

### Articles

Grooving matter(s): 'Taking measure' by touch	47-66
<i>Kevin Pijpers</i>	

The algorithmic panopticon at Deliveroo: Measurement, precarity, and the illusion of control	67-95
<i>Jamie Woodcock</i>	

Subverting capital's temporality: A critical reappraisal of laziness	97-121
<i>Yari Lanci</i>	

Evaluation and the tension between generalization and particularity: The negotiation of supplementary child allowance in a cooperative	123-152
<i>Nina Pohler</i>	

A number is worth more than a thousand pictures: The case of designers' cynical resistance through quantification	153-186
<i>Ulises Navarro Aguiar</i>	

## Notes

Sucking stones: Absurdity, paradox and quantifying the unquantifiable in cross cultural management studies 187-201  
*Gregory Allen and Robert Campbell*

'This bag provides 185 school meals': Ethical commodities and the quantification of good 203-218  
*Lisa Daily*

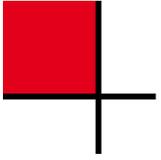
After measurement 219-234  
*Tom O'Dea*

## Reviews

Collective chronopolitics 235-244  
*Armin Beverungen*

Digital powers: Surveillance and economic logics in a datafied world 245-253  
*Mikkel Flyverbom*

Against transparency: Surveillant assemblages, partition and the limits of digital democracy 255-263  
*Chris Land*



## Beyond measure

Nick Butler, Helen Delaney, Emilie Hesselbo and Sverre Spoelstra

### The numbered

Elias Canetti's 1956 play *The numbered* tells the story of a society in which everyone knows exactly when they will die. The people in this society are not given regular names, but instead go through life by their 'proper name': a number that signifies the amount of years they will live. While each character knows their own 'moment', i.e. their time of death, they do not know when anyone else will die because it is taboo to reveal one's age. One's date of birth and death are safely stored away in a locket, hung around their neck not long after they are born. This remains unopened until the day they die, at which point a mysterious character called 'the Keeper' opens the locket and takes it away.

In this society, murders and suicides are impossible because the date of one's death is predetermined. Having lost its original meaning, the word 'murderer' is now reserved for those who dispense with their lockets in an attempt to escape their moment. They become fugitives and, if they are caught, their 'moment' takes place before a crowd, like a public execution.

At the start of the play, an anonymous man celebrates the discovery of the 'moment' as 'the greatest advance in human history'. Another man lauds the fact that a person is now certain of their allotted years, so that 'he stands as firmly on them as his two feet' (Canetti, 1984: 13). But as the story unfolds,

the numbers that these people stand on do not appear to give them the stability foretold at the beginning of the play. Seventy, who is just a little girl, is terrified that her mother, Thirty-Two, could die any moment. A boy called Ten is exempted from going to school since he has too little time to put to use the knowledge he would gain; he spends his days throwing stones at people instead.

The protagonist of the story is a rebellious character named Fifty. Fifty does not know his date of birth and therefore does not know when his 'moment' is supposed to come. What's more, he refuses to believe that one's moment is indeed fixed in advance. With a mixture of persuasion and coercion, he convinces two old ladies to hand over their lockets to him. When he opens them, he finds that they are empty. Like Nietzsche's madman announcing the death of God, Fifty runs through the streets with the news that 'the lockets are empty', setting this strange world on a path of transformation towards something like our own.

Or is it the other way around? Has our world already transformed into a version of Canetti's dystopia? Today, the act of quantifying and measuring exerts a curious grip on us. In our personal lives, we scrutinize our diet, fitness, sleeping habits, and menstrual cycles via digital tracking technologies. In our working lives, we are rewarded for our performance according to key metrics such as balanced scorecards and SMART objectives. Even as academics, we are tempted to evaluate the quality of our scholarship according to citation rate, h-index, and journal score. We now live in a totally quantified society characterized by a profound 'trust in numbers' (Porter, 1996), reflecting our long-standing infatuation with scientific objectivity. If our age has a motto, it would be something like the McNamara fallacy: 'If you can't measure it, it doesn't exist'.

But, as Canetti's play reminds us, numbers do much more than just count what exists. Numbers reveal, but they also hide; they tell us who we are, but also who we ought to become; they show us how happy and healthy we are, but also urge us to adjust ourselves to the norm. Numbers manage us and we, in turn, manage ourselves through numbers. At the same time, the rationale behind these metrics remains inaccessible to us, stored safely away

in a locket, kept secret from all but the few who have access to these systems of enumeration and computation.

In our special issue, we open up this locket and explore questions around measurement in relation to management, organization, and politics – namely, how do processes of quantification intervene in our lives, sideline other modes of judgement and decision, and lead us astray with a trail of numbers. The title of the special issue, ‘Beyond measure’, signals an attempt to denaturalize measurement, to peel back the layers of commensuration to see what lies beneath. In other words, what practical and moral conditions are required for any kind of measurement to take place at all? To this end, the remainder of the editorial will approach the cultural meaning of measurement through a series of striking examples: the kilogram prototype, time-motion studies, psychometric instruments, and the golden mean.

### **The adjustment bureau**

In the south-west suburbs of Paris, a grand villa sits in attractive parkland. Once owned by Marie Antoinette, the villa now houses the International Bureau of Weights and Measures, an intergovernmental agency founded in 1875 to maintain universal standards of measurement across the world. Locked in a vault in the basement of the Saint-Cloud villa, you will find a piece of metal, no larger than a child’s fist, made of platinum and iridium. This is the kilogram prototype, the physical object against which all other weights are measured.<sup>1</sup>

The kilogram prototype, or ur-kilogram, was built to last. Without it, there would be no way to truly standardize the measurements in everything from single-dose pharmaceuticals to large-scale engineering projects. The problem is that the kilogram prototype has been losing mass, slowly but surely, over the last century and a half (Frost, 2018). Shedding perhaps no more than a tiny grain of sand over its lifetime, this loss of mass means that the ur-kilogram is no longer exactly the same weight as it was when it was made in the late nineteenth century. And if the universal standard for

---

1 Thanks to Kevin Pijpers for drawing our attention to the kilogram prototype.

weights is untethered from its core property – unchangeability – then true commensuration becomes virtually impossible.

The kilogram prototype offers a kind of moral lesson about the nature of measurement. Just when we think we have pinned down the precise quantity of a phenomenon, even something as basic as weight, we find that it quickly slips from our fingertips. This provides a warning to psychologists who draw conclusions from IQ scores; managers who subject their employees to aptitude tests; and policy-makers who want to measure the happiness levels of a nation. In all of these cases, we might wonder whether intelligence, aptitude, and happiness are just like that small lump of alloy kept under lock and key in a Paris vault: quantities that seem so immutable, but for one reason or another begin to change over time in strange and unpredictable ways, throwing our common systems of measurement out of whack.

The ur-kilogram also tells a story of how organizations are mobilized in the effort to impose measures on the rest of the world. Like a series of Russian dolls, one organization enfolds another for the sole purpose of maintaining strict standards of universal measurement: the International Bureau of Weights and Measures is controlled by the International Committee for Weights and Measures, which is in turn controlled by the General Conference on Weights and Measures – the ultimate authority that approves the International System of Units, encompassing time, length, mass, electricity, temperature, substance, and brightness. The bureaucratic structures required to define and preserve these fundamental magnitudes are labyrinthine, and one could be forgiven for imagining that the elegant villa in the Parisian outskirts is the setting for a Kafka novel.

Universal standards of measurement are useful only insofar as they allow us to measure other things that are deemed to be valuable in some way. While science is near the top of the list – we cannot think of physics, chemistry, or biology without accurately measuring matter and energy, elements and compounds, or cells and genes – so too is trade. Commercial enterprise is nothing without precise measurement and shared methods of equivalence. For example, how do I know how much merchandise I am buying if not by a predetermined weight or length? Moreover, trade is based on the ultimate

universal measure: money. Cold hard cash renders commensurate almost everything we can imagine, from apples and pears and tables and chairs to factory workers and nursemaids and rocket ships and rollercoasters. Measurement, in other words, is a process of bringing disparate things under the same abstract rubric.

We can begin to see why measurement is so central to capitalist organizations. The key question, for any business owner, is how to optimize input relative to output – that is, to finely calibrate the equilibrium between wages, raw materials, and other overheads in order to turn a profit. Historically, labour has been treated in the same way as any other kind of production cost: a fixed quantity, albeit one measured in time. A universal solvent, money dissolves the qualitative distinction between a clanking piece of machinery and a living breathing human being, reducing both to numbers on an accountant's balance sheet.

But here we encounter a curious paradox. While the quantity of labour remains constant during the working day (for example, no one has to work longer than 48 hours a week in the European Union), the quality of labour can be endlessly manipulated, modified, stretched out like dough. Think of the office worker whose line manager overloads them with more and more tasks: 'I don't care how you do it, I just want it done by the end of the day!'. And so the office worker sighs deeply, puts their head down, and works twice as hard as the afternoon wears on. This is the distillation of management's role in capitalist organizations: to wind up its workforce tighter and tighter like clockwork automata, using techniques of measurement – targets, quotas, and deadlines – to discipline and control employees.

There is perhaps no better illustration of this process than Frederick Winslow Taylor, whose *Principles of scientific management* (1911) has become the origin story of management itself. Famously, Taylor conducted a series of scientific studies to determine the 'one best way' to do work, from carrying small bars of iron to operating a metalworking lathe. Boiled down to its essence, scientific management involves replacing the labourer's rule-of-thumb with detailed instructions on how to perform an activity, measured against the ticking of a stopwatch. It is no coincidence that the language

Taylor used to introduce his system of scientific management draws heavily on the rhetoric of mechanical engineering, a field in which exact measurements matter. On this view, time-motion studies reveal the immutable ‘rules, laws, and formulae which replace the judgment of the individual workman’ (Taylor, 1911: 16), turning a heaving mass of factory labour into mathematical equations sketched in a notebook and abstract trajectories plotted on a graph.

The objective methods and universal standards professed by scientific management were, of course, a sham. In truth, Taylor’s conclusions were largely the result of wishful thinking, data manipulation, and outright fabrication (Wrege and Perroni, 1974). When speaking before the US Congress, Taylor himself admitted to making certain ‘adjustments’ to his calculations by factors of 20 to 225 percent, wildly exaggerating his supposedly scientific observations (Stewart, 2006). But still, the force of Taylor’s claims – the promise to ramp up productivity according to strictly scientific criteria – continue to reverberate in capitalist organizations, from the industrial workplace to the virtual office. While it is relatively easy to dismiss Taylor’s crude characterizations of industrial workers as ‘stupid’ and ‘mentally sluggish’, his strategic reliance on measurement and quantification provides the template for contemporary management, whether in the form of key performance indicators or algorithmic supervision. This is the real lesson of scientific management: let the numbers do the talking, but only after you have decided what those numbers should be.

### **What’s the size of your spirit?**

Psychometric instruments are now so commonplace in organizations that we tend to overlook their history. Designed to quantitatively assess our interior conditions – such as cognitive ability or emotional traits – psychometrics turn the inside out, reaching deep within our souls to find raw scores, quotients, and standard deviations. Put simply, psychometric instruments seek to uncover laws and regularities in our character and conduct. This is a peculiarly modern invention: prior to the nineteenth century, our attitudes

and aptitudes were classified in all sorts of ways, but never in relation to a statistical norm. As Ian Hacking (1990) reminds us, statistical normalcy was a product of a society that had begun to mobilize large institutions to collect and sift through numerical data of every imaginable kind, including births, deaths, suicide, crime, sickness, poverty, education, and so on. Out of this context quantitative psychology – pioneered by Wilhelm Wundt in the late nineteenth century – would emerge, giving birth to the ‘normal person’ with the aid of standardized tests.

Personality tests are perhaps the best known type of psychometric instrument. First used to identify ‘unstable’ soldiers in the First World War and ‘maladjusted’ workers in organizations (Gibby and Zickar, 2008), personality tests originally sought to weed out the abnormal from the normal, the unfit from the fit. Today, personality tests extend well beyond simply identifying dangerous or disruptive elements in organizations; they are now used for recruitment, training and development, cultural engineering, organizational planning, employee engagement, performance evaluation, and other organizational functions. To escape from the realm of psychometric testing one would need to escape from corporate life itself.

Outside work, personality tests are no less pervasive. A quick Google search reveals thousands of questionnaires that all claim to uncover your true character. For example, the DOPE test will tell you if you are a Dove, an Owl, a Peacock, or an Eagle. Or if colours are more your thing, you can take the Insights Discovery test and see if your personality is red, blue, yellow, or green. Most of these measures derive in one way or another from the Myers-Briggs Type Indicator, the most popular personality test in the world, used by private companies and public institutions alike to sort people into one of 16 distinct types (Menand, 2018). Such tests promise to provide you with a ‘freakishly accurate’ description of who you truly are ‘in less than 12 minutes’ ([www.16personalities.com](http://www.16personalities.com)), leading to a deeper understanding of your innermost being. This self-knowledge will help you to relate to other people and, ultimately, will assist you in succeeding in work and life.

While this might sound harmless, there is more here than meets the eye. In particular, personality tests blur the distinction between the descriptive and

the normative. Such tests invariably claim to measure who you are or how you behave in purely neutral, objective terms. But a quick glance at any personality test reveals its language and structure to be heavily laden with normative values. For instance, although one's test results are typically presented as a mere 'transcript' of one's thoughts and inclinations, personality tests subtly nudge us towards understanding ourselves in particular ways – for example, as having 'too little' ambition or 'too much' caution. In other words, some numbers are more desirable than others. Once a personality test is used for organizational purposes, it inevitably does more than simply offer a 'freakishly accurate' description of one's personality; it surreptitiously guides and reshapes employee's beliefs and behaviours in line with corporate imperatives.

Despite their scientific claims, psychometric instruments do not always measure what is strictly speaking measurable. Take the case of leadership studies. Ever since the late 1970s, leadership researchers have conceptualized the leader as someone who is, because of his or her extraordinary greatness, beyond measure. The field of leadership has been in search of superlative adjectives that can explain how these extraordinary characters produce extraordinary results: 'transformational', 'charismatic', 'visionary', etc. The business scandals at the start of the new millennium, in combination with the climate crisis, have only increased the demand for new adjectives that capture the inestimable greatness of leaders, but this time in moral terms: 'authentic', 'spiritual', 'responsible', etc. To study extraordinary leaders, positivist researchers use a battery of psychometric instruments such as the Spiritual Leadership Survey (SLS) or the Authentic Leadership Questionnaire (ALQ) in an effort to measure the immeasurable. But how is it possible to measure one's level of spirituality when the spirit by definition transcends the material world? Or authenticity, the mysterious force that is said to be found only deep within ourselves?

It is difficult to find a leadership researcher who is ready to admit that they are measuring the immeasurable because because it would go against their understanding of themselves as scientists. A scientist measures things that are measurable; their world is not the world of ghosts, spirits, and

superpowers. Yet at least one leadership theorist, Max De Pree, is explicit about something that remains implicit in the work of many others:

I just want to drop a friendly word of warning: don't measure only what's easily measurable. We need to learn how to measure what's significant, how to measure matters of the spirit, how to measure strategic needs, how to measure competence, how to measure results. We also need to learn how to measure moral purpose in our organizations. In the process we need to learn to sense potential and nurture moral purpose. (De Pree, 1997: 15-16)

We recognize De Pree's noble intentions (the world of leadership and other business fads is full of them), but there is something in this new spirit of measurement that is rather disturbing. After all, how is moral purpose something that can be revealed by measuring matters of the spirit? It seems that nothing is off limits for leadership researchers; for them, all aspects of the human condition can and should be measured – and put to work in organizations.

### **The lost moderation of measurement**

Allen Guttman (1978: 49), in his classic book about the role of measurement in modern sports, remarks with a hint of nostalgia that, for the Greeks, 'man was still the measure of all things, not the object of endless measurement'. Of course, Protagoras' famous declaration that man is the measure of all things has been controversial. Plato criticized Protagoras for suggesting that there is no such thing as absolute truth; such a perspective would, in Plato's view, lead to a highly problematic form of relativism. In our times, the idea that man is the measure of all things may also be criticized for its implicit anthropocentrism. Why should man be the measure of all things, rather than, say, the animals that we share our planet with? And what about future generations – shouldn't they be the measure of what we do?

What Protagoras meant has been the subject of much speculation, not least because very few fragments of his work have survived. But even Plato, Protagoras' most trenchant critic, found it necessary to concede that the human experience of the physical world was inescapably tied up with the place of the human within it. Among the Greeks, there was a general

agreement that the material world could not be described from 'outside' but that any determination of things in the world was tied to the person doing the measuring. More important than finding objective measures to describe and control the world around us, such as the ur-kilogram, was to find the right measure in proportion to one's experiences and place in the world. This is the broader Greek context that Guttman hints at, which offers a very different idea of measure than the one to which we have become accustomed.

This type of thinking is expressed clearly in the Aristotelian notion of virtue as the just measure between two extremes, or the 'golden mean'. The virtue of courage provides a classic example: a courageous person judges that some dangers are worth facing whereas others are not. He or she experiences the right amount of fear, i.e. the level of fear that is appropriate to the circumstances. In responding to the situation adequately, the courageous person finds the correct middle path between recklessness and cowardice. He or she can do so because courage has become a part of their character. What is crucial in our context is that the Aristotelian 'just measure' is tied to the person and the circumstances. In other words, what is appropriate in a specific situation is dependent on the situation and on the person who acts within that situation. The right measure can therefore never be objectified. All virtuous behaviour is, in Aristotle's terms, a balancing act, a matter of moderation. Even moderation must be moderated: moderation (*sôphrosune* in Aristotle) is itself a virtue that requires finding the true course between excess and deficiency.

Today, we tend to associate measurement with scientific instruments that measure something 'objectively', i.e. without relying on the perspective of the individual. It is Aristotle's idea of measure, of a 'just measure', that is lost in our culture's obsession with quantitative metrics. The personality test, rather than a sign of scientific progress, is a symptom of our collective inability to measure ourselves in relation to ourselves. When a 12-minute questionnaire is needed to find out who we truly are, then we really do not have a clue about *who* we are. Our point is simple. Measurement can be extremely helpful in many spheres of life, and science wouldn't be science without it. But the project of objectifying everything, including that which

by nature resists objectification, ourselves included, is spiraling out of control. Is a just measure of measurement still possible?

## Introduction to the papers

We open the special issue with a beautiful exhibit provided by artists Richard Ibghy and Marilou Lemmens, called ‘Concrete abstractions’. Their text begins by training our eye to see the art in efforts to measure, quantify, and chart. With historical images and narratives, we are taken back in time to the nineteenth century and the quantification work conducted by early political economists and engineers. We see efforts to depict numbers visually through graphs and diagrams, signaling a shift in how knowledge is produced and used. Throughout the exhibit, photographs of Ibghy and Lemmens’ artworks – material recreations of these graphs and diagrams – invite us to visualize and denaturalize the power relations embedded in the act of measurement. One of Ibghy and Lemmens’ artworks – a piece representing ‘Distribution of performance in a plant where methods have not been standardized’ – is used as the cover image for the special issue. It is a particularly fitting image because it raises questions of normalcy and deviation embedded within statistical measures (in this case, productivity in an industrial context). It thus serves as a reminder that the process of measurement extends ‘beyond measure’ by tapping into other kinds of social and ethical assumptions, guiding human conduct in often subtle and insidious ways.

In the first article of the issue, ‘Grooving matter(s)’, Kevin Pijpers takes a close look at how archeologists ‘take measure’ by using their sense of touch in archaeological fieldwork. Pijpers shows how archeologists rely on a form of tactile and bodily measurement, which reminds us that measurement is not necessarily quantitative. The dominant discourse on measurement, which tries to reduce measurement to objective relations between instruments and things ‘out there’, can easily obscure the fact that measurement can (and does) happen in relation to our body and our self. Pijpers further shows how this sense of touch is bound up with archeological knowledge and its affective dimensions. Overall, the paper demonstrates

how science cannot, and should not, be reduced to quantified forms of measurement alone.

In ‘The algorithmic panopticon at Deliveroo’, Jamie Woodcock explores how precarious workers in the gig economy are supervised and disciplined by digital surveillance technologies. Drawing on in-depth interviews and extensive fieldwork, Woodcock shows how forms of algorithmic management are coming to measure and control the labour process in new and troubling ways. For example, every movement from pick-up to delivery is monitored and assessed by the app-based software, yet the workers themselves do not have access to this data. What’s more, if these workers fail to perform according to unknown metrics, they may find themselves suddenly ‘deactivated’ within the system and expelled from the platform. The case of Deliveroo thus offers a bleak warning about the future of work in which the management of labour is entirely automated, outsourced to an algorithm that is carefully calibrated for maximum efficiency.

In his article ‘Subverting capital’s temporality’, Yari Lanci undertakes a critical reappraisal of the idea of laziness as it appears in a number of literatures, specifically in relation to ‘action’, ‘activity’, and ‘work’. In doing so, the article argues that laziness is often constructed in wholly negative terms. Lanci claims that contemporary discourses that cast individuals or groups as idle or lazy fundamentally serve the politico-economic logics of capitalism – that is, measuring the worth of human beings according to their ‘productivity’. His analysis offers an alternate re-reading of the concept of laziness, ultimately suggesting the power of being strategically lazy to confront, interrupt, and destabilize capitalist social relations and temporalities.

The next article, Nina Pohler’s ‘Evaluation and the tension between generalization and particularity’, examines a radical democratic organization’s efforts to design a model to calculate supplementary child allowance. On principle, the organisation pays equal wages to all. However, the inclusion of new members with children becomes a ‘critical moment’ of radical uncertainty, which sparks a series of deliberations about whether and how to value children and child-raising. The paper analyzes a series of

online discussions between collective members as they construct a standardized evaluation device. Drawing on Boltanski and Thevenot, Pohler reveals how collective efforts to value and evaluate issues of moral complexity are marked by high uncertainty, deep deliberations, and compromised solutions.

Drawing on an ethnographic study of design work at a manufacturing firm, Ulises Navarro Aguiar, in his paper ‘A number is worth more than a thousand pictures’, examines how designers quantify the value of their work by developing their own evaluation tool. Navarro Aguiar shows how this quasi-parodic attempt to make their work ‘count’ in the eyes of engineers and managers is not merely a form of cynical resistance; it also has the unintended effect of strengthening the corporate culture of measurement and undermining the designers’ own professional expertise. As a whole, Navarro Aguiar’s paper highlights what is sacrificed in companies where numbers are prioritized above all else.

In the note ‘Sucking stones’, Gregory Allen and Robert Campbell draw on absurdism and logical paradox to critique positivist Hofstedian cross-cultural management studies. Over the last four decades, Geert Hofstede and those working in the same tradition have amassed a huge cachet of survey data from over 70 countries, all in an effort to measure and quantify differences between national cultures in the service of managerial objectives. The note outlines the absurdity and self-referential paradoxes in a paradigm that models ‘the study of something as complex and clearly subjective as culture on a Cartesian, natural sciences model’ (Allen and Campbell, this issue).

Lisa Daily’s note, “‘This bag provides 185 school meals’”, examines how corporations use the power of numbers to underscore their ethical mission. Focusing on lifestyle brand FEED and shoe company TOMS, Daily shows how both companies use a series of metrics – such as the number of donated shoes or free school meals – to quantify their levels of social responsibility. But the problem is that these one-dimensional quotas tend to obscure more complicated realities around structural inequalities and widespread poverty. In other words, ‘[t]his formation of measurability strives to make objective

and simple that which is subjective and complex' (Daily, this issue). As Daily reminds us, the new regime of ethical capitalism draws on a discourse of philanthropic do-gooding without recognizing its own complicity in patterns of exploitation and alienation.

In his note, 'After measurement', Tom O'Dea discusses the place of optimization in contemporary society. He shows how phenomena that are traditionally seen as qualitative in nature, such as friendship, physical exercise, or sex, become the target of measurement. Once something is measured, it becomes subject to optimization: 'there is a right number of steps, a right number of friends, a right amount of time spent having sex' (O'Dea, this issue). O'Dea explores how human subjects become the object of measurement, and thereby made susceptible to optimization. Understanding how these processes work, O'Dea argues, becomes crucial in trying to come to grips with our increasingly computational world.

We close the special issue with three book reviews. Armin Beverungen reviews Melissa Gregg's book *Counterproductive*. The book provides an exciting re-reading of the history of time management and productivity, unsettling taken-for-granted assumptions about how we measure our working time. Her writing takes us back to early home economics pioneers and the Hawthorne studies, reevaluating them in a feminist light. From there, Gregg scrutinizes all manner of productivity tools such as time management self-help books, productivity apps, and mindful technologies, and ends by inviting us to think differently about post-work productivity.

Mikkel Flyverbom reviews Shoshana Zuboff's *The age of surveillance capitalism*. In what has become one of the 'must reads' of recent years, Zuboff's book speaks directly to 'the role of technology in society, the dominance of tech companies, contemporary mutations of capitalism, and how to protect fundamental human values in the face of these forces' (Flyverbom, this issue). Of particular relevance for this special issue is the trade in human data and futures. Flyverbom's review summarizes the book's key ideas and outlines his take on what future research the book may inspire.

Finally, Chris Land reviews a book that ought to be read alongside Zuboff's tome, a much shorter (64-page) theoretical treatise by Clare Birchall: *Shareveillance*. Birchall is interested in questions about what constitutes transparency and 'open government' with regard to what and whose data is shared, with whom, and for what purposes. For Land (this issue), the book 'offers both a critique of the dominant model of dataveillance and neo-liberal subjectivity, and some potential paths to an alternative use of data'. One of the alternative paths that the book ends with is the possibility for radical, open-access academic publishing and shared, collective authorship to disrupt and resist dominant quantified models of knowledge production in academia – something close to the hearts of *ephemera* and its readers.

## references

- Canetti, E. (1984) *The numbered*, trans. C. Stewart. London: Marion Boyars.
- De Pree, M. (1997) *Leading without power: Finding hope in serving community*. San Francisco: Jossey-Bass.
- Frost, N. (2018) 'A brief history of the kilogram, and why scientists are ready to revise it', *Quartz*, 12 November. [<https://qz.com/1458672/the-history-of-the-international-prototype-kilogram>]
- Gibby, R.E. and M.J. Zickar (2008) 'A history of the early days of personality testing in American industry: An obsession with adjustment', *History of Psychology*, 11(3): 164-184.
- Guttmann, A. (1978) *From ritual to record: The nature of modern sports*. New York: Columbia University Press.
- Hacking, I. (1990) *The taming of chance*. Cambridge: Cambridge University Press.
- Menand, L (2018) 'What personality tests really deliver', *The New Yorker*, 3 September. [<https://www.newyorker.com/magazine/2018/09/10/what-personality-tests-really-deliver>]
- Porter, M. (1996) *Trust in numbers: The pursuit of objectivity in science and public life*. Princeton: Princeton University Press.

Stewart, M. (2006) 'The management myth', *The Atlantic*, June. [https://www.theatlantic.com/magazine/archive/2006/06/the-management-myth/304883]

Taylor, F.W. (1911) *The principles of scientific management*. New York: Harper and Brothers.

Wrege, C.D. and A.G. Perroni (1974) 'Taylor's pig-tale: A historical analysis of Frederick W. Taylor's pig-iron experiments', *Academy of Management Journal*, 17(1): 6-27.

## **acknowledgement**

This special issue and the *ephemera* conference 'Beyond measure', which took place at Stockholm University on 1-2 June 2017, received funding from the Swedish Research Council (2015-01100) and Jan Wallander and Tom Hedelius' Research Foundation (P2015-0106:1).

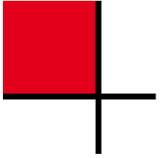
## **the author**

Nick Butler is a member of the editorial collective of *ephemera*.  
Email: nick.butler@sbs.su.se

Helen Delaney is an affiliate member of the editorial collective of *ephemera*.  
Email: h.delaney@auckland.ac.nz

Emilie Hesselbo is a doctoral candidate at the Department of Business Administration, Lund University, Sweden. Her thesis explores the normative beliefs produced by leadership measures.  
Email: emilie.hesselbo@fek.lu.se

Sverre Spoelstra is an affiliate member of the editorial collective of *ephemera*.  
Email: sverre.spoelstra@fek.lu.se



## Concrete abstractions

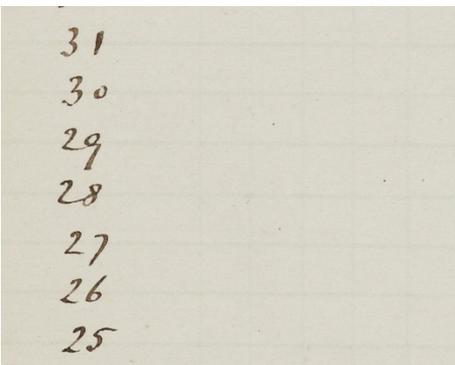
Richard Ibghy and Marilou Lemmens

### Spaces of observation

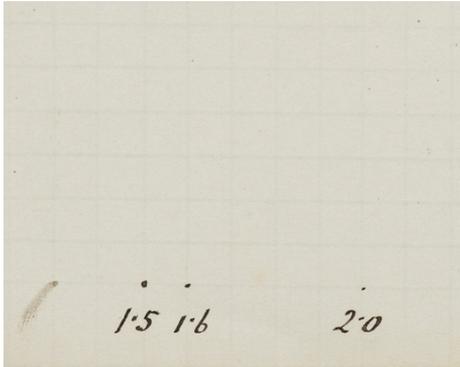
Space begins by tracing signs on a blank page.



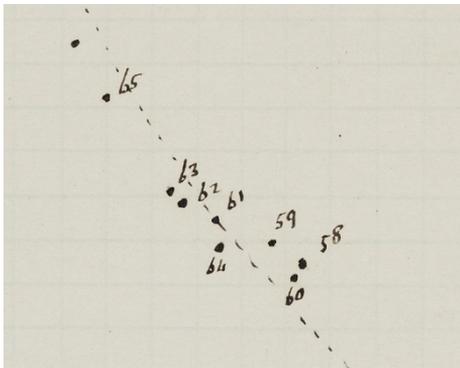
A series of numbers climb the left margin, one on top of the other.



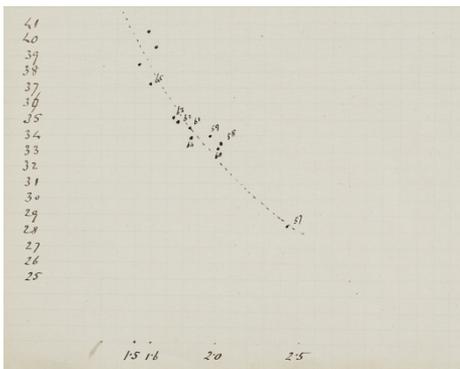
Another series, less dense, just long enough to establish scale and direction, appears at the bottom of the page, from left to right.



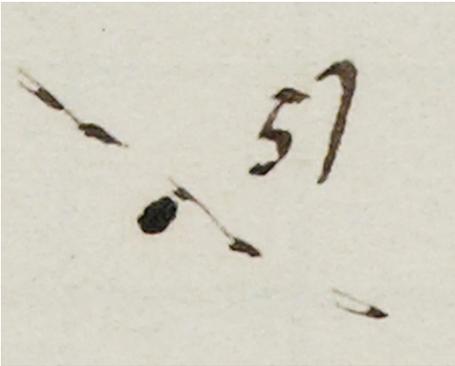
More numbers, and an equal quantity of dots, have been placed around the centre of the grid. Unlike the first two series, they are irregularly distributed.



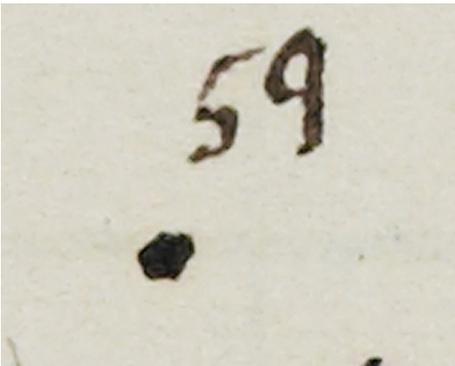
The numbers on the left represent quantities. At the bottom are prices. The unruly ones, years. Perhaps, the whole graph, drawn by William Stanley Jevons in 1865, represents the demand for coal.



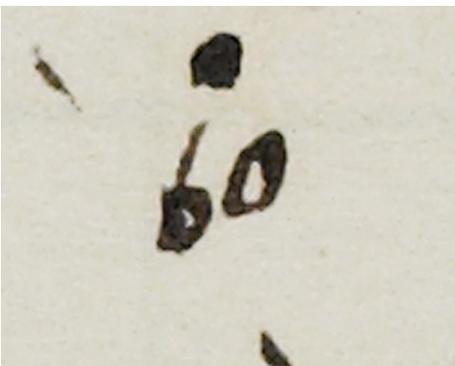
This is the year 1857.



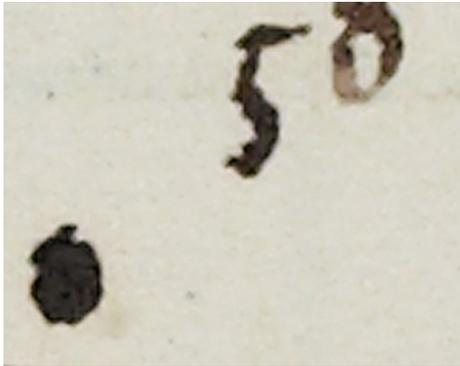
This one is 1859.



This is 1860.



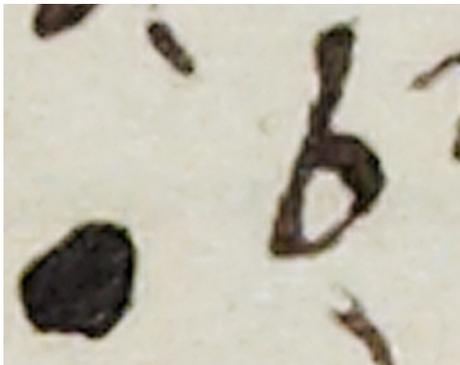
This is 1858.



This is 1863.



This is 1862.



This is 1861.



And this is 1865.



Later, almost as an afterthought, a dashed line is drawn.



It does not represent anything.



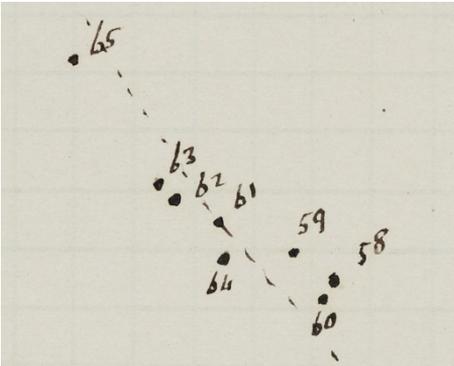
Yet its focus and regularity appear to call the dots to order,



to a regular function.



Suddenly, the isolated dots look confused, disorganized, almost stupid.



### From political economy to economics

The drawing was produced by the nineteenth-century political economist William Stanley Jevons. It is one of the earliest known attempts to derive a mathematical function from plotting statistical data on prices and quantities.

In the graph, we can recognize the function by the dashed line.

It is interesting that the dashes do not connect the dots, which would have provided an irregular line; rather, the dashes form a smooth curve, indicating where Jevons thought the dots would have gone had the observations been recorded more accurately.

A smooth curve assumes that the relationship between the two variables – the historical price of coal and the quantity of coal sold at that price – are directly correlated.

It was at the end of the nineteenth century, when political economists stopped gaping at individual dots and started looking for patterns in the data, for ‘social facts’, that their field of study gave birth to economics, or the science of economy.

Today, even a cursory comparison of economics with other social and natural sciences reveals the unusual emphasis economists place on the use of graphs. Conversely, political economists were rather late to embrace the use of statistical data in their field of study.

## **The armchair**

In Victorian times, the political economist was very much like a private detective: a skilled investigator who had learned to put his talents for observation to good use.

Arriving at the scene of a crime, the political economist would round up the usual suspects and interrogate them. Drawing out relevant bits of information, he would attempt to make associations between them, always on the lookout for necessary connections and inconsistencies. What especially excited him was searching for possible motives, and finding the one that best fit the crime. For he knew, as did any private detective worthy of his profession, that he was in the business of generating motives; he was consumed by a fascination for the dark and self-interested side of human nature.

The political economist often recorded his observations in a duodecimo-sized notebook – large enough to contain handwritten text, small enough to carry around at all times (fig. 1). On the right-hand page, it was common practice to record numerical facts, notes from conversations, excerpts from other texts, and personal experiences. Commentaries, references to other sources, noted discrepancies, and general insights were then added to the left-hand page. In this manner, the literary space of the notebook became an epistemic tool that combined observation, reflection and conjecture to infer fundamental human principles.

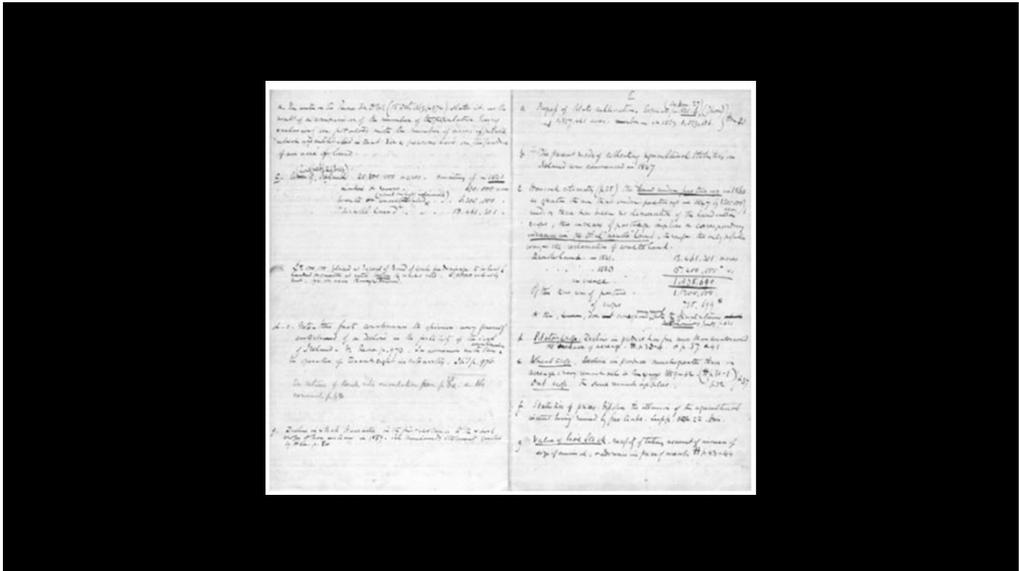


Figure 1. Fragment from John Elliot Cairne’s notebook on the state of Ireland, 1864

In time, when the fieldwork was done, the political economist retired to his study to evaluate his material, to sift through things and decide what was relevant. This is where the armchair comes in (fig. 2). In an effort to refine his ideas, a second and sometimes even a third version of his notes might be prepared. It was only when he had succeeded in untangling the inherent complexities of the social world, when economic and historical events could be traced to motives of human action, that the political economist was satisfied that his case was solved.

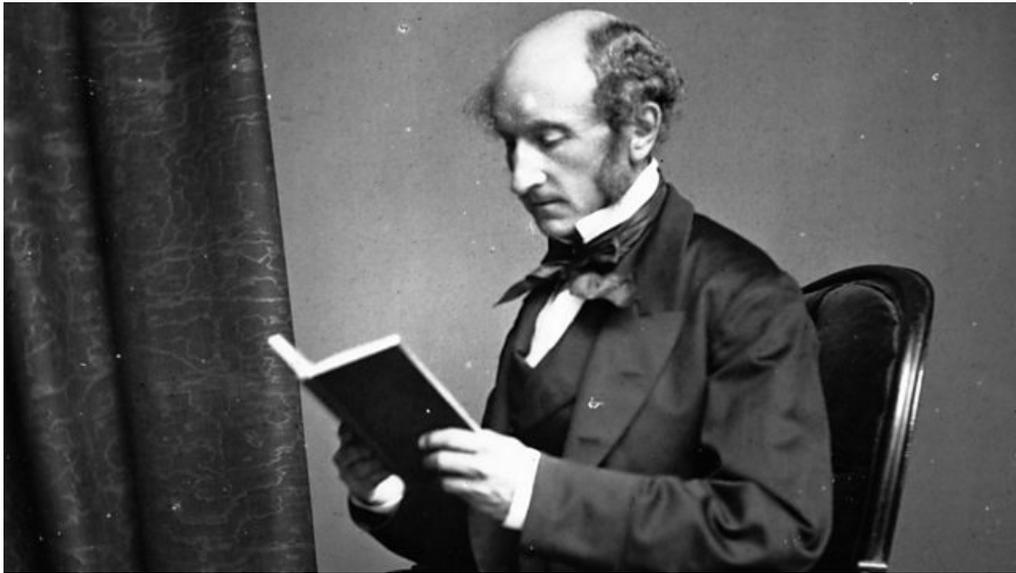


Figure 2. John Stuart Mill, circa 1858

To the extent that such fundamental insights into human behaviour escaped mathematicians and their statistical tables, political economists of the Victorian era considered both – the mathematicians and their tables – with equal quantities of suspicion and disdain.

### **A nineteenth-century approach to science**

Graphs started to be used in political economy during the eighteenth century by William Playfair, a Scottish engineer.

In a 1785 publication entitled *The commercial and political atlas: Representing, by means of stained copper-plate charts, the exports, imports, and general trade of England, at a single view*, Playfair invented several types of diagrams, including line, area and bar charts (fig. 3). Later, in 1801, he also invented pie charts and circle graphs, which are used to show part-to-whole relationships.

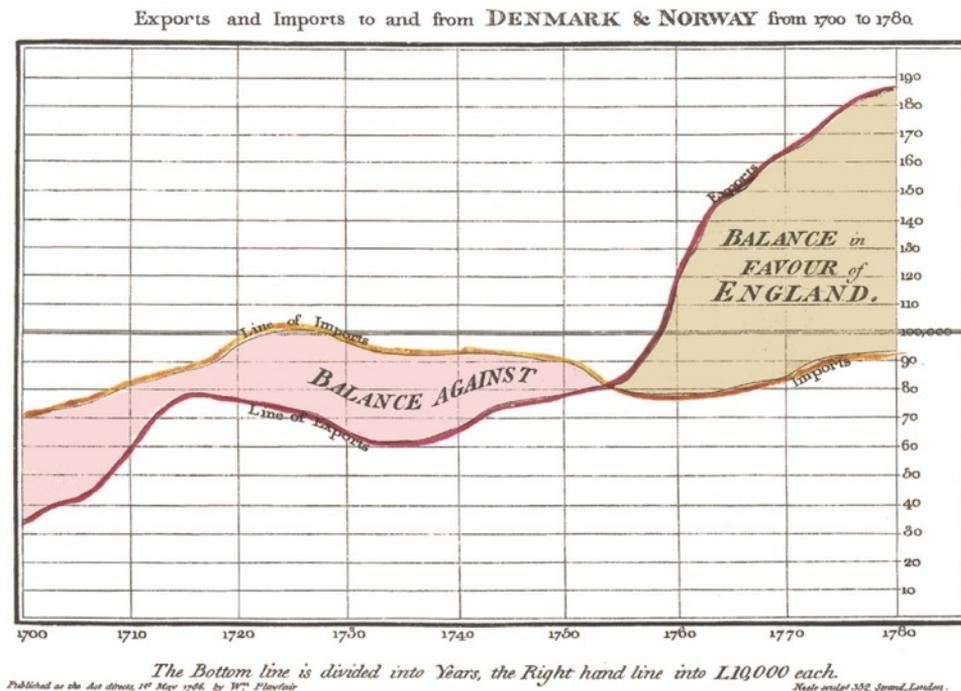


Figure 3. William Playfair, ‘Exports and imports to and from Denmark and Norway from 1700 to 1780’, in *The commercial and political atlas*, 1786

However, diagrams were not to be seen again in the literature for over half a century.

It was around the 1830s, as the use of statistics intensified, that interest in graphical means of expression revived and started to appear in scientific texts and, to a lesser extent, in works of social and historical analysis.

Yet, when Jevons started producing economic graphical representations from the 1860s onward, he was highly criticized for doing so by his fellow political economists.

It was mainly through the work of Alfred Marshall in 1890 that diagrams became an accepted form for representing economic concerns. Marshall was the first to plot supply and demand curves onto one and the same Cartesian plane so they could cross at what would become known as the point of equilibrium.

It was at this moment that political economists traded the literary space of observation, reflection and conjecture – the notebook and the armchair – for the Cartesian space of statistics and mathematics.

Although political economists at first used diagrams as a means of representation and persuasion, by the end of the nineteenth century they were also used as a means of investigation and comprehension.

With the change in focus from representation to investigation and the production of knowledge, diagrams in economics also changed from a concern with shape and functional form to a focus on turning points and points of intersection.

Furthermore, while representations are static in relation to what they show and refer to – for example, a bar chart presenting statistics about the *Distribution of average output in the USA metropolitan areas* (fig 4) – knowledge generators have a dynamic, open-ended relation to what they can provoke.



Figure 4. Distribution of average output in the USA metropolitan areas

For example, *Space relationship layout for Dorben Consulting* (fig. 5) is a diagram that can be used to imagine various spatial layouts for offices and production facilities.



Figure 5. Space relationship layout for Dorben Consulting

No matter how we classify these visualizations, they all participate in a visual epistemology – they are all connected to forms of knowledge production.

Today, there are few tools as important to economic pedagogy and analysis as graphic representation. Yet the graphic language of points, lines and curves hasn't evolved very much since Playfair introduced his charts.

In many ways, the diagrammatic techniques that were developed during the nineteenth century reflect the scientific paradigm of the time, which is to say, they participate in a process of breaking nature down into its simplest possible elements, and then trying to define rules and causal relations on how these elements interact.

Many would argue that the science of economics hasn't evolved much since the nineteenth century either, and continues to isolate and abstract aspects

of human behaviour into the simplest possible actions, and then tries to establish irreducible laws to describe them.

### **Normal people**

Graphical forms of representation may be considered as the meeting point between statistics and geometry. Without data, we would have nothing to plot. Without geometry, we are left with discrete points that will always remain unrelated.

The collection of statistical information started in the sixteenth century, when governments and other institutions began enumerating people and their habits. However, it was during the outbreak of the plague in seventeenth-century London, when parishes recorded and published weekly reports on the number and causes of death, that this practice led to the widespread collection of data, from births and crime rates to trade volumes (fig. 6 and fig. 7).

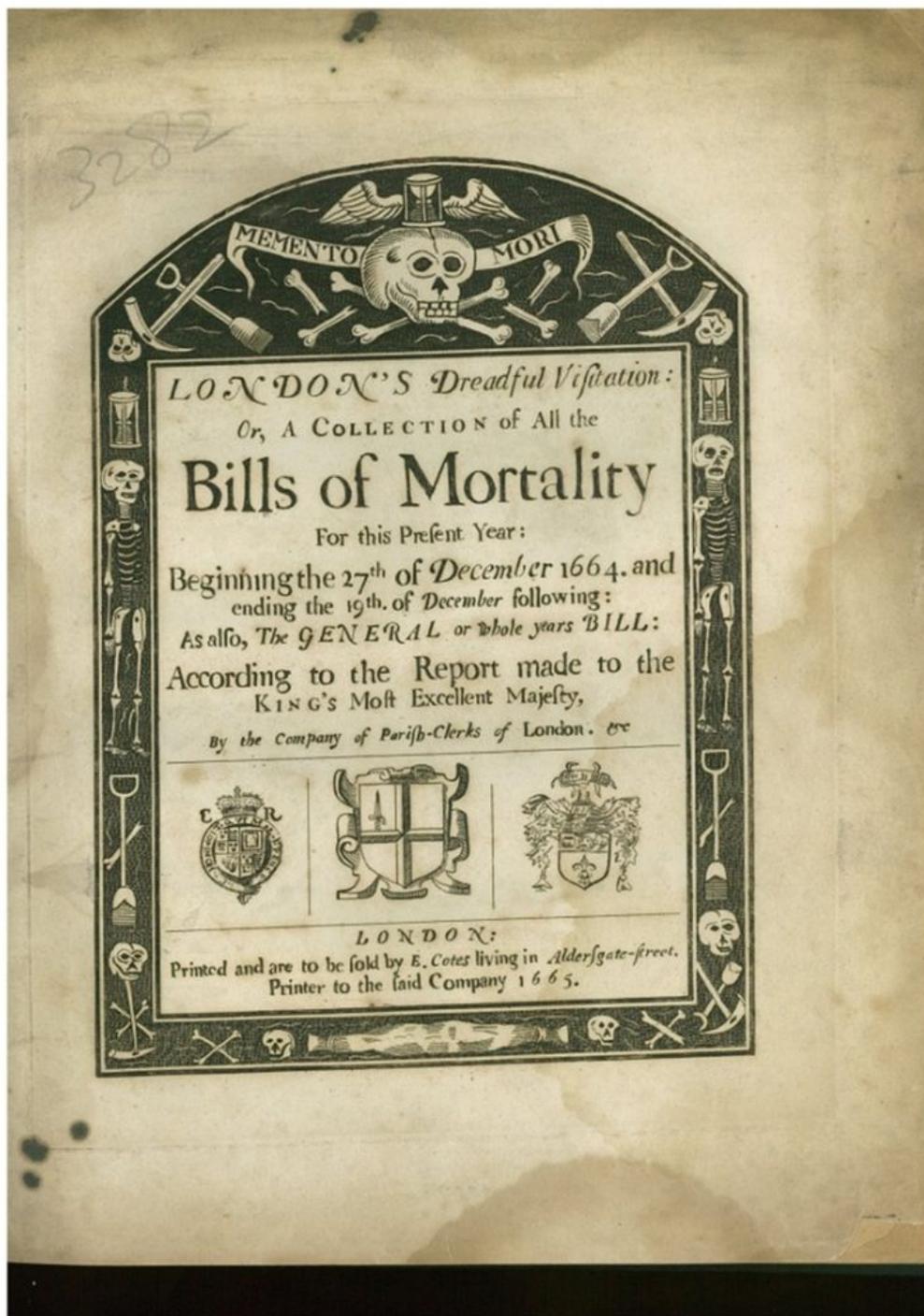


Figure 6. Fragment from a collection of *Bills of mortality: Beginning on December 27, 1664 and ending on December 19, 1665*



It was at that point that societies became statistical.

A good example is the case of suicide.

During the first half of the nineteenth century, suicide was a much-studied phenomenon. One could even say it was a fad. So when a debate erupted between France and England over which country had the most suicides, a massive enumeration ensued. The result, published in 1822 by Jean-Pierre Falret, was a dissertation on hypochondria and suicide. In addition to observing that 1813 was a particularly bad year for Paris suicides (we're not sure if that means there were a lot or very few), Falret provided the following list of predisposing causes: heredity, temperament, age, sex, education, reading novels, music, theatrical performances, climate, seasons, masturbation and idleness.

More importantly, as the figures on suicides became public, along with other forms of 'social deviancy', mathematicians pored over them, and as they did, they were amazed at their regularity. No matter how they sliced the data – by education, wages, religion or nationality – they were able to observe 'invariable laws' regarding their relative frequency. They could not help but wonder how it was that, when regarded *en masse*, phenomena that appeared to be the result of free will and a very complex set of social circumstances could become so predictable.

In the process, a new type of law came into being: the law of probability. The law of probability had connotations of normalcy and deviations from the norm, and as such, it had direct consequences on people and their behaviour (fig. 8).



Figure 8. Distribution of performance in a plant where methods have not been standardized

If the Enlightenment attempted to understand and define something called ‘human nature’, by the nineteenth century thinkers became obsessed with something called ‘normal people’.

The interesting thing about statistical laws concerning human behaviour is that they are both inexorable and self-regulating: people are normal if they conform to the central tendency.

Those at the extremes are considered pathological.

Consequently, most of us try to make ourselves as normal as possible, which, in turn, affects that which is considered normal. Furthermore, enumeration requires categories, and defining these new classes of people for the purposes of statistics has an impact on the way we conceive of ourselves and of others.

## Each number equals one inhalation and one exhalation

It is also at the end of the nineteenth century that the concept of objectivity and scientific methods of measurement were introduced to study human productivity; an event which had a tremendous effect on the way labour has been conceived, measured and designed ever since.

The doctrines of 'work science', 'Fordism', 'Taylorism' and 'scientific management' all represent particular versions of the attempt to find positivist and scientific resolutions to the question of production. Although they differ on many levels, what they share is a commitment to ideas of rationalization in addition to technological and social efficiency (fig. 9).



Figure 9. Desola Gantt chart

The economic notion of efficiency, as the ratio of output to input, became the unquestioned rationality behind the new disciplines directed towards labour activities and labour relations.

Today, notions of economic efficiency and objective measures of work extend the original approaches of the late-nineteenth century into every area of

labour, technological efficiency and business organization (fig. 10). Diagrams, graphs, time and motion studies, tables, timelines, flow charts and bar charts still play an important role in the propagation of these ideas and the day-to-day evaluation of worker performance.

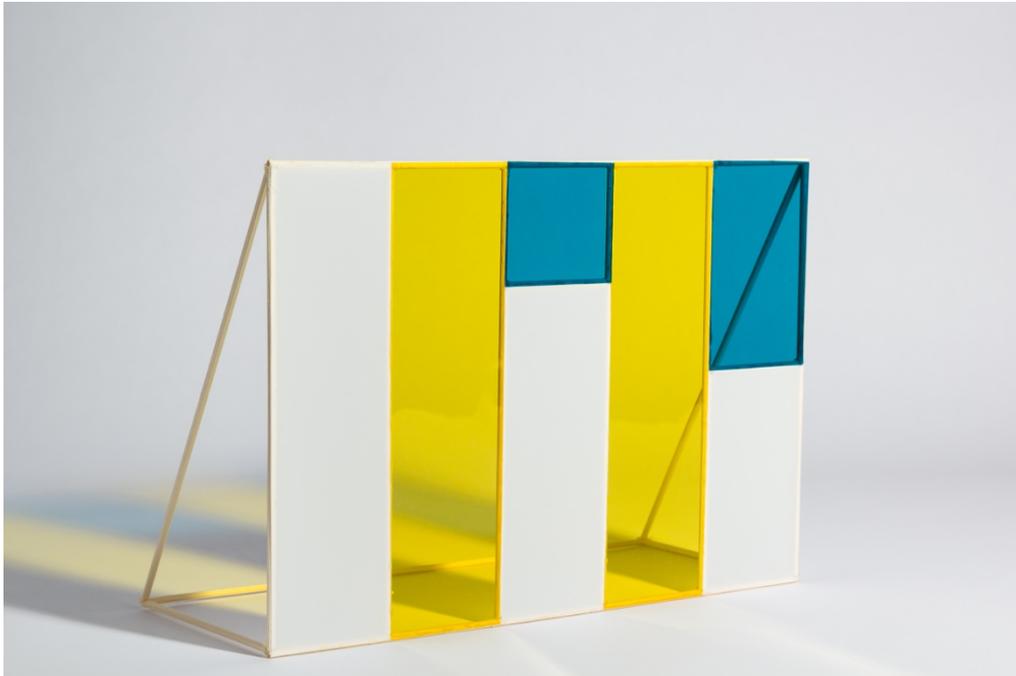


Figure 10. Postinjury productivity losses – Absentee and earning effects

In graphs, labour is analyzed and broken down into units, while new methods for the management of time, communication and workflows are sketched. In the process, abstract measurements transform complex ideas about human behaviour into comparable data, and labour becomes an abstraction that reduces the specificity and meaning of concrete labour to numerical units; in other words, to labour in general.

It is this abstraction, from the concrete and particular to the general, which allows one to grasp labour quantitatively. Through this process, abstracted working activities can then be translated into a common medium – numbers – which can be compared and through which relations can be established. The capacity of graphs to make the relations between elements visible was precisely what made them fit for the task.

In Frederic S. Lee's book, *The human machine and industrial efficiency*, published in 1918, we see a diagram charting the *Output among men polishing metal on a ten-hour shift with no rest breaks except for lunch* (fig. 11). The graph reveals the decline of productivity over time and constitutes a classic example of management scientists' interest in maximizing productivity through optimal rest break schedules. With the word 'LUNCH' printed in the middle at the bottom, we can appreciate how the graph sought to visually communicate the temporality of the experiment.



Figure 11. Output among men polishing metal on a ten-hour shift with no rest breaks except for lunch

Developed in the late-nineteenth century, the photographic study of motion served as a basis for the use of still and moving images in the analysis of human movement within industry. These approaches to work measurement were developed by Frederick Taylor, Henry Ford, and Frank and Lillian Gilbreth in the first decades of the twentieth century in the context of an industrial economy. They are still widely used today.

Between 1910 and 1924, the Gilbreths devised multiple ways to use photographic images in factories and other places of work to determine the

most efficient methods of operation or ‘the best way.’ Their time and motion studies, also called ‘chronocyclegraphs’, were realized by capturing the movements of workers with long photographic exposures. The motion ‘paths’ recorded by the camera were traced by attaching tiny lamps to the body of the worker. The images could then be translated into graphics such as *Two cycles on drill press* (fig. 12) and *Natural movement of the hand / The shortest path after operator has been trained*. These graphs were then analyzed by engineers so they could identify inefficient gestures and design the most time-efficient movements to be taught and used by all workers.

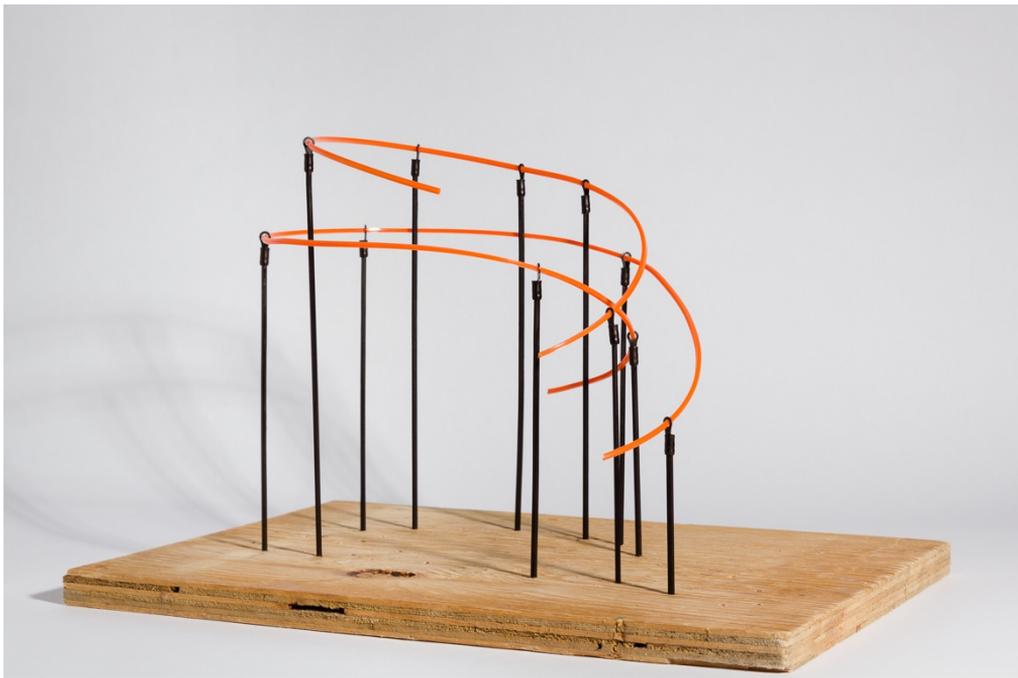


Figure 12. Two cycles on drill press

Flow charts, which are endemic today in management and organization analysis, also appeared during the early part of the twentieth century. The way flow charts reduce activities, processes and complex actions into simplified workflows make them especially suited to the needs of management and administration. Because of its ability to present chronological sequences, the chart is instrumental in developing a plant layout or for improving the design of existing workspaces. *Diagram of the revised layout of a group of operations* (fig. 13) was produced to improve production by studying the layout of operations in a rifle factory.

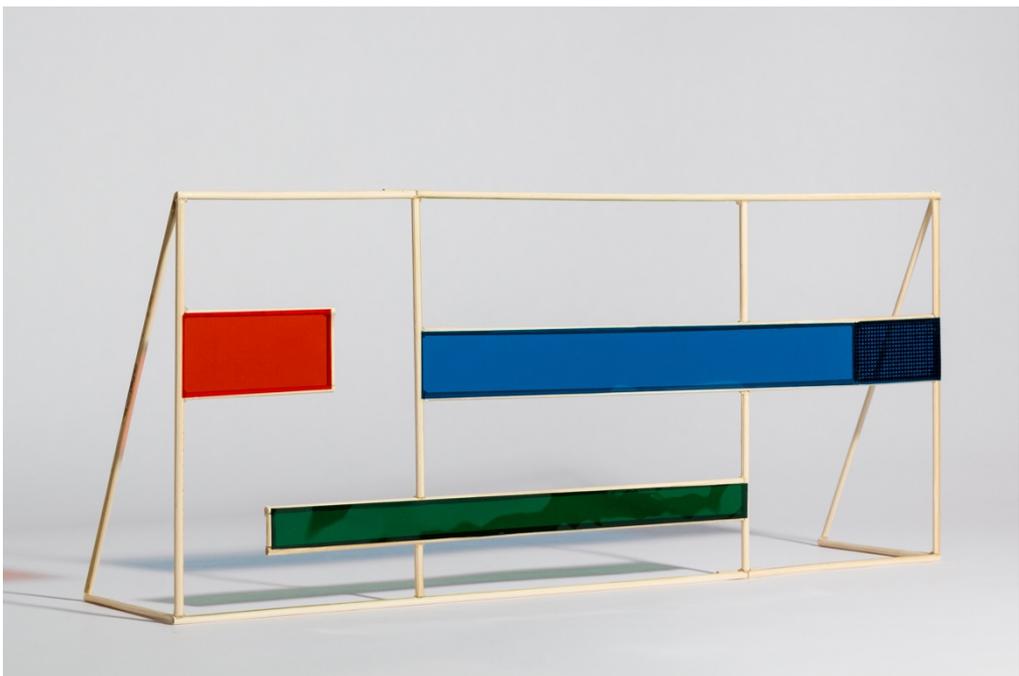


Figure 13. Diagram of the revised layout of a group of operations

Other diagrams, such as *Organization chart showing the influence of methods, standards and work design of the operations of the enterprise* (fig. 14), reduce the entirety of relationships within an enterprise to discrete chunks of activity, workflows and hierarchical positioning. Organization charts are very clear and visually pleasing. That's why they are used: because they look nice on paper or on a PowerPoint slide. Generally, they're not based on hard data, and they're usually put on paper in a way that 'feels' best, and what 'feels' best is always whatever 'looks' best. As one young art critic put it: 'Whole

organizations reorganized, wages set, instructions written, based on sticks dipped in lavender and mint green food colouring?'

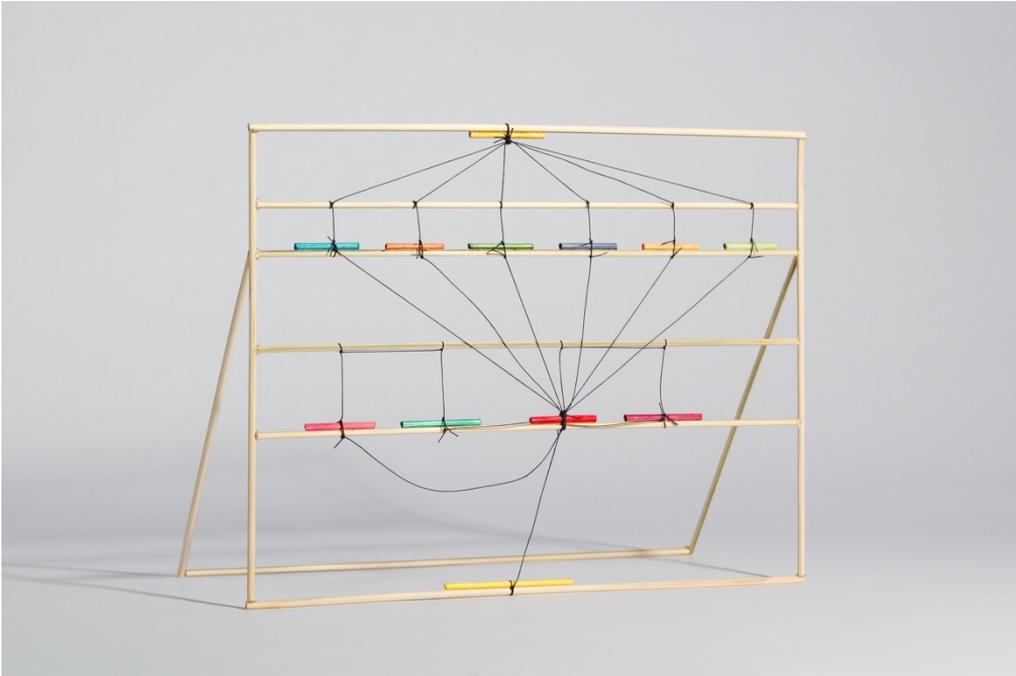


Figure 14. Organization chart showing the influence of methods, standards and work design of the operations of the enterprise

One of the most famous experiments in industrial history took place at Western Electric's factory at Hawthorne, near Chicago, between 1927 and 1933. The experiment involved changes in physical working conditions and work requirements, changes in management and supervision, and changes in the social relations of workers. Surprisingly, in all cases, productivity improved whenever a change was made. For instance, productivity improved when lighting in the workroom was augmented, but also when it was dimmed again. This became known as the 'Hawthorne Effect' – a reaction in which individuals modified their behaviour in response to their awareness of being observed. The graph titled *Worker productivity trends in periods 1 to 24 of the first relay experiment at Hawthorne* (fig. 15) presents a statistical analysis of the productivity for the 257 workweeks of the experiment.



Figure 15. Worker productivity trends in periods 1 to 24 of the first relay experiment at Hawthorne

From the latter part of the twentieth century to the present, what constitutes human productivity and how it can be measured have shifted as economies have gone through a series of transformations that have modified the nature, form and organization of labour. Amongst these transformations is a shift from the mass production of identical products to delocalized and more flexible manufacturing processes, as well as a shift to service and knowledge economies. While Fordist models considered labour as the harnessing of ‘manpower’, post-Fordist models necessitate the mobilization of not only logical and technical capacities, but also of the affective and communicative resources of the worker.

Changes in the use and organization of workplaces reflect some of these transformations. They are especially visible in the design of offices. In *Coffee point placements at Novartis Research Facility* (fig. 16), we see an architectural plan of one of the edifices in Novartis’s new campus in Basel, which is entirely dedicated to the emplacement of ‘coffee points’ on the different floors of the building. The plan reveals how architecture itself is designed to respond to

the need for fostering collaboration and communication between workers in a knowledge economy.



Figure 16. Coffee point placements at Novartis Research Facility

To sketch *Circulation route, projected teams and total workplace at Google Berlin* (fig. 17), architects worked with management consultants to design flows in the workplace that would be conducive to mobility and communication between employees from different departments while creating identification within teams of workers.



Figure 17. Circulation route, projected teams and total workplace at Google Berlin

And finally, the last sculpture is called *Flow diagram of the old layout of a group of operations* (fig. 18). These sculptures have recently been exhibited in New York, where the same art critic quoted above visited the exhibition with a former management consultant, named Hannah. This is what Hannah had to say about this sculpture:

This is meant to visualize how the factory floor would be used by each worker. In a perfect world, none of these strings would overlap – each person would have a single route, which was never doubled back on, and they wouldn't overlap with those of another worker. If you have machinery involved, every time these lines cross, there's the possibility of error, or injury. You see this green guy here, he's just fucking around, his life sucks.



Figure 18. Flow diagram of the old layout of a group of operations

## **The fly**

It was mentioned earlier that graphical forms of representation may be considered as the meeting point between statistics and geometry.

But there is a third element without which no data may be plotted and no geometry may be calculated. This third element is space.

The concept of ‘space’ can denote the physical or temporal absence that exists between two objects or events, like the distance between two people, or the silence between two words.

It may also denote the everythingness that surrounds us, like when we look up and appreciate the vastness of the sky.

When fragmented into smaller bits, space has the capacity to retain the inherent spaceness of the original: erecting a wall gets you two spaces where before there was one.

In this way, space behaves more like a monad than an atom: it has no parts (although we may speak of a part of a space).

By placing an object in space, it is possible to create an indefinite number of new spaces: the space within the object, behind the object, under the object, and so on. Space defies arithmetic: by adding something to space, it multiplies.

Descartes is reported to have invented coordinate space while lying in bed one morning imagining how to communicate the movements of a fly he watched ambulating on the ceiling.

His solution, to describe the fly's position relative to its distance from the walls of the room, amounted to reducing the total space occupied by the insect to a single dot.

What he gained in precision, he lost in accuracy.

He also lost the fly.

## **acknowledgement**

Artworks pictured in figures 4-5 and 8-18 by Richard Ibgby and Marilou Lemmens from the series *Each number equals one inhalation and one exhalation* (2016-17).

## **the author**

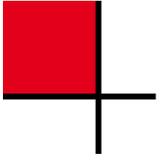
Richard Ibgby and Marilou Lemmens are artists who live and work in Durham-Sud, Quebec, Canada. Richard and Marilou have published four artist's books and their writings have been published in books, catalogues, and magazines. A comprehensive monograph about their practice as well as a book dedicated to one of their works, *The prophets*, will be published in 2020. They were awarded the Prix Giverny Capital in 2019 and the Research Fellowship of the Grantham Foundation for the Arts and the Environment in 2020.

Website: <http://www.ibghylemmens.com/index.html>

Email: [richardibgby@gmail.com](mailto:richardibgby@gmail.com)

Email: [mariloulemmens@gmail.com](mailto:mariloulemmens@gmail.com)





# Grooving matter(s): ‘Taking measure’ through touch

Kevin Pijpers

## abstract

This paper investigates the ability of touching practices to measure. Thinking with touch highlights not only its ability to perceive, but also to affect and intervene in material contexts. Drawing on extracts from the author’s research into archaeological excavation labour, this paper wonders how touch could do measurement in the sciences otherwise. Addressing measurement in terms of active practices of ‘measuring’ or ‘taking measure’ emphasises the lived time of scientists, as well as their bodily ability to switch between modes of measuring. The paper aims to elicit the temporal, bodily, affective and spatial intricacies of archaeological labour in the trenches, and contributes to critical ethnographic accounts on materiality, context, and comparison in Science and Technology Studies. In doing so, it takes material groovings in archaeological fieldwork as evocative acts of scientific measurement.

## Introduction

This paper takes a ‘leap of imagination’ (Whitehead, 1978: 4; following Stengers, 2011: 22) in an experiment with science, matter, and measurement. It thinks measurement in terms of scientists’, and in particular archaeologists’, sense of touch. Proposing that human touch is most interesting to practices of measurement for its ability to perceive indigenously, that is, ‘from the midst of things’ (Howes, 2005: 6; Myers and

Dumit, 2011), thinking with touch redefines what it means to take measure. As a performative ‘instrument’ of taking measure, a touching body affects and intervenes in what it is set out to measure, which I take to be of incredible advantage to the responsible production of scientific knowledge. This paper takes ‘taking measure’ as the bodily homing in on the sensed objectivity of more and less everyday experiences of knowing.

Drawing on a sociological and anthropological strand in Science and Technology Studies, I propose that scientists’ touch folds and re-folds affectual imprints and ex-prints between bodies, ‘objects’ of measurement, and worlds of attachments and detachments. Being in touch harbours a sense in which scientists’ responsibility envelops the worlds of their practices, including their abilities to switch between techniques of measurement in relation to the changing environments of their research. Through what Joanna Latimer (2007) calls ‘motility’, these switches in techniques of measuring ‘move the world’. More than simply an organ for sensory registration and one-directional perception then, touch knots together felt geographical intensities on the body with extensive worlds. It entangles the measuring body with the objects it touches on, transforming objects in the process of ‘taking their measure’. Politically, this paper sides with a pre-modern idea of the sense of touch, which until the eighteenth century was understood as the master sense: ‘[touch] tests, confirms what sight could only perceive’ (Jay, 1993: 35). Modern ideas regarding the production of knowledge through privileged distanced vision might have miss-measured the relation between the human senses and the makings of knowledge.

In order to clarify measurement as a dimension of scientists’ sense of touch, this paper recruits descriptions (including one quotation and two photographs) from the author’s ethnographic fieldwork at the archaeological excavation on the peninsula of Ardnamurchan, Scotland, in the summer of 2014. Touch is featured prominently in archaeological excavations, as it is archaeologists’ prime sense of excavation labour, and crucial to the practical organisation of archaeological fieldwork (see Edgeworth, 2013). Archaeologists manually emplace nylon strings, which measure and differentiate between the inside and outside of trenches; water-proof

drawings are made by hand and pencil; worn-out trowels scrape away the top soil with a sense of precision; Simone the drone is steered overhead by software translating the haptic noise of human hands moving over the smooth screen of a tablet into signals of techno-scientific meaning. Measure-by-touch in archaeology is about more than physical touch, as it invites relations extending to other bodies and things. Drawing on Hannah Macpherson's (2009) research on blind people's sense of touch, as well as Mark Paterson's (2009) research on the geography of the felt body, I propose that the sense of touch for archaeologists is about the human body's place in the world, e.g. where the body plants its feet, and how it moves about, from where and when it takes measure of the atmosphere it is attuned (and attuning) to (Stewart, 2011).

By exploring the haptic dimension of knowledge making, this paper highlights an area of sensory resistance to stratified understandings of measurement. This sensory resistance entails thinking the sciences from the 'great outdoors' (Meillassoux, 2010); e.g. from their messy and un-measured fields. In this paper I argue for a fractal and relational concept of 'measurement' through touch, the senses and materiality, and in doing so this paper contributes to discussions on contextualisation and comparison within ethnography and Science and Technology Studies (e.g. Morita, 2014). It explores how archaeological fieldwork is contextualised in processes of *taking measure from within*, through what Karin Knorr-Cetina (1999: 170) calls the engrossing and entrancing quality of collective experimental work. This paper measures the 'weight' of this engrossing experimentality in the field, including how archaeology as an expert science becomes more strongly objective (e.g. Harding, 2016) by taking and re-taking measure.

### **Transforming contexts of experimental comparison**

[O]ne [problem area] concerns our present lack of understanding of the contemporary machineries of knowing, of their depth, and particularly of their diversity [...]. (Knorr-Cetina, 1999: 2)

My fieldwork with archaeologists consisted of following their encounters with objects, people, and stuff in the environments of their excavation. I

employed an ethnography focusing on archaeologists' particular ways of knowing through experimental and experiential touch. Working alongside archaeologists at the excavation site at Ardnamurchan, Scotland, I asked questions and conversed with them about their activities on their practices, taking their physical touch and embodiment as metonymical points of entry into their conceptual thought, sensations and affects (cares, worries, hopes, desires, fears...), without separating the physical from the abstract or conceptual. This also means that I started conversations about their physical labour in first instance, and followed the conversations (and materiality of the excavation), wherever they led us. This voyage was material in the sense that the environment is material, both in terms of the microscaled 'soil', as in terms of the wider environment the excavation is situated in. Moreover, excavation labour also forms material as well as conceptual traces in historical sense; as a work in progress of understanding a material past up until the point that archaeologists started digging in it. Even so, one could argue that archaeology itself is invested in the future of the past events of Ardnamurchan in a contribution to knowledge about events having occurred there. This 'knowing' as a form of taking measure of the past is why archaeology is so interesting in this regard, and what led me to do research on it.

Alongside Knorr-Cetina (1999), I am therefore concerned with how archaeologists' touch contextualises their research practices and knowledge making. Her notion of *epistemic cultures* is apt here, as she discusses how the engrossment of scientists into their research is crucial for their ways of knowing. Archaeological fieldwork contains an epistemic culture (or multiple), which make up particular ways of knowing. Practices of excavation labour entail a related set of experimental exercises, designed also to draw archaeologists into relation with the environment and soil, and entrance them into their work. These practices *code* and *decode* the archaeologists' touch: e.g. how archaeologists physically touch on their sites and objects, how they are touched by their environments, and how they as such know.

In this context, archaeologist Matt Edgeworth (2011, 2013, 2016b) suggests that the relationality between landscapes and archaeologists working the

soil provides localisation and justification of their fieldwork from *within* their research practices. Edgeworth (2016a: 107, following Capelotti, 2010) speaks of the *archaeosphere*, a ‘time-mobile and time-saturated’ realm in recurring dialogue with as of yet unknown dimensions of pasts, grounded in soil and archaeological evidence. These unknown dimensions are approached by archaeologists, slowly and methodically brought into the known (the archaeological record) by touch and the senses. Archaeology then happens at the ‘edge of the unknown’ (Edgeworth, 2016a: 111), at the edges of a partially known history, in processes of haptic measurement. What is interesting is that in relating to this unknown both an abstract sense *of* and *for* history is included, as well as a very material and concrete sense for the landscape of an excavation site. In other words, archaeological practices should somehow attune archaeologists’ touch to a partial history and landscape.

Atsuro Morita’s (2014) paper *The Ethnographic Machine* describes such attunement as a dimension of ethnographic research. In his paper Morita draws strongly on Marilyn Strathern’s thought on ethnography. Strathern (1992, 1996) situates ethnography as an ‘evocative artifact’ (Morita, 2014: 222), affirming that ‘contextualization plays a pivotal role in mediating the conceptual and the empirical in ethnography’ (*ibid.*: 230). I employ Morita’s use of Strathernian ethnography and contextualisation here as a way to frame a contrast between ethnography as an ‘evocative artifact’ and archaeologists’ sense of touch as ethnographic instruments of evocation and engrossment. In this sense, a recurring ‘engrossing’ term in Morita’s paper is *awkward*: an affectual signification of how relations are being connected (and disconnected) by events of knowing. What is *awkward* about Morita’s (*ibid.*) use of the machinic, and related to the sense of touch and taking of measure I am describing here, is how his ‘expanded notion of machine as a connectivity traversing the inside and outside of objects’ can ‘help... us consider the relation between those internal and external connections’ (*ibid.*: 225). In other words, ethnography could be a machine to ‘take measure’ of epistemic cultures like archaeology, and their times and places, through the occasional awkward effect of connects and disconnects between ethnographer and object.

In relating Morita's (*ibid.*) ethnographic machine to Knorr-Cetina's (1999) epistemic cultures, as well as the measuring touch of archaeologists, I propose that interruptions (in the form of sometimes awkward connects and disconnects) of varying intensities occupy a constant, contingent, and affective dimension within empirical research. 'To take measure' is then not just a way of turning the noun 'measurement' into a verb, but rather to emphasise the significance of the lived time of i.e. archaeologists and other experts in their fields, and the connected ability to compare their findings 'from *within* without drawing on any external scales' (Morita, 2014: 229). During my fieldwork with archaeologists I have seen archaeologists continuously interrupted by findings (or lack of expected or hoped-for findings). These interruptions seem to serve as affective impulses to transforming bodily attitudes and continue excavating; a retaking of measure of the objects of their labour and knowing in process.

### **The lived time of taking measure by switching**

I turn next to my ethnographic research with archaeological excavations to expand on the notion of taking measure through touch and engrossment.

I am one of those, put me at the edge of a trench and I think I know what is happening, but put me in the trench and I 'just know'. Or at least that's how I feel. (David, 2014, email correspondence)

This extract from my conversations with archaeologists signifies the tacit and bodily dimension of taking measure in archaeological fieldwork. David highlights a difference between being put at the edge of the trench, and being inside of it. I propose that the difference between being inside and outside of the trench is here not a matter of simply achieving a better perspective, or closer look, at what is going on in a trench. My continued conversations with David highlighted not so much the qualitative difference between his ability to 'just know' when inside the trench versus 'thinking to know' when outside of the trench. Rather, I would argue it is this movement from outside, to inside, calling on a 'reason of haptic measure' within the ephemeral and tacit quality of his bodily knowing. There is a process of 'world-shifting' (Latimer and Munro, 2009: 8) going on in this movement of

re-taking measure of the trench; a switching of attachments and belongings to David's body with his movement through the field site, and inside and outside of trenches. This shifting of the world generates descriptions on how archaeological knowledge is made by taking measure of a trench. I want to emphasise here how David's switching between standing outside of the trench ('I think I know') to inside of the trench ('just know') to gathering some sort of measure about his knowing ('that's how I feel') is important for the way he takes measure of the trench in an embodied sense.

In other words, there is an increase in David's stability of knowing when moving along these lines of knowing and feeling. While inside the trench, so close to the earth, there is a sensory myopia going on. Invoking a sense of incommensurability – of becoming part of a particular place, this myopia makes comparison or scale to an outside rather difficult. My observations and discussions with archaeologists show that one has to work from inside a trench in order to get a measure of its significance – and the significance of its potential contents. Drawing on Latour (2004), being intimate with the soil teaches archaeologists how to become more articulate by being affected by the chaos of residues and traces of the past, which in turn instigates the desire to organise and re-organise the trenches, e.g. in the process of switching measures. Matt Edgeworth's (2016a: 111) 'edge of the unknown' describes the threshold between the dark loam the unknown objects reside in, and their emergence into the 'human sphere'. David shows this is not a one-directional movement, but instead how archaeologists are drawn by their sites to switch between vantage points across different edges, increasing the complexity of their descriptions of the soil over time.

This edge emphasises the archaeologist's ability to take measure of the soil and the historical objects in it, by means of a switch of David's living body from inside to outside, to inside, following different archaeological techniques of observation and intervention. This switch questions any unilateral direction and movement of the archaeological knowledge machine. Rather, any progressive and linear movement from unearthing of the trench, to object in the soil, to object of analysis and knowledge, and perhaps to finished object in a museum, fold backwards into the materiality of the landscape, and the bodies of archaeologists. This vicarious movement

of touch as a sense of measure has a clear temporal dimension. In the words of Dan Hicks (2016), archaeology is the temporality of the landscape revisited. This notion of revisiting the landscape un-conceals what is often taken for granted in both practices of scientific knowledge creation, and in practices of measurement: *that time spent taking measure is time lived*. Hicks (*ibid.*) tells us that, for archaeology, this temporal period of intervention is present in revisiting the landscape, that is, in switching, re-turning, re-collecting, re-memembering, and adding layers of understanding to an ‘archive’. Techniques of archaeological fieldwork, in other words, groove the material history of the trench, and allow archaeologists to re-visit, and re-measure, a particular part of a grooved trench in different ways.

### **Demands to ‘take measure’**



Image 1: Archaeologist Glenn, at the Ardnamurchan Transitions Project in 2014.

This trench (image 1), a presumed neolithic grave, was of great concern to the archaeologists involved in its excavation. The large upright stone on the left side of the picture was discovered cutting across the larger site of excavation, protruding from the designated field site into the ‘non-archaeological’ part of the landscape. The stone got out of line, unruly, as it ventured out of the large trench into the epistemologically dark and obtuse ‘wilderness’: permission to excavate the lower half of the trench, just below Glenn’s trowel, had not been granted by Historic Scotland, the government agency in charge of preserving and caring for Scottish heritage until 2015. It took some days to get permission to excavate this trench, but archaeologists do not have days to waste, waiting for permission. Beyond the potential waste of time of obtaining permission however, doubts festered whether it was at all desirable to excavate this particular trench: its location so close to the surface led the archaeologists to hypothesise that grave robbers might already have emptied the spoils hundreds of years ago. The need for permission, the limited time for excavating, as well as the possibility of an empty grave mingled, and led to doubts and anxiety: their labour would perhaps better be spent elsewhere – the cost to excavate this trench might be too high. The ‘cost’ of the excavation was being measured by felt affects and a sense of time. Importantly, taking measure of such ‘cost’ happened within a temporal intervention of archaeological labour, internal to the excavation. The ‘costs’ here are measured affectively, and are therefore not deductive, but instead affective ‘gains’ of sensing and knowing the excavation site.

It is crucial to note that these affectual constraints, surrounding the particular trench, and its place in the larger excavation, vicariously circulated between bodies of archaeologists, and the large upright stone in the unruly trench. These constraints constitute the relational interplay between the trench, the archaeologists, trowels, and Historic Scotland, and were in no way easily or quickly ‘solved’. Glenn, and his colleagues involved in excavating this trench had doubts, formed by their desire for a response from the site, e.g. that it would return some concrete result, which could affect the archaeologists in an archaeologically meaningful way. What ‘archaeology’ means at this point is then decidedly undecided: rather, the

mingling of constraints occurs in the process of 'measuring'. Their bodily practices switch continuously, in the process of addressing these constraints. The mingling of doubts, time pressure, and bureaucracy constituted the tenacity of the hold archaeologists have on this trench. Furthermore, the hope to continue their excavation of the area in years to come also relies on continued justifications of the archaeological measuring of a site. So it is not only the past, and the present, which are of concern, but also the future. The encounter with the upright stone itself, including the totality of its affects, makes the trench, its archaeologists, as well as what we continue to call 'archaeology'. At this point, the encounter between upright stone and archaeologists did not so much lead to a possible choice on whether or not to excavate. The relationality between bodies – e.g. stone and archaeologists – infused by the material encounter, instead *demand taking measure*. As such the lack of time, anxiety, and potential refusal of Historic Scotland were conditional constraints set by the encounter, which brought into becoming a relationality of measure between archaeologists and the stone. Even though not-yet-archaeology, bodies who do not know yet are affected by this variety of constraints, which cannot be taken as separate from the excavation practices themselves. There is, in other words, a society (see Shaviro, 2007) made here, involving bodies of archaeologists, their tools, the stone, time, and the possibility of doing interesting archaeology.

Image 1 reveals more subtle ways of the demand to take measure within this society, as it shows Glenn just starting a cross-section. Cross-sectioning involves only excavating a quarter, or in this case half of a trench, while leaving the other half untouched. In the words of Glenn, cross-sectioning means 'messing up one half so we still have the other half' (field notes N1). As it is impossible to excavate the site a second time, cross-sectioning is a precaution to continue the excavation in the case of accidental destruction of one of the two parts. Cross-sectioning 'cakes' the trench by means of a transversal cut, allowing archaeologists a view at different stratigraphical contexts from the side, and within the trench. As a technique, it enables contrasts to occur *in profile* and in pace with stratigraphically unearthing each section. The technique enables continuation of the excavation, black-

boxing part of it as untouchable, while simultaneously making possible a touching on the trench. Cross-sectioning is therefore a technique of keeping one part distant, and making the other part excavate-able, and therefore of revisiting the landscape in a different way. In doing so, archaeologists establish themselves as ‘keepers’ (Heidegger, 1971; Latimer and Munro, 2009) of the trench, by means of the archaeological technique of cross-sectioning, to continue an ongoing series of ‘measure taking’ by their sense of touch. Cross-sectioning finds new patterns, colours, textures, and new ways of engaging with the site. In this sense, it seems that cross-sectioning is not only a technique to carefully continue the relation with the site. It is also speculative, in the sense that it endeavours to make both bodies of archaeologists as well as excavations able to respond in new ways. Even if ‘nothing’ of interest is found as was indeed the case when Glenn and some of his colleagues finished the cross-section, the technique still enabled a continuation of the excavation work, and a revisiting of the landscape.

I propose here to understand ‘taking measure’ as the grooving of the relationship between Glenn, archaeologist, and trench. Grooves are present between the outside and inside of the trench, as well as between findings from the field and purified knowledge, which maintain the contingency that there are always additional things to say, new data sets to fabricate, more knowledge to add, and new measures to take. Knowledge in the form of conference proceedings, articles and monographs therefore, cannot foreclose or conclude the site of archaeological excavations as a finished process. Archaeologists of the Ardnamurchan Transitions Project do return to the excavation over multiple years, and even though they generally excavate different areas each year, they occasionally return to the same trench for further excavation. This yearly revisiting adds to an overlap of partial connections (Strathern, 1992), and a learning and re-learning to be affected by differences of the field site.

## Measuring the groove between ‘something’ and ‘nothing’



Image 2: The cross-sectioned trench with an upper and lower part. The upper part is the part in progress of excavation. The lower part is the part kept ‘pristine’. And yet, in re-taking a measure of the trench, a specific cut was made in the lower half of the trench.

Image 2 features a photograph taken of the same trench, a few days later, after it has been cross-sectioned. In image 2, the cross-section is drawn horizontally across the middle of the trench. Initially, archaeologists set out to excavate only the top part, leaving the bottom part intact. The groove of the cross-section here determines a temporary status of the two parts. The upper part, which is manipulable and workable, is also fabricated as ‘social’ in terms of the entanglements occurring between archaeologists, the soil, the stones at the bottom, and generally knowledge extracted in touch with the part. The bottom part is fabricated as (temporarily) untouchable, and only sense-able by means of its side-view. Cross-sectioning might allow for a more modern conception of science, e.g. the separation between its ‘natural’ dimension of the untouchable part, and the social dimension of its

manipulable part. However, both the 'natural' and 'social' parts are constituted because of the act of cross-sectioning the trench in its entirety. This groove then does not constitute an absolute, one-directional edge.

After days of excavating, the trench turned out to be empty of archaeologically interesting objects. However, as image 2 shows, different contexts were in fact found in the trench. The difference here between 'nothing' and 'something' is a particular groove in the taking measure as well, related to the difference between what archaeologists say they do, and what actually ends up happening in relation to the excavation. Or, in other words, the distinction between 'nothing' and 'something' relates to the difference between what is archaeologically valuable, and what is not valuable, and therefore remains 'unmeasured'. A more material groove is present between the inside and outside of the excavation territory itself, where archaeologists jump inside the trench, and experience it as a singularity, a world on its own. These grooves are then, again, not bifurcations, but instead they are transgressed continually as they affect the bodies involved in them. Thinking with grooves allows more in-depth descriptions of the switching of positions (Latimer, 2007) between 'something' and 'nothing'. For instance, supervisor Beth asked her fellow archaeologists, during the excavation of this trench, to 'have faith that there is something in the [walled storage pit]' (field notes F8), implying the later possibility to switch to material and conceptual relations, which could provide some degree of measure to their work.

Another interesting part of this picture is the furrow (the deeper excavated lower part on image 2). Glenn and his colleagues were attempting to figure out whether this furrow was a human intervention in the ancient monument, or instead an animal intervention by a rodent. In other words, they were trying to figure out if this was 'an intentional cut' or an unintentional one. Taking the decision to start excavating the bottom part however took hours, as in order to 'free the bottom for excavation', they had to judge the cross-section to be complete. The upper part of image 2 shows a combination of rocks, which signify the bottom of the trench, and the end of the cross-section. These rocks envelop the archaeologists, in the process of the rodent-question, with disappointment. 'I don't like the look of this',

Glenn reports. In their discussions on whether the proposed bottom was in fact the bottom, a line of thought was considered. First, the bottom of the trench did not look like a bottom, because the stones found on this layer were rather uniquely placed, possibly intentionally so – e.g. by humans. This could imply that the bottom was in fact the new top of another context. On the other hand, I was told by Glenn that the bottom does appear to be a bottom, as more and more solid rocks are found on the lower end of the trench. The bottom/top is in suspense in this moment, and with it the possibility of continuing bodily encounters with the trench. I have found this to be crucial to archaeological practices of knowing: their practices seem to be about crafting possibilities of practical continuity, not in terms of an increasingly more affected body (Latour, 2004), but as ways to figure out possible affectual recombinations. In other words, the *what if* question is important here: what if these stones signify a bottom – what if they signify a top? Under what conditions could the bottom be a top, or a bottom? How does either way allow us to continue? These questions frame how the process of continued taking measure develops.

These conditions of excavation, or in Stengers's (2011: 518) terms, the *hold* of archaeologists on the excavation, are subjected to continuous renderings (see Myers, 2015). In light of this, the notion to first plan (e.g. draw) this context, and then perhaps remove the other half of the cross-section was set in motion. Supervisors gathered and together it was decided that the stones visible in the upper part of image 2 were indeed the bottom of the trench. The thought process here was that the stone slabs on the sides were loosening, indicating that the stones on the bottom were used as a foundation for the grave. Yet, the archaeologists told me that it was unlikely that the stones on the bottom are in fact natural. The decision on what is a 'natural' ground surface or bottom is an archaeologist's measure of the particular trench. It is easy to imagine a different material definition of the bottom of the trench, if there would not have been a deadline, or frustration regarding time lost deciding on the nature of the rodent furrow, or if there would have been multiple significant finds in this particular grave. The ability of archaeologists to switch between descriptions, and with it, to

switch how they ‘take measure’, frames how they continue the excavation, and their labour.

## Contrasting methods

Archaeologists touch stuff continuously, and they do so from an established practice with a history of teaching and professional training. My own modality of sensing was quite different, coming from a more continental philosophical perspective, which I learned almost exclusively from inside universities, libraries, books and articles, in which ‘touch’ is rather a mediating concept of the mind, than an immediate idea of physical attachments and detachments. As I joined archaeologists in their experimental work, I worked alongside them in physically touching soil, stones, and sturdy roots of plants populating the earth. In terms of ‘grooving’, the difference between my own (in archaeological sense) amateuristic and unguided touch, and the expert touch of experienced archaeologists evoked a powerful contrast. Even though I was instructed and assisted in my excavation practice by archaeologists, this contrast was felt not only in an attitude of my own *not-having-the-sense* of how deep to excavate, but also in an awkward attitude of *not-knowing* how to ‘interpret’ contrasts in the soil, or measurements done by levelling equipment, or mappings made by pen and paper. Touch as such offered a point of entry for ‘taking measure’ of archaeological excavation labour – as an awkward machine. Touch serves as a metonym to think from and within an outside, as well as a way to collaborate (with archaeologists) in a ‘touching vision’ of experience and knowledge, which is often neglected (Puig de la Bellacasa, 2009).

‘Taking measure from within’ inverts the modern idea of distancing measurement through externalised determination of the environment. Archaeological excavation labour inverts modern linear understandings of time, and it inverts distanced objectivity (i.e. through vision as primary sense) into a felt and bodily geography of objective affects. However, the socio-political environment of archaeology exists within a modernised academic system of external scales and contexts. This broader landscape

means archaeologists in the field need ways and methods to mediate between their craft of ‘measuring from within’, and external requirements. In this context, feminist archaeologist Alison Wylie (2002) discusses in the chapter *Ethical dilemmas in archaeological practice: The (trans)formation of disciplinary identity* the rise and existence of cultural resource management amidst the struggle for archaeology’s identity, in which archaeology functions not as a set of expert practices, but in reduced ways to safekeep, and keep covered by soil, monuments and artefacts from destruction by capitalist ventures. Wylie describes aptly the many tensions between salvaging archaeological objects for the sake of safekeeping them, and archaeology as a ‘systematic investigation of the archaeological record as a source of evidence, a scientific resource’ (*ibid.*: 230), as well as the tension between anthropology and more positivistic approaches to scientific archaeology (Martín-Torres and Killick, 2015).

## Conclusion

This paper has explored ‘taking measure’ through touch in practices which contextualise archaeological knowing. Haptic practices give context from within to archaeology’s epistemic practices. Rather than evoking finished and distanced results, the touching techniques and visions (Puig de la Bellacasa, 2009) of bodily practices show that ‘taking measure’ opens up lived time and space through the ways archaeologists switch between methods, and transform contexts of experimental comparison.

The aim of this paper has been to elucidate how the engrossment and entrancement of archaeologists, including the bodily, affective, temporal and spatial dimensions of their work, constitute (one of, and a part of) their epistemic culture(s) (Knorr-Cetina, 1999). Rethinking established notions of measurement, this paper has attempted to make scientific measurement an active process of ‘thinking’ (Stengers, 2011: 21). Taking measure actively grooves both affectual bodies of archaeologists, as well as spatial landscapes and temporal histories, and evokes a ‘comparison from within without drawing on any external scales’ (Morita, 2014: 229).

Thinking with touch and grooves in archaeological fieldwork furthermore retains movement to practices of measure. In archaeological excavations, grooves are material and affectual imprints and ex-prints, which are transgressed by bodies in processes of measuring more precisely what a trench is about. Furthermore, thinking with grooves emphasises the folding of additional (haptic, bodily, affectual, temporal, spatial...) dimensions into excavation work. The grooving of archaeological excavations shows how 'taking measure' gathers together bodies of archaeologists as well as the trenches of their research, folding and re-folding affects as anxieties, fears, awkwardness, worries, legal questions, as well as, importantly, the joy of excavating.

This paper speculatively concludes that affective practices of measure fold and unfold an intensive hold on the doings of science, and that 'taking measure' is crucial for the engrossment and entrancement of scientists, and therefore, for understanding how archaeologists know. Keeping alive a sense of wonder for the crafting potential of the sense of touch makes archaeological excavation labour political: archaeological fieldwork does more than extract artefacts from the field, and pristinely organising them in museums (see Kaulingfreks *et al.*, 2011), making them untouchable in the process. 'Taking measure' can then be understood in relation to the epistemic switches of archaeologists in relation to interruptions to their disciplinary practices, in which the untouchable part of the cross-sectioned trench becomes touchable – and vice versa. As described in this paper, the haptic relation between a 'touchable and excavatable' top in archaeology and a 'pristine' bottom allows for the possibility of a switch between techniques of taking measure. This paper has argued that these switches are necessary to renderings – or rather bodily groovings – of taking measure.

## references

- Capelotti, P.J. (2014) *The human archaeology of space: Lunar, planetary and interstellar relics of exploration*. Jefferson: McFarland.
- Edgeworth, M. (2011) 'Excavation as a ground of archaeological knowledge', *Archaeological Dialogues*, 18(1): 44-46.

- Edgeworth, M. (2013) 'Archaeology's way of opening the world', in A. González-Ruibal (ed.) *Reclaiming archaeology: Beyond the tropes of modernity*. London and New York: Routledge.
- Edgeworth, M. (2016a) 'Grounded objects: Archaeology and speculative realism', *Archaeological Dialogues*, 23(1): 93-113.
- Edgeworth, M. (2016b) 'The ground beneath our feet: Beyond surface appearances', in G. Mackert and P. Petritsch (eds.) *Mensch macht Natur. Landschaft im Anthropozän*. Berlin: Walter de Gruyter.
- Harding, S. (2016) 'Précis of Objectivity and diversity: Another logic of scientific research', *Philosophical Studies*, 174: 1801-1806.
- Heidegger, M. (1971) *Poetry, language, thought*, trans. A. Hofstadter. New York: Harper & Row.
- Hicks, D. (2016) 'The temporality of the landscape revisited', *Norwegian Archaeological Review*, 49(1): 1-18.
- Howes, D. (2005) *Empire of the senses: The sensual culture reader*. Oxford: Berg.
- Jay, M. (1993) *Downcast eyes: The denigration of vision in twentieth-century French thought*. London: University of California Press.
- Kaulingfreks, R., S. Spoelstra and R. Ten Bos (2011) 'Wonders without wounds: On singularity, museum and organisation', *Management & Organizational History*, 6(3): 311-327.
- Knorr-Cetina, K. (1999) *Epistemic cultures: How the sciences make knowledge*. Cambridge: Harvard University Press.
- Latimer, J. (2007) 'Creating text, analyzing text: A note on ethnography, writing and power', in *Ethnographic futures: Voice, politics, and representation*. Second Symposium on Current Developments in Ethnographic Research in the Social and Management Sciences, Keele University.
- Latimer, J.E. and R. Munro (2009) 'Keeping & dwelling: Relational extension, the idea of home, and otherness', *Space and Culture*, 12(3): 317-331.
- Latour, B. (2004) 'How to talk about the body? The normative dimension of Science Studies', *Body and Society*, 10(2-3): 205-229.

- Macpherson, H. (2009) 'Articulating blind touch: Thinking through the feet', *The Senses and Society*, 4(2): 179-193.
- Martinón-Torres, M. and D. Killick (2015) 'Archaeological theories and archaeological sciences', in A. Gardner, M. Lake and U. Sommer (eds) *The Oxford handbook of archaeological theory*. Oxford: Oxford University Press.
- Meillassoux, Q. (2010) *After finitude: An essay on the necessity of contingency*. London: Bloomsbury.
- Morita, A. (2014) 'The ethnographic machine: Experimenting with context and comparison in Strathernian ethnography', *Science, Technology, and Human Values*, 39(2): 214-235.
- Myers, N. (2015) *Rendering life molecular*. Durham: Duke University Press.
- Myers, N. and J. Dumit (2011) 'Haptic creativity and the mid-embodiments of experimental life', in F. E. Mascia-Lees (ed.) *A companion to the anthropology of the body and embodiment*. Oxford: Wiley-Blackwell.
- Paterson, M. (2009) 'Haptic geographies: Ethnography, haptic knowledges and sensuous dispositions', *Progress in Human Geography*, 33(6): 766-788.
- Puig de la Bellacasa, M. (2009) 'Touching technologies, touching visions. The reclaiming of sensorial experience and the politics of speculative thinking', *Subjectivity*, 28(1): 297-315.
- Shaviro, S. (2007) 'Deleuze's encounter with Whitehead'. [<http://ftp.shaviro.com/Othertexts/DeleuzeWhitehead.pdf>]
- Stengers, I. (2011) *Thinking with Whitehead: A free and wild creation of concepts*. Cambridge: Harvard University Press.
- Stewart, K. (2011) 'Atmospheric attunements', *Environment and Planning D: Society and Space*, 29(3): 445-453.
- Strathern, M. (1992) *Partial connections*. Walnut Creek: AltaMira.
- Strathern, M. (1996) 'Cutting the network', *Journal of the Royal Anthropological Institute*, 2(3): 517-535.
- Whitehead, A. (1978) *Process and reality*. London: Collier Macmillan Publishing.

Wylie, A. (2002) *Thinking from things: Essays in the philosophy of archaeology*. Los Angeles: University of California Press.

## **acknowledgment**

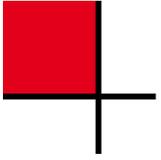
I am grateful and indebted in particular to Maria Puig de la Bellacasa, John Cromby, Steve Brown, Joanna Latimer, and Martin Corbett, and many others at the University of Leicester, for their helpful and critical comments on my PhD project throughout its various stages. My gratitude goes out to the archaeologists of the Ardnamurchan Transitions Project for inviting me to their excavation site, and engaging with my research questions in most interesting ways. I also heartily thank the anonymous reviewers of this paper for their commitment and rigour to the crafting of this paper.

## **the author**

Kevin Pijpers was awarded his doctoral degree by the University of Leicester School of Business, in 2018. His PhD explores haptic encounters with archaeological knowing. His research interests are multidisciplinary, including the senses and organisations, social epistemology, Science and Technology Studies, archaeology, philosophy of science, and more broadly, societal and organisational change. He holds an MA in Critical Organisation and Intervention Studies, and a BA in Humanistic Studies, both from the University of Humanistic Studies in Utrecht, the Netherlands.

Email: [kevin@pijpers.org](mailto:kevin@pijpers.org)

Twitter: [@kevinpijpers](https://twitter.com/kevinpijpers)



# The algorithmic panopticon at Deliveroo: Measurement, precarity, and the illusion of control

Jamie Woodcock

## abstract

Deliveroo is a food delivery platform that allows customers to order food from restaurants and have it delivered via a smartphone app. It uses a similar business model to Uber, effectively outsourcing the costs and risks of the operation onto workers. New platforms like these utilise digital surveillance to measure and control workers through their smartphones. Although algorithms have become a popular topic of research, less is known about how these are experienced by workers and how effective they are at overcoming the indeterminacy of the labour process at work. This article draws on a workers' inquiry methodology – including observation, interviewing, and co-research – to explore these questions from the perspective of the worker. It traces the development of supervision, from the panopticon in the factory, to the electronic panopticon in the call centre, and applies this as the algorithmic panopticon at Deliveroo. The analysis highlights how this managerial technique relies upon illusions of control and freedom, drawing attention to the double precarity present for both the workers and the platform.

## Introduction

Deliveroo is a platform for food delivery, using the model of Uber, which has become the archetypal example of this kind of organisation. Platforms have grown rapidly in recent years, something captured in the refrain for new

companies that they will be the ‘Uber for X’ (Srnicsek, 2017: 37). Like Uber, Deliveroo is pitched as a platform that connects customers with food and the riders to deliver it. Deliveroo can therefore be considered as the ‘Uber for food delivery’, despite the fact it also competes with Uber’s own UberEats offering. It has become a major part of the so-called ‘gig economy’ in London, in which work is becoming increasingly fractured across different gigs – or precarious work arrangements. Deliveroo is ‘disrupting’ the food delivery sector, to use the parlance of these companies. In the words of Deliveroo (2017), it connects ‘hundreds of restaurant chains and many top quality independents to deliver their food’ with ‘a fantastic team of drivers.’ The platform aspect relates to the fact that Deliveroo classifies the drivers as ‘self-employed independent contractors’, claiming that they bring together the restaurants and drivers rather than directly employing anyone. This is similar to Uber’s claim to be a taxi company that employs no drivers, nor owns any cars.

The aim of this article is to intervene in the debates around the use of algorithms in platform work. There is an increasing output of research on algorithms (Schneier, 2015; Cheney-Lippold, 2017; O’Neil, 2017; Turow, 2017; Eubanks, 2018), but less focus on how they are used in practice as forms of ‘algorithmic management’ (Lee et al., 2015; Rosenblatt and Stark, 2016). At Deliveroo, algorithms are used to measure and supervise work. However, as comparatively little is known about how these work in practice, there is risk of overstating the power and sophistication of these techniques. This paper will address the use of algorithms at Deliveroo through an updated version of the panopticon metaphor. In order to do this, the development of different forms of measurement and supervision are traced from the factory and call centre. These two examples highlight how the techniques have developed, both in terms of the new methods, but also exploring what the loss of a human supervisor – either walking the factory floors or listening in the call centre – means for management at Deliveroo.

The contribution of this article is an intervention into the debates on platform work and the role of measurement, surveillance, and control. The intention is to highlight how the algorithm operates at Deliveroo by starting from the perspective of the worker on the platform. To do this, the article

uses the workers' inquiry as a methodological approach, drawing on observation, interviews, and elements of co-research. The findings also reveal how algorithmic management is experienced by workers, along with a two-fold expression of precarity at Deliveroo – both for workers and the platform. This is discussed in terms of Deliveroo's need for an illusion of managerial control, albeit backed up detailed supervision and the occasional disciplinary act. The appearance of an omnipresent and automatic method of supervising and disciplining workers is a cost-effective method of control, but, as the participants show in this paper, this appearance was far from total.

## Measurement at work

### *The factory*

The measurement of work is a core concern for management, clearly identifiable in the factory regime. The management of work involves the buying of people's time and then its effective use. The capitalist work relation is premised on the existence of what Marx (1976: 272) joked were workers who are 'free in a double sense'. This meant workers that are free to choose who they sell their time to, but also freed from any other way to make a living. The problem here, and one which managers have long been concerned with (as well as labour process theorists from the other side), is the contradiction between the interests of the seller of labour power (the worker) and the buyer (the capitalist). In chapter ten of *Capital*, Marx (1976) explores this through the tensions over the length of the working day. In the context of the factory, the capitalist seeks to increase their profits through increasing the extraction of surplus value from workers. Marx explores how the lengthening of the working day achieves this, increasing the absolute surplus value produced. However, this method results in marginal returns, as it exhausts workers in the process of lengthening the shifts. Instead of making the absolute period of work longer, relative surplus value can be increased by making workers produce more during the same period of time. Both of these are attempts to solve the indeterminacy of labour power (how to get the most out of purchased labour power), but increasing relative

surplus value has been the most effective. However, achieving this is complicated in practice because it entails exerting control over workers. As Edwards (1979: 12) has argued, 'control is rendered problematic because unlike the other commodities involved in production, labor power is always embodied in people, who have their own interests and needs and who retain their power to resist being treated like a commodity'.

In the factory, the measurement of worker performance therefore became an important starting point for increasing profits. Systematic measurement of the labour process became an obsession for Taylor (1967: 36), who argued that 'managers assume' the 'burden of gathering together all of the traditional knowledge which in the past has been possessed by the workmen and then the classifying, tabulating, and reducing this knowledge to rules, laws, and formulae.' While studying work at the Midvale Steel company, Taylor developed a close knowledge of production, breaking down and measuring each aspect. Scientific management (or Taylorism as it became known) developed into a method with three principles. First, the 'gathering and development of knowledge of the labour process', which entails detailed measurement of the work. Second, 'the concentration of this knowledge as the exclusive province of management'. Third, the 'use of this monopoly over knowledge to control each step of the labor process and its mode of execution' (Braverman, 1999: 82). These three principles, along with the prevalence of time and motion studies, went beyond just measurement to become what Braverman (1999: 60) has argued is 'a theory which is nothing less than the explicit verbalization of the capitalist mode of production'.

Measurement is therefore a key part of managing the labour process. It provides the basis for managers to address the indeterminacy of labour power, ensuring that purchased labour power is being used effectively. In the factory, this required supervisors who would walk 'up and down the central aisle of the workshop' carrying out 'a supervision that was both general and individual' (Foucault, 1991: 145). This process turned the factory into a workplace of surveillance, measuring the work through direct supervision to ensure workers were expending maximum effort. However, the general aspect of supervision is also one of threat – after all, the supervisor cannot watch every worker simultaneously. This aspect of supervision is often

discussed through the metaphor of the panopticon, which was an architectural model of a prison in which a single observer could simultaneously watch each prisoner from a central point. The panopticon was intended to internalise the supervisory function, as the individual prisoner cannot know when the observer is watching and so assumes it could happen at any point. While Bentham (1995: 80) discussed the utility of this in prisons, he also argued that ‘whatever be the manufacture, the utility of the principle is obvious and incontestable, in all cases where the workmen are paid according to their time’. He foresaw how the panopticon could also be a tool to overcome the indeterminacy of labour power. However, Bentham also continued to argue that where workers are ‘paid by the piece’, the ‘interest which the [worker] has in the value of [their] work supersedes the use of coercion, and of every expedient calculated to give force to it’. Therefore, the subordination of workers increasingly used piece-rates in production alongside supervision. Both involve attempts to make workers internalise management’s aims.

Piece-rates provide a powerful tool for managers to encourage greater productivity. If management became obsessed with finding ways to increase productivity, Burawoy (1979) instead looked at why workers worked as hard as they did. In the study, he found workers used game-like practices to ‘make out’ and surpass expected work quotas. The piece-rate approach became successful and, as Cliff (1970) has argued, about two-fifths of the working class were covered by piece-work systems before 1970 in the UK. However, the piece-rate system – along with strong shop-steward networks – provided multiple avenues for workers to effectively resist management. In response to working class militancy, these were increasingly replaced by ‘productivity deals’, with workers agreeing to work for a higher wage and not restrict productivity measures. This meant again developing new ways to control workers, no longer relying on a straightforward financial incentive.

### *The call centre*

The next key development of managerial control comes after the decline of manufacturing in the UK. Across the global north, this restructuring has meant that most people now work in services. What sets services apart from

factory work are four main characteristics: intangibility, variability, perishability of output, and simultaneity of consumption and production (Lovelock, 1983). This creates new challenges for management ‘because services are more intangible than not, quality and productivity are difficult to measure’, which means ‘it is difficult to set specific goals for employees and evaluate their performance based on those goals’ (Batt, 2008: 434). One way to overcome this has been to apply new kinds of technology to the labour process in service work. Despite the early claims to the contrary, this has led to a kind of post-industrial work that Brophy (2010: 474) has described as ‘not Daniel Bell’s dream, but Harry Braverman’s nightmare’.

The call centre became symbolic of many of these changes, as well as becoming the focus of many debates on measurement, surveillance, and control. As Glucksmann (2004: 795) summarised, call centres are ‘one of the most researched’ forms of contemporary work, providing ‘material for debates about “surveillance versus resistance”, work degradation and the relevance of an electronic panopticon analogy’. This focused on how ‘emotional labour’ (Hochschild, 2012) was being organised in call centres (Mulholland, 2002; Houlihan, 2002; Kolinko, 2002, Taylor and Bain, 2003). This qualitative aspect of the labour process is difficult to quantify and measure, due to its subjective and ephemeral characteristics. Taylor and Bain (1999: 103) therefore conceptualised the demand for call centre workers to ‘smile down the phone’ within a workplace marked by ‘extreme levels of surveillance, monitoring and speed-up’ (Taylor and Bain 1999: 108).

Facilitated by digital technology, the call centre became a site in which the measurement of the labour process could be timed to the second (Woodcock, 2017). In this context, Foucault’s (1991) use of the panopticon metaphor was developed by Fernie and Metcalf (1997: 3) to claim that call centres were organised like an ‘electronic panopticon’. They argued and that the ‘possibilities for monitoring behaviour and measuring output are amazing to behold’ and that ‘the “tyranny of the assembly line” is but a Sunday school picnic compared with the control that management can exercise in computer telephony’. The use of this metaphor has faced criticism, for example McKinlay and Taylor (1998: 175) argued that ‘the factory and the office are neither prison nor asylum, their social architectures never those of the total

institution'. Similarly, Taylor and Bain (1999: 103) point out that this comparison can 'disavow the possibilities for collective organisation and resistance', and that in call centres, management 'rely on a combination of technologically driven measurements and human supervisors' (Taylor and Bain 1999: 108). After all, the workplace involves contradictions between quantity and quality of phone calls in the labour process (Bain et al., 2002: 3) and necessarily entails the 'dynamic process of capital accumulation' (Taylor and Bain 1999: 108). Yet it is possible to use the panopticon metaphor to illustrate the new dynamics of supervision while still drawing attention to the resistance that takes place on the call centre floor (Woodcock, 2017).

### *The platform*

These previous debates about factory work and call centres provide an important route into understanding the role of measurement in platform work. The same concern over the indeterminacy of labour power in the factory and the call centre remains, although now platforms are purchasing slivers of worker's time, spread out over a geographic range that is potentially global. As Standing (2016) has predicted, one third of labour transaction will take place on digital platforms by 2025. The 'integration' of telephones and computers in the call centre that facilitated the intensification of measurement (Taylor and Bain, 1999: 102) is now reconfigured, with workers expected to pay for their own smartphones equipped with GPS for far more granular data collection.

The growth of platforms like Deliveroo and Uber has been analysed by Nick Srnicek (2017: 91). He identifies the 'lean platform economy' as emerging from a context in which it 'ultimately appears as an outlet for surplus capital in an era of ultra-low interest rates and dire investment opportunities rather than the vanguard destined to revive capitalism'. Trebor Scholz (2017: 13) has also undertaken a sustained critique of platforms, arguing that they have been 'instrumental in the process of dissolving direct employment, thereby creating low-wage futures for millions of people'. Scholz (2017: 42) argues that platforms like Deliveroo are, in fact, 'a labor company, not simply a tech startup, which means it is reliant on the availability of an abundance of cheap labor and a permissive regulatory environment' (Scholz, 2017: 44).

While there are a range of different forms of platforms, delivery platforms are a kind of ‘geographically-sticky’ work (Graham and Woodcock, 2018: 245) that requires workers to be in a particular place to complete the work. This is distinguishable from forms of ‘cloud work’ that workers can complete from anywhere with a computer and internet connection, either short tasks like ‘crowdwork’ or larger ‘freelance’ activities. Deliveroo is therefore a kind of ‘location-specific labour platform’ (Graham and Woodcock, 2018: 245).

The key way that platforms like Deliveroo have sought to manage labour is through the use of algorithms. Algorithms involves ‘sets of defined steps structured to process instructions/data to produce an output’ (Kitchin, 2017: 14), often automating previous ways of doing things. The processes involved are often obscured as if they operate like a ‘black box’ (Pasquale, 2015), making research challenging. Kitchin (2017: 22-25) has suggested six different ways forward for researching algorithms. The first four involve directly engaging with the algorithm, either through the ‘pseudo-code/source code’, ‘reflexively producing code’, ‘reverse engineering’, or by ‘interviewing designers or conducting an ethnography of a code teaming.’ However, by positioning the algorithmic management as a development of previous management techniques in the factory and then the call centres, platforms can also be considered in two other ways: either by ‘unpacking the full socio-technical assemblage of algorithms’ – although this is clearly very difficult to undertake in a single short case study – or by ‘examining how algorithms do work in the world’ (Kitchin, 2017: 25). Thus, following the worker and the algorithm into what Marx (1976: 280) described as ‘the hidden abode of production’ provides a way to explore this in practice. This must start from an understanding of the workplace as a site of conflict in which algorithms are designed and implemented by management. The algorithm, and of course the measurement necessary for it to be effective, are therefore part of a longer history of management at work, a process that necessarily involves attempts to supervise, control, motivate, and discipline workers.

## Research methods

There are significant challenges for researching work at Deliveroo as it is mediated via a digital platform. The organisation of work limits the opportunities for accessing workers, as there is nothing analogous to the factory gates. There is no physical point outside the workplace at the start or end of a shift to speak to workers. As with other kinds of precarious work, there are structural access problems, and the company itself is not open to research. To address this, the article draws on an ongoing research project that has experimented with different methods to overcome these barriers. It began in June 2016 in London, before the first strike at Deliveroo in August that year (see Woodcock, 2016). This project is an attempt to apply the method of workers' inquiry (Marx, 1938), which has been covered in previous issues of both *ephemera* (Woodcock, 2014) and *Viewpoint* (Woodcock, 2013). It began through serendipitous contact with a Deliveroo driver, along with noticing a rapidly growing number of workers appearing on the roads of London. In Workerist terms, despite the initial contact with a Deliveroo driver, the project began as an 'inquiry from above' (Rieser 2001: 4), seeking to gain access to the workplace. This involved 'participatory' methods, ethnographic observations, and conversations with workers (Alberti, 2014) which were documented with 'full field-notes' throughout the project (Lofland and Lofland, 1995). These were supplemented with ten semi-structured interviews, which were recorded and transcribed. The researcher's identity and the aims of the project were disclosed to both the interview participants, as well as the workers who were engaged in informal conversations. All of the interviews have been anonymised using pseudonyms to protect the identity of the participants. This is particularly important as Deliveroo have previously victimised workers for speaking publicly about the company (Geraghty, 2016).

The extended contact with Deliveroo workers allowed the utilisation of snowball sampling for the semi-structured interviews, which Hagan et al. (2011: 157) have noted is 'a commonly used strategy for locating hard-to-find or sensitive population'. This was a deliberative approach to sampling, seeking out further contacts from those encountered during the observation. The interviews themselves were difficult to organise, despite initial interest

from potential interviewees. Due to the shift patterns of the work, it proved difficult to reliably schedule interviews. When the interviews were scheduled, they took place across London. Each was recorded, and informed consent was achieved with each participant. In total there were ten formal interviews which were transcribed, along with field notes for the other conversations and participatory activities. Eight of the interviews were with bicycle riders, while the other two were with moped/motorcycle drivers. Half of the interviews were with migrant workers, mainly from EU countries. The age range was relatively narrow, with participants in their 20s, and all of the participants were men.

To supplement these methods, the project also attempted a collaborative form of 'co-research' (Rieser, 2001: 1). This involved two main activities. First, co-writing an article with a Deliveroo rider, who used the pseudonym Facility Waters (Waters and Woodcock, 2017). This process was carried out over six months. It involved Waters self-tracking their routes across London, taking detailed information and pictures about each step of the labour process, and analysing their own experiences in depth. It began as a form of co-writing termed 'the full fountain pen method' (Worcester 1995: 125) that the Johnson-Forest Tendency developed, but the final paper was mostly written by Waters, with myself becoming more of an editor. The results of this paper are drawn upon here both directly (with some quotation from Waters in the article) and indirectly. The second part was a collaboration with the IWGB (the Independent Workers' Union of Great Britain). The workers involved in the strike approached the IWGB and began organising with them afterwards. I observed these early meetings and provided volunteer support in various ways to facilitate access.

Informal conversations were conducted with workers during the later organising campaign in London. Many of these conversations were conducted during the organising drive in a north London zone, which involved speaking to people based in that zone, but also activists who had travelled over from other areas to leaflet for the union campaign. Due to the nature of the activities, there were bursts of activity as drivers arrived at peak times, followed by relative lulls that provided ample time to talk. Given the conditions in which these conversations were had – on the side of the road,

often interrupted, and partly in the rain – it was not possible to record these, although for fourteen, field notes were taken as soon as possible afterwards. However, despite these constraints, it was possible to discuss the issues of algorithmic management and resistance with workers, adding additional data to the formal interviews.

This collaboration was overt from the very beginning, with the position of the researcher made explicit throughout. It mainly involved observation and informal interviews, but I also volunteered to help union activists with the creation, dissemination, and analysis of an online survey of work conditions in the gig economy. This involved a combination of closed questions about features of the work, along with open questions to solicit testimonials from workers. The survey was conducted online and distributed via existing WhatsApp networks of riders and through the organising campaign in London, resulting in 158 responses. Further details can be found in parliamentary select committee submission (IWGB Couriers & Logistics Branch, 2017). In return for assisting with the research, it was agreed that the statistics could be used for this article, and the initial findings of the data is drawn upon here to add an overview of the conditions in this kind of work. The connection between knowledge production and organising has always been a critical component of workers' inquiry as a method, setting it apart from more traditional methods. As Burawoy (1988) has argued, engagement and intervention can indeed be a valid part of the research process. The project therefore aimed to create a 'participative communit[y] of inquiry', collaborating with Deliveroo workers in a form of 'co-research' (Reason and Bradbury, 2008: 1) in order to move from an inquiry 'from above' towards and inquiry 'from below' (Rieser, 2001: 4).

## **Working for Deliveroo**

### *How Deliveroo works*

Working for Deliveroo starts with a short 'onboarding' process. For example, as one driver, Alejandro explained, 'I apply on the internet and that's it, they send me a text "can you come tomorrow to have a quick interview", ask me a few questions, a trial with the bicycle, twenty minutes of cycling around and

that's it'. The speed of the process was much quicker than applying for other kinds of service work, although it was comparable, as Fred noted, to getting work in a call centre – another industry marked by high demand for workers. The 'onboarding' process took place at physical location shared with the company's call centre. Once the initial assessment was complete, a representative from the company would take the prospective worker's phone and download the app, then the worker queues for the Deliveroo branded clothes and backpack. This contact with Deliveroo is the first and only physical interaction, and the company representatives (like the call centre workers that they meet at this point) are also on precarious contracts.

The delivery workforce at Deliveroo is divided into two parts. The first are the moped or motorbike drivers, who work throughout the day and evening. As Mostafa explained, drivers tended to work 'six days or more, around eleven hours a day is common'. This meant that Deliveroo would be the main source of income. These workers were primarily migrants, with large numbers of workers from Brazil, the Indian subcontinent, and eastern Europe. The second are the cyclists, who work a shorter shift pattern over lunch and the evening, helping to meet peak demand over mealtimes. For many of the cyclists, this was often fitted around other kinds of work, like Tim who worked 'in the evenings after my other job', and Fred who also worked in a book shop. There are similarities here with other kinds of platform work, with the income being used to supplement other forms of low paid work, particularly given the high cost of living in London.

The first key difference with other service industry work is that there is no formal employment contract for drivers. Deliveroo, like Uber, uses the controversial 'self-employed independent contractor' (rather than employee or worker status), which is in the process of being challenged (Rogers, 2016; Aloisi, 2016). The survey conducted with Deliveroo drivers and the IWGB illustrates some of the problems with this independent contractor status. Notably, 87.1 percent of the respondents did not think that the status accurately reflects the nature of their work, with 47.6 percent believing they should be categorised as 'employee' and 43.5 percent as 'worker'. In addition to this disagreement with employment status, an overwhelming 97.8 percent wanted an increase in employment rights – including 'access to pensions,

parental leave, holiday pay, and sick pay'. In particular, 95.7 percent of respondents thought that the company should be responsible for providing specific measures for safety at work, including paying for insurance and providing adequate training. These figures demonstrate serious issues at Deliveroo. The clearest examples of this is that 92 percent felt the classification as 'self-employed' resulted in them 'being treated unfairly compared to an employee' and that 'employers deliberately misuse the "self-employed" category to take advantage of their workers'. The results of the survey highlighted that these workers were not content with the current contract status.

The 'self-employed independent contractor' status affected the experience of working at Deliveroo. As Conor noted, this meant that 'technically I can get anyone else to fill in for my shift', but that would mean 'I'd have to give them my phone to get the orders, and I'm not going to do that, who would give their phone over to someone else!'. Rather than taking advantage of this option – which was arguably only included to support the self-employed status – the lack of employment security was keenly felt by all the participants. As Steve explained, 'it's not even like you'll get sacked working here, you just get "deactivated", that's it just a message, a notification'. In light of this, Kendrick explained he would 'rather have something with more security' and was 'actively looking for something else'.

This experience is a form of precarity at work – both in terms of the conditions of the work and the subjective experience of the insecurity. Precarity, 'as a concept', is 'both more unwieldy and indeterminate than most'. As Mitropoulos (2005: 12) argues, if anything can be said 'for certain about precariousness, it is that it teeters', which points towards 'some of the tensions that shadow much of the discussion about precarious labour'. Bourdieu (1998: 95-9) has provided a useful definition of 'précarité' as a 'new mode of domination in public life... based on the creation of generalized and permanent state of insecurity aimed at forcing workers into submission, into the acceptance of exploitation'. This experience of precarity is present at Deliveroo, compounded by the lack of physical contact with other workers and management. For example, Fred talked about the difference with working in a 'call centre' as 'its a workplace you can see like

the amount of people within like a week that would be gone but with Deliveroo it's much harder to tell...you don't have any physical contact with Deliveroo'. This is again like Uber, as after the 'onboarding' there is no reason why there would be physical contact with supervisors or representatives of the company. However, unlike Uber, Deliveroo workers meet at 'zone centres' and can form offline connections with other workers (Waters and Woodcock, 2017). As Leonardo explained, 'Deliveroo tell us where to wait between orders, so you know, we meet each other, that's how I got on the WhatsApp group too'. For Steve, the meeting points played an important role, as 'you get to chat away, talk about what's happening and meet other people doing the same thing'. Despite these collective moments between deliveries, Alejandro remarked that 'I feel alone with the company, you feel like you are a self-employed because you don't have bosses but at the same time Deliveroo is your boss, you can't see anybody but you work for a company'.

The precarity and risk led Alejandro to highlight that he 'feels scared sometimes... If I have an accident it's my problem, the company only care about you if you deliver the order and that's it. I feel less secure absolutely'. The risk of accidents while making deliveries was a strikingly common theme. There were numerous stories of drivers or riders who had accidents while on a shift, receiving no assistance from Deliveroo, other than suspending their account while they could not work. Mumit had a crash while on his motorbike and received no help. Similarly, after this, he left his motorbike for 'three minutes... standard delivery, came back down, bike was gone'. Following the theft, he also received no support:

Deliveroo don't care, it's got nothing to do with them, because you're an independent contractor so you have to deal with your own things, they don't care, they'll sign you off for the shift until you can get back, they'll say get back in touch with us and that's all through the call centre as well, not through a person who's...even pretending to give a fuck [laughter].

In Mumit's estimation, 'across the whole of London every day, at least one Deliveroo motorcycle gets stolen, if not two or three, and I imagine the bicycle rate is a lot higher'. This represents a significant extra cost for drivers, whether the cost of a new bicycle or 'thousands of pounds to get a

[motor]bike'. The process of contractual outsourcing (through the self-employed independent contractor status) frees Deliveroo from the risks of much of the work, meaning they do not even need to measure the extent of these losses. For workers, this compounds the sense of precarity, not only through the unstable relationship with Deliveroo, but the additional risks from cycling or driving around the city.

### *Measurement at Deliveroo*

The measurement of work at Deliveroo begins when the driver enters their 'zone'. London is divided into multiple zones that carve up the city. Once entering the zone – after the unpaid drive from home to there – the worker can activate the smartphone app and log in. Within this is a 'zone centre'. This is an algorithmically determined meeting point, designed as a waiting area with the shortest possible routes for deliveries. This is a key difference to Uber, with drivers not being given directions between taxi journeys, other than the nudge of surge pricing. Example screenshots of each step of the labour process can be found in the co-written article (Waters and Woodcock, 2017).

The information asymmetry between the platform and the worker is particularly notable at Deliveroo. The platform has a real-time knowledge of each worker, measuring GPS positioning and timing, whereas the worker is only given enough information to complete the next part of the task. Once an order has been made, it is then pushed out via the app to a worker, a process determined algorithmically. The individual worker chosen by the algorithm is only given the option to accept the delivery – although they can be skipped by ignoring the notification. This is believed to negatively affect the workers rating, but as Facility explained 'we rarely receive any official clarification, and largely rely on sharing information and experiences between workers' (Waters and Woodcock, 2017). Despite the claim that these workers are self-employed, they are only given just enough information at each step. The first instruction is which restaurant the food needs to be picked up from, with no information about the following journey. This means workers cannot skip a delivery with a long or complicated route, in favour of making shorter journeys to maximise their

pay. The app screen displays the restaurant location and then moves into a GPS guide route. On arrival at the restaurant, the worker confirms this through the app and is given instructions, which can involve entering the restaurant via a back door to collect food. The worker is then expected to check what they are picking up, but the focus here is the order number to be exchanged. In some cases, the worker can be informed that they are doing a 'stacked order', picking up more than one order from a restaurant, again not given a choice through the app to refuse this.

Once the order has been received from the restaurant, a new swipe on the app provides the worker with the address of the customer. The app then switches to the GPS route. After the journey – which can differ greatly in length across the zone – the worker arrives at the customer's address, hands over the food, and confirms the delivery on the app. The customer interaction is limited to the handing over of the food, perhaps with some brief pleasantries. Unlike Uber, the customer does not rate the quality of the interaction. There is the option for the customer to add a tip through the app, although this can only be added at the point the customer orders the food. Therefore, the customer does not have an opportunity to measure the workers performance – either in terms of speed of the delivery or quality of the doorstep interaction – before making a choice about whether or how much to tip. As Conor explained, 'you find out about the tips after you do the deliveries, I save them up until the end of the shift to open them like scratch cards'. Following a delivery, workers are ordered back to the 'zone centre' to wait for the next delivery. Through the app, workers are given each task step-by-step. Echoing Taylor (1967: 3), the app 'specifies not only what is to be done, but how it is to be done and the exact time allowed for doing it'.

Workers, at least at the point I conducted interviews, were assigned shifts to log in. However, despite the ability for Deliveroo to know exactly when a worker starts or ends a shift, the interviewees noted that often they would start earlier and finish later. For example, Facility (Waters and Woodcock, 2017) would often start before their assigned shift because:

I have logged on early and been paid my hourly rate regardless of when I was officially down to do so. Sometimes this works, sometimes it does not. While I am certain there are specific criterion that Deliveroo payroll are using, I have no certainty of what these actually are. The other riders and I have our superstitions, but very little concrete knowledge.

Similarly, shifts would often be extended if the worker took a delivery that could not be completed in the remaining time. Although technically workers could call 'Rider Support' to be unassigned, 'the line gets jammed at 9:30pm as so many people are doing this, so being on hold takes just as long as delivering the food. And if you deliver the food you get the pay, so it is just not worth the hassle' (Waters and Woodcock, 2017). However, this dynamic later began to disappear, as Deliveroo moved from a pay arrangement with an hourly component and a small amount per delivery, to only paying per delivery.

The movement from hourly rates to piece rate – or rather to an entirely piece rate arrangement – is a further method through which Deliveroo is shifting the risk of the business model onto workers. In the absence of physical supervision, Deliveroo has developed methods to encourage workers to make timely deliveries. The piece rate means that workers can measure the relationship between their own performance and pay: the more they deliver over a shift, the more money they make. However, this also relies on enough demand from customers – something which mainly comes over mealtimes, rather than evenly spread over the day. In addition to the numbers of deliveries made, workers also receive an email (at the point of the interviews it was every two weeks) with work performance statistics. As Kendall explained, 'so I get this email that tells me... time to the restaurant, to the customer, at the customer'. However, he continued:

I don't even get the actual numbers, I get my distance from the mean and whether or not I met their criteria. So I get this email that is like: good job you met all the criteria and you were five minutes faster than average. The first month I like missed the criteria of time at the customer, which I thought was weird, but nothing happened. If you had no penalties yeah, you don't have to show up, there's no penalty. Like they send you the email for self-motivation, I don't know, SDSA they call it, so here's a bunch of information, changes of my Service Delivery Standards Assessment, so that they did give me my average, time to the restaurant. So average difference was 2.8, but they didn't

actually give me my real time. Travel to customer, -3.4, time at customer, they don't tell me, they just tell me they matched it.

The new possibilities offered by this level of surveillance is impressive. It is comparable to methods developed in call centres, in which (as noted earlier) it became 'feasible to attain total knowledge, in "real time", of how every employee's time was being deployed, through the application of electronic monitoring equipment' (Bain et al. 2002: 3). This possibility is now extended at Deliveroo through the smartphone, GPS technology, and greatly increased bandwidth. It is also, like in the factory and the call centre, combined with a piece-rate system.

This aspect of Deliveroo is particularly important for understanding how the work is managed. Unlike many other kinds of service work in London, there is almost no contact with the company or managers. Conor explained the difference as this: 'there's no supervisor standing over your shoulder, no one checking up on you and coming over to talk, it's really different'. In order to understand how a workplace – in this case dispersed over numerous zones across London – can be successfully organised and managed, it is necessary to consider how technology and techniques are experienced by workers at Deliveroo. The app-based organisation of the labour process allows Deliveroo to collect fine-grain data on the performance of workers. While workers are signed in to the app they are tracked by GPS and each stage of the order is timed and logged. The technology provides 'a real-time "God's eye-view" of workers currently logged in', as Facility argued, involved a perspective of 'watching the city from directly above, viewing the abstracted "units" as they move around the terrain, and displaying live data flows of various kinds' (Waters and Woodcock, 2017). The information created by the technology is not shared with the workers, leading to an information asymmetry which is becoming a common feature of platform work (Heeks, 2017: 17). It was this that led Facility to self-track and attempt to overcome this asymmetry (Waters and Woodcock, 2017).

## The illusion of control at Deliveroo

The labour process at Deliveroo is clearly precisely timed and measured. While these kinds of methods were developed extensively in call centres, at Deliveroo this is now happening outside of a physical workplace. Each action that the worker takes is meticulous logged and compared through the software platform, another example of what Cederström and Fleming (2012: 38) have called ‘exposure capitalism’, where ‘everything about us is suddenly on display – to be seen, to be judged’. In other contexts, algorithms have been used to ‘seduce, coerce, discipline, regulate and control: to guide and reshape how people, animals and objects interact with and pass through various systems’ (Kitchin, 2017: 19). This is also the case at Deliveroo. As Mumit explains, at Deliveroo ‘it’s the algorithm that’s the boss’, automatically collecting and comparing data across the entire company. Mumit continues: ‘the algorithm has rules and we’re the ones who, knowing that, the guys in the office are data driven, and we’re the ones who make the data’.

For the worker, the information is only relayed in the form of ‘a progress report and it gives you a list and it breaks down how long it taking you to do each of your things’, which Fred explains includes time to get to accept the order, travel to the restaurant, collect the food, deliver to the customer, time taken at customer, and so on. Fred further notes:

the thing that’s really interesting, is they don’t tell you what the average that they’re looking for is, they just say ‘you’re achieving’ or ‘you’re not achieving it’ but they don’t tell you, they don’t say ‘you’re under thirteen minutes’, they say ‘your time is twelve and a half minutes, which is you know, achieving better than the target’ but they won’t say what the target is, it’s just you’re doing it quick enough, but you’re not, but its definitely like obscurity is part of the motivating thing, like if you don’t really know then you just have to keep going faster.

This is an important feature of the Deliveroo platform. However, as Sam explains, ‘when you fail it just says like, ‘you haven’t met the expectations’, there is no consequence, there is no anything’. Each of the interviewees noted that there were very few, if any, direct disciplinary results for performance. At one stage Ben had been told there was ‘a three strike rule’,

although in their case this had never been acted upon. There was a general confusion amongst participants about how the process worked, and Sam also explained ‘things like this keep changing, like the payment structure too, and it’ll change again soon I’m sure’. However, later Deliveroo would introduce waves of ‘deactivations’, firing people for what workers presumed was falling into the lowest performing categories.

To make sense of this it is useful to return to Fernie and Metcalf’s (1997: 3) metaphor of the ‘electronic panopticon’. The key difference at Deliveroo is that there is no physical presence of supervisors or managers to enact decisions based on the data. Instead, Deliveroo automates much of the management of the labour process, sending emails to drivers rather than calling them into meetings. This creates what can be conceptualised as an *algorithmic panopticon* (Pasquinelli, 2015) at Deliveroo (Waters and Woodcock, 2017). The algorithmic panopticon is, like the architectural model, ‘sustained by another appearance, one that is not the effect of reality, but that is itself a fiction’ (Božovič, 1995: 8). Not only has Deliveroo attempted to contractually outsource workers, but the actual supervision and management of the labour process is automated. This is not outsourced in the same way as it is within the platform, but involves supervisors no longer being employed in the same way. The efficacy of this approach relies upon the social power of algorithms: there is evidence of detailed supervision in the emails to workers, and discipline is enforced with occasional ‘deactivations’.

The process of measurement is combined with the piece-rate system to provide the illusion of control at Deliveroo. This illusion is an attempt to inculcate workers with the imperatives of management. Unlike the factory or the call centre, the supervisor is no longer present, removing the physical aspect. Control goes beyond just the supervision of workers to ensure that they are working effectively. Control is also about overcoming worker resistance. Yet, the strikes at Deliveroo have shown that the algorithmic panopticon is not effective at all for dealing with wildcat strike action. The idea of an algorithmic panopticon does not ‘disavow the possibilities for collective organisation and resistance’ (Taylor and Bain, 1999: 103), which was a concern during the call centre debates. This can be seen clearly with

the instances of strike action from 2016 at Deliveroo. In response to a change in payment terms, a demonstration was organised outside of the Deliveroo headquarters in central London. Drivers were able to take strike action over the course of the next few days by logging out of the Deliveroo app. The precarity of their own employment conditions allowed the wildcat strike action to spread incredibly quickly, with no need to adhere to the regulations restricting trade union action in the UK. In a sign of their own precarity, Deliveroo backed down from their original plans that sparked the action, opting instead to trial the new rate in a particular zone. In the factory or the call centre, supervisors would be on hand to deal with strike action. Without any effective disciplinary apparatus, Deliveroo had almost no tools at its disposal to manage the strike action. This also hints at the possibility that there is more resistance happening below the surface of both the researcher and managerial gaze.

Outside of strike action, the illusion holds Deliveroo together as an effective organisation. It works just well enough to keep the platform operating. However, the points of rupture highlight that Deliveroo, like other platforms, is involved in a twofold precarity: forcing workers into precarity, while operating precariously as a lean platform itself. This illusion of control can be partly explained by the emphasis of data collection by platforms, but also due to the lean model with pressure on costs (Srnicek, 2017). The data collected at Deliveroo is not just used to send out automated performance emails. As Agre (1994: 107) pointed out, privacy can be considered in terms of surveillance (as it often has) or as capture. This capture model 'has deep roots in the practical application of computer systems' and goes further than observation to acquire and dissect data on individuals. It can also be found in more forms of work, as data collection and metrics become increasingly widely used (Woodcock, 2018). At Deliveroo, this extends to the installation of proprietary software on rider's smartphones, allowing the vast capture of data. Deliveroo's algorithmic panopticon can also be conceived as operating within a broader 'surveillance assemblage' (Haggerty and Ericson, 2000: 611) of both worker and customer. This data is intended to develop the future business models of Deliveroo, stretching from the dark kitchens (where food is prepared only for deliveries, see Facility and Woodcock, 2017), automated

food delivery, and the prediction and shaping of food consumption patterns (Panja, 2018).

The algorithmic panopticon has not solved the problem of the indeterminacy of labour power for Deliveroo. The longer term aims of Deliveroo, like Uber, lies in the collection of data. For now, the model at Deliveroo requires two interrelated illusions. The first is the illusion of control discussed here. The second is an illusion of freedom. As Fred explained, working at Deliveroo is ‘actually like a reasonable shit job because that illusion of freedom is really strong like you do kind of feel like your own boss because we can all stand around and talk shit about Deliveroo as much as we like’ because ‘you don’t have that sort of spectacle of authority’. The difference with Deliveroo’s algorithmic panopticon is this lack of direct disciplinary action. In the factory, supervision was direct and carried risk of disciplinary action, while in the call centre workers had regular meetings with supervisors to discuss their performance – and could be fired on the spot (Woodcock, 2017: 43). The panopticon requires ‘punishment’ as a ‘spectacle’ to support the supposed omnipresence of the inspector (Božović, 1995: 4). Instead, Deliveroo entrusts the automated performance emails to convince workers. In the process, workers find a form of freedom within this. However, it is an ‘illusion of freedom’, as Fred notes, because in the end, workers do not have control. For example, there is no way to dispute a ‘deactivation’ or challenge the data that has been collected.

## **Conclusion**

This article aimed to understand Deliveroo from the perspective of workers. The use of workers’ inquiry methods allowed an experimental look at how management through algorithms, conceptualised here as an algorithmic panopticon, is carried out in practice. Rather than focusing attention on the algorithm itself, the article places this within the development of different forms of measurement and control at work. This historical trend is an important corrective to the risk that complex algorithms are overestimated, either in practice or theoretically, and then appear as a perfect supervisory

tool, becoming like the observer in the panopticon. The correction to this is a return to the workers' perspective.

Throughout the article, the role of measurement has been considered. First, through an examination of the factory and the classical panopticon, the call centre and the electronic panopticon, and then at Deliveroo with the algorithmic panopticon. Each of these instances had different ways of enacting surveillance and measuring work – with piece rates, disciplining, and other methods to try and overcome the indeterminacy of the labour process. However, measurement alone is never enough within the contradictory context of the workplace. At Deliveroo, the algorithmic panopticon goes beyond measurement, but without physical supervision, it relies upon the illusions of control and freedom. However, like in the factory and call centre before, the practice of this management approach is not without problems. Workers discover these through their engagement with the labour process. The precarious employment conditions also represent a potential lowering of the barriers to resistance and struggle, seen with the wildcat strikes at Deliveroo in 2016. Precarity is therefore twofold at Deliveroo: both precarious working conditions for workers, as well as a precarious operation for the platform.

The appearance of an omnipresent and automatic method of supervising and disciplining workers is a cost-effective method of control, but as the participants indicated, this appearance was far from total. It is also important to note that the participants expressed a positive experience of the illusion of freedom created by the algorithmic panopticon, along with the ability to work outside of a formal workplace, whether on a bicycle or moped/motorbike. The illusion of freedom provided an important mobilising factor for the organising campaign that followed. The business model of Deliveroo, like that of Uber, has so far proven effective and is being applied – either in part or completely – to an increasingly greater range of sectors. The early success of Deliveroo workers to organise, along with the support of the IWGB, provides an important example of how workers can resist in these new contexts. Further research is needed to understand the factors that led to the strike action and trace the lines of struggle that are emerging in the gig economy. The strikes show that the power of the algorithmic panopticon

is not totalising. Instead, it is one part of what Foucault (2012) would have called an ‘archipelago of different powers.’ Thus, the streets of London, like the factory floor and the call centres before that, remain a ‘contested terrain’ (Edwards 1979: 15), in which workers continue to come into conflict with their employers – whether via an algorithm or not.

## references

- Agre, P. (1994) ‘Surveillance and capture: Two models of privacy’, *The Information Society*, 10(2): 101-127.
- Alberti, G. (2014) ‘Mobility strategies, “mobility differentials” and “transnational exit”’: The experiences of precarious migrants in London’s hospitality jobs’, *Work, Employment and Society*, 28(6): 865-881.
- Aloisi, A. (2016) ‘Commoditized workers: Case study research on labor law issues arising from a set of “on-demand/gig economy” platforms’, *Comparative Labor Law and Policy Journal*, 37(3): 620-653.
- Bain, P., A.C. Watson, G. Mulvey, and C. Gall (2002) ‘Taylorism, targets and the pursuit of quantity and quality by call centre management’, *New Technology, Work and Employment*, 17(3): 170-185.
- Braverman, H. (1999) *Labor and monopoly capitalism: The degradation of work in the twentieth century*. London: Monthly Review.
- Bentham, J. (1995) *The panopticon writings*. London: Verso.
- Bourdieu, P. (1998) *Contre feux*. London: Raisons d’agir.
- Batt, R. (2008) ‘Service strategies: Marketing, operations, and human resource practices’, in P. Boxall, J. Purcell and P. Wright (eds.) *The Oxford handbook of human resource management*. Oxford: Oxford University Press.
- Božovič, M. (1995) ‘Introduction’, in J. Bentham, *The panopticon writings*. London: Verso.
- Brophy, E. (2010) ‘The subterranean stream: Communicative capitalism and call centre labour’, *ephemera*, 10(3/4): 470-483.

- Burawoy, M. (1979) *Manufacturing consent*. Chicago: University of Chicago Press.
- Burawoy, M. (1998) 'The extended case method', *Sociological Theory*, 16(1): 4-33.
- Cederström, C. and P. Fleming (2012) *Dead man working*. Winchester: Zero Books.
- Cheney-Lippold, J. (2017) *We are data: Algorithms and the making of our digital selves*. New York: NYU Press.
- Cliff, T. (1970) *The employers' offensive: Productivity deals and how to fight them*. London: Pluto.
- Deliveroo (2017) 'Frequently asked questions'. [<https://deliveroo.co.uk/faq#howdoesitwork>]
- Edwards, R. (1979) *Contested terrain: The transformation of the workplace in the twentieth century*. New York: Basic Books.
- Eubanks, V. (2018) *Automating inequality: How high-tech tools profile, police and punish the poor*. New York: St. Martin's Press.
- Fernie, S. and D. Metcalf (1997) *(Not) hanging on the telephone: Payment systems in the new sweatshops*. London School of Economics: Centre for Economic Performance.
- Foucault, M. (1991) *Discipline and punish: The birth of the prison*, trans. A. Sheridan. London: Penguin.
- Foucault, M. (2012) 'The mesh of power', *Viewpoint Magazine*, 2. [<https://viewpointmag.com/2012/09/12/the-mesh-of-power/>].
- Geraghty, B. (2016) 'Deliveroo and victimisation in the gig economy (updated)', *Financial Times Alphaville*, 7 December.
- Glucksmann, M. (2004) 'Why "work"? Gender and the "total social organisation of labour"', *Gender, Work, and Organisation*, 2(2): 63-75.
- Graham, M. and J. Woodcock (2018) 'Towards a fairer platform economy: Introducing the fairwork foundation', *Alternate Routes*, 29: 242-253.

- Hagan, J., N. Lowe and C. Quingla (2011) 'Skills on the move: Re-thinking the relationship between human capital and immigrant labour mobility', *Work and Occupations*, 38(2): 149-178.
- Haggerty, K.D. and R.V. Ericson (2000) 'The surveillant assemblage', *British Journal of Sociology*, 51(4): 605-622.
- Heeks, R. (2017) 'Decent work and the digital gig economy: A developing country perspective on employment impacts and standards in online outsourcing, crowdwork, etc', Paper 71, Manchester: Centre for Development Informatics, Global Development Institute, SEED.
- Hochschild, A. R. (2012) *The managed heart: Commercialization of human feeling*. Berkeley: University of California Press.
- Houlihan, M. (2002) 'Tensions and variations in call centre management strategies', *Human Resource Management Journal*, 12(4): 67-85.
- IWGB Couriers & Logistics Branch (2017) 'Written evidence from IWGB Couriers & Logistics Branch (WOW 99)', *The future world of work*. [<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/business-energy-and-industrial-strategy-committee/future-world-of-work/written/47112.pdf>].
- Kitchin, R. (2017) 'Thinking critically about and researching algorithms', *Information, Communication & Society*, 20(1): 14-29.
- Kolinko (2002) *Hotlines – call centre. inquiry. communism*. Oberhausen: Kolinko.
- Lee, M.K., D. Kusbit, E. Metsky and L. Dabbish (2015) 'Working with machines: The impact of algorithmic, data-driven management on human workers', in B. Begole, J. Kim, K Inkpen, and W. Wood (eds.) *Proceedings of the 33rd annual ACM SIGCHI conference*. New York NY: ACM Press.
- Lofland, J. and L. Lofland (1995) *Analyzing social settings: A guide to qualitative observation and analysis*. Belmont, CA: Wadsworth.
- Lovelock, C.H. (1983) 'Classifying services to gain strategic marketing insights', *The Journal of Marketing*, 47: 9-20.
- Marx, K. (1976) *Capital: A critique of political economy vol. 1*. London: Penguin Books.

- Marx, K. (1938) 'A workers' inquiry', *New Internationalist*, 4(12): 379-381.
- McKinlay, M. and P. Taylor (1998) 'Foucault and the politics of production', in A. McKinlay and L. Starkey (eds.) *Management and organization theory*. London: Sage.
- Mitropoulos, A. (2005) 'Precari-Us', *Mute: Precarious Reader*, 2: 12-19.
- Mulholland, K. (2002) 'Gender, emotional labour and teamworking in a call centre', *Personnel Review*, 31(3): 283-303.
- O'Neil, C. (2017) *Weapons of math destruction: How big data increases inequality and threatens democracy*. London: Penguin.
- Panja, S. (2018) 'Deliveroo plans to make its own food and replace chefs and riders with robots'. [<https://london.eater.com/2018/3/29/17175482/deliveroo-future-plans-robots-profits-investors>]
- Pasquale, F. (2015) *The black box society: The secret algorithms that control money and information*. Cambridge, MA: Harvard University Press.
- Pasquinelli, M. (2015) *Anomaly detection: The mathematization of the abnormal in the metadata society*. Berlin: Transmediale.
- Reason, P. and H. Bradbury (2008) 'Introduction', in P. Reason and H. Bradbury (eds.) *Sage handbook of action research*. London: Sage.
- Rieser, V. (2001) 'The political, cultural development and main reference points', *Generation online*. [<http://www.generation-online.org/t/vittorio.htm>].
- Rogers, B. (2016) 'Employment rights in the platform economy: Getting back to basics', *Harvard Law and Policy Review*, 40: 479-520.
- Rosenblat, A. and L. Stark (2016) 'Algorithmic labor and information asymmetries: A case study of Uber's drivers', *International Journal of Communication*, 10: 3758-3784.
- Schneier, B. (2015) *Data and goliath: The hidden battles to collect your data and control your world*. New York: W.W. Norton & Company.
- Scholz, T. (2015) 'Digital black box labor'. [[http://wiki.p2pfoundation.net/Digital\\_Black\\_Box\\_Labor](http://wiki.p2pfoundation.net/Digital_Black_Box_Labor)]

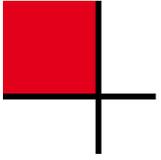
- Scholz, T. (2017) *Uberworked and underpaid*. Cambridge: Polity Press.
- Srnicek, N. (2017) *Platform capitalism*. Cambridge: Polity.
- Standing, G. (2016) *The corruption of capitalism: Why rentiers thrive and work does not pay*. London: Biteback Publishing.
- Taylor, F. (1967) *The principles of scientific management*. New York: Norton.
- Taylor, P. and P. Bain (1999) ‘“An assembly line in the head”: Work and employee relations in the call centre’, *Industrial Relations Journal*, 30(2): 101-117.
- Turow, J. (2017) *The aisles have eyes: How retailers track your shopping, strip your privacy, and define your power*. New Haven, CN: Yale University Press.
- Waters, F. and Woodcock, J. (2017) ‘Far from seamless: A workers’ inquiry at deliveroo’, *Viewpoint Magazine*.  
[<https://www.viewpointmag.com/2017/09/20/far-seamless-workers-inquiry-deliveroo/>]
- Worcester, K. (1995) *C.L.R. James: A political biography*. Albany: State University of New York Press.
- Woodcock, J. (2013) ‘Smile down the phone: An attempt at a workers’ inquiry in a call center’, *Viewpoint Magazine*, 3.
- Woodcock, J. (2014) ‘The workers’ inquiry from trotskyism to operaismo: A political methodology for investigating the workplace’, *ephemera*, 14(3): 493-513.
- Woodcock, J. (2016) ‘#Slaveroo: Deliveroo drivers organising in the “gig economy”’. [<https://novaramedia.com/2016/08/12/slaveroo-deliveroo-drivers-organising-in-the-gig-economy/>]
- Woodcock, J. (2017) *Working the phones: Control and resistance in call centres*. London: Pluto Press.
- Woodcock, J. (2018) ‘Digital labour in the university: Understanding the transformations of academic work in the UK’, *tripleC*, 16(1).

## the author

Dr Jamie Woodcock is a senior lecturer at the Open University and a researcher based in London. He is the author of *The gig economy* (Polity, 2019), *Marx at the arcade* (Haymarket, 2019), and *Working the phones* (Pluto, 2017). Jamie is on the editorial board of *Historical Materialism* and *Notes from Below*.

Email: [jamie.woodcock@open.ac.uk](mailto:jamie.woodcock@open.ac.uk)





# Subverting capital's temporality: A critical reappraisal of laziness

Yari Lanci

## abstract

In the aftermath of the 2008 financial crisis we witnessed a revival of discussions about a presumed 'laziness' of Southern European countries. In addition to the diffusion of the so-called regime of austerity and the rise of unemployment, at a national level, refrains around the notion of laziness have been coupled with the neoliberal emphasis on self-responsibility as regards the individuals' capacity (or lack thereof) to construct themselves as 'employable'. This article argues that the laziness refrain is used as an accusation to enforce and maintain specific politico-economic relations of production. This is done also by means of personifying a morally charged high ground that underpins the subject making the accusation, which is in turn used to undermine modes of existence that are formally forged and presented as falling out and compromising the 'idyllic' conditions for the extraction of an expected amount of profits. I will thus critically reappraise the idea of laziness in a series of literatures so as to challenge its construction as an anthropological universal and highlight its contemporary (and historically determined) configuration. To do so, I will isolate scenes in which 'laziness' has been tackled, by different theorists, in its philosophical status, in its relation to the ideas of 'action' and 'activity', in its connection with 'work', and its antagonistic relationship with 'time' within capitalist social relations.

## Introduction

Pulcinella, or Punch, the famous Neapolitan puppet-buffoon of *commedia dell'arte*, has hanging on his bedroom wall a notice stating 'Do it tomorrow'. It is the first thing he sees when he rises from bed each morning. When faced with a new days' demands of successive 'things to do', simply reading this notice is enough to short-circuit any attempt at doing what Pulcinella has to do, is supposed to do, or has been asked to do, in an eternal postponement of his daily tasks.

I want to start with this anecdote in order to reframe what is often nowadays conceived under the umbrella term of 'laziness', with exclusively negative connotations, for it seems that the common understanding of the concept conceals its most fundamental (and subversive) trait: the voluntary reluctance to exploited work. When we speak about laziness in a strictly negative sense, we tend to erase the historicity, complexity and heterogeneity of the term and negate the critical potential that is inherent within some of its manifestations, in addition to overlook the material (and discursive) circumstances that allow such a construction of this category. This does not mean this piece will exhaustively map and fully unleash such critical potential, and it is not my intent – even inadvertently – to offer a political program taking laziness (in whichever form the reader decides to grasp it) as its point of departure or its core principle. I will, however, embark in an analysis of the use of the term and venture to trace the uneven genealogy of its contemporary usage in the conviction that a more systematic critical reading of this notion can lay some ground for such a task. Rather than following a chronological trajectory in this exploration, I will instead attempt to reappraise 'laziness' *vis-à-vis* the relation this concept entertains – progressively, while the analysis unfolds – with exploited labour under capitalism and, primarily, with its set of temporalities. Indeed, this article will gradually develop starting from the attempts to a more 'neutral' and philosophical understanding of this notion and its relation to 'action' and 'activity', hover over its connection with 'work' (where time freed from work could be utilised for actions and activities with some form or other of ultimate social utility), and slowly

proceed towards its antagonistic nexus with 'time' under capitalist conditions of production.

The central tenet of this text is that today's moralising discourses seeking to inculcate individuals or groups as 'lazy' or 'idle' is to be conceived of as intrinsic and functional, rather than secondary, to the politico-economic logics of government under capitalism. As a consequent corollary of this, laziness could also be thought of as one of the most effective means to, at once, unbalance the pre-established and ideal set of temporalities of capital that allow the relentless extraction of profit, and as a potential means to create interstitial 'spaces' within and outside its temporal cages. Understanding the terms of this confrontation entails grasping that, on the one hand, the current implications of the use of the notion of laziness are historically determined and reflect specific politico-economic necessities (which I will touch upon). This is to say that 'laziness' cannot be thought of as an anthropological universal despite repeated attempts over the centuries to render it as such. On the other hand, for the very reason of fabricating and categorising 'laziness' as in stark opposition to the dominant (neoliberal) logics of government, the modern ideological constructions of this category disclose the intrinsically political rationality of such a way of governing and expose it to criticism and overt confrontation, particularly on the terrain of the measurement and control of productivity and the government of time. In other words, while not advocating for an alternative (if innate) human 'productivity' which could be deployed differently (outside and beyond capital), I would argue that the present construction of 'laziness' is to be understood against the backdrop of a capitalist setting which condemns it inasmuch as laziness as such severely damages the structural temporal logic of capital. I will thus re-read different manifestations of this concept in order to highlight its contrast to the temporalities of today's configurations of capital. Laziness against capitalist time, not (yet) as a political non-capitalist 'production'.<sup>1</sup>

---

1 The reference here is to the Italian Workerist tradition whose analyses I extensively rely upon in what follows, especially with regard to the resistance to work, but with which I do not necessarily share some of the more 'politicised' and 'vitalist' theses of some of its exponents.

Let us then briefly look at a recent manifestation of the ideological use of this term, before setting out in more detail some understandings of ‘laziness’ in the writings of key thinkers who have enquired it in its traits as a conceptual category, in relation to work and its ideology and, most importantly, as an alterity in opposition to the temporalities of capital.

### **A revived outbreak of the noble art of wasting time**

In the aftermath of the financial crisis of 2008, and following the diffusion of the so-called regime of austerity, it has not been uncommon to hear or read about the inclination to laziness of the P.I.I.G.S.<sup>2</sup> Evidently, the citizens of the PIIGS countries were not particularly happy about being compelled to pay back a debt that, as individual citizens, they had never contracted. Yet instead of pointing to the first (this time quite blatant) signs of dysfunctionality within the EU, it was often easier to refer to an alleged idleness and parasitism of the people of Southern Europe. For instance, in 2011, in the years preceding the rapid escalation of the crisis in the Eurozone, the German chancellor Angela Merkel not only claimed (incorrectly) that people in Southern Europe on average retire earlier than in Germany, but she also criticised them for supposedly enjoying more vacation time. As she put it, ‘We can’t have a common currency where some get lots of vacation time and others very little. That won’t work in the long term’ (in Böll and Böcking, 2011). Others, like the conservative columnist David Brooks, while scolding Greece, Italy, and Spain for not having ‘lived within their means’ in contrast to countries such as Germany and the Netherlands – who instead ‘have played by the rules and practiced good governance’ – puts forward a morally laden argument: ‘People who work hard and play by the rules should have a fair shot at prosperity. Money should go to people on the basis of merit and enterprise. *Self-control should be rewarded while laziness and self-indulgence should not*’ (Brooks, 2011, emphasis added).<sup>3</sup>

---

2 Portugal, Italy, Ireland, Greece, and Spain are the European countries most affected by the recent crisis of sovereign debt.

3 It is quite telling that only a few paragraphs below, Mr Brooks is perfectly aware that ‘It’s true that Germans benefited enormously from the Eurozone and the

Furthermore, the whole discursive field gravitating around different variants of the idea of laziness seems to have been assimilated also by those whose suspected laziness is being denounced. The implementation of neoliberal policies in the relatively recent past, in addition to the rise in the rate of unemployment, gave way to a surprising (yet paradoxically banal) consequence: the anthropological stigma of 'being lazy' proclaimed by the dominant ideological discourse has been absorbed, 'from below', by the subjects directly affected by the generalisation of the contemporary framework of precarity. The progressive disappearance of the standard Fordist employment relation (the permanent contract), the multiplication of new regimes of casualization of labour (part-time and fixed-term contract, project contracts and so on), and the unprecedented proliferation of forms of unpaid labour (stages and internships) have all manifestly contributed to shape the individual's self-perception of being 'lazy' as the cause for the lack of a steady income. From this perspective, which is to say from the perspective of the precarious worker and perfectly in keeping with the theoretical backbones of neoliberalism, laziness appears to be one of the traits comprised in the internalised logic (and subjective experience) of a subject conceiving herself as an enterprise, where the lack of a steady income is linked to a lack in proper (i.e., not-'lazy') investment in her human capital.<sup>4</sup>

Notwithstanding the fact that official statistics do not altogether support arguments against the 'laziness' of the PIIGS such as those reported earlier, in that the amount of annual hours actually worked per worker has been on average much higher in the PIIGS countries than in Germany and the

---

southern European bubble, and that German and French banks are far from blameless'. That does not seem to prevent him to advance a rather biased and inconsistent argument.

- 4 On precarity and its link with neoliberalism, see Mitropoulos (2005) and Tsianos and Papadopoulou (2006). As concerns the relation between a conception of the self as enterprise and neoliberalism, see the canonical Foucault (2010). The most interesting takes on precarity, not as a merely recent neoliberal phenomenon but rather as something structurally embedded in the logics of capital, can be found in Di Bernardo (2016) and Neilson and Rossiter (2008).

Netherlands in the past twenty five years or more,<sup>5</sup> let us assume for the sake of the argument that this is not relevant, as critique should be ideally undertaken starting from the claims (and regimes of ‘truth’) of the object to be criticised, so as to then dismantle it from within. Therefore, I want to draw the attention to the allegations of self-indulgence, idleness, and laziness just mentioned. Despite their individual idiosyncrasies (of which more later), these terms have increasingly become part of the vocabulary deployed in mainstream discourses as a response to the series of economic crises leading to the 2008 crash and its prolonged and ongoing aftermath. What is the reason for these charges and the use of these terms? Why are these charges usually categorised as such?

The crisis in the Eurozone broadly speaking, the rise of the neoliberal discourse on flexibility at work and its emphasis on self-responsibility and investment in human capital, are not the first semantic fields or historical moments in which the laziness-refrain has been nonchalantly deployed. One could trace it back to at least Aesop’s fable of the ant strenuously and patiently saving up food for the winter and, when winter comes, refusing to feed the begging grasshopper who had instead been singing throughout all summer. Indeed, thinking about the ‘laborious’ North of Italy blaming the ‘lazy’ Southerners for depleting the results of their hard work is only one of the most persistent and unshakeable examples. ‘It’s because they can enjoy the sun much more’, the Austrian Milan claims; ‘They complain because they can’t even *experience* the sun’, the Reign of the Two Sicilies counters – the implication being that Northerners would do exactly the same if only there were some sun to enjoy. This becomes curiously plain again when tabloids such as *The Sun* or *The Mirror* fear an exponential flurry of suspicious sick days on the rare sunny summer days in England (Cambridge, 2017; Stretch, 2015). The presence of sunny weather appears to be one of the contributing factors, but by itself it does not seem enough to account for the severe demonization of laziness, as a category, especially when framed by moral distinctions. Thus, we need firstly to understand this peculiar category

---

5 Data gathered from the Organization for Economic Co-operation and Development (OECD). [<http://stats.oecd.org/index.aspx?DataSetCode=ANHRS>]

in some of its traits in order to then shed light on the implications of its (overtly ideological) contemporary usage.

### **Laziness as a relation to the self, itself, and work**

The French semiotician Roland Barthes elegantly attempted to define the notion of laziness outside moral categories and delimit its formal conceptual parameters. In an interview from 1979, he distinguishes different kinds of laziness some of which are passive and are undergone painfully. Examples of this kind can be found in the sense of rebellion one experiences when confronted with boring or irritating tasks, such as 'mail, manuscripts to read, and so on'.<sup>6</sup> In those cases, Barthes argues, 'I rebel and tell myself that I just can't get everything done, like a student who can't do his homework' (1985: 339). This is a kind of laziness which imposes itself on the self, instead of the other way round, and is very different from the 'glorious and philosophical form of laziness' which, Barthes specifies, takes the form of 'not doing anything' (*ibid.*). Yet the French philosopher does not advance an argument – and neither does the present writer – for that pure form of laziness which, in any case, he is aware it is almost impossible to detect in modern Western culture. Instead, Barthes is at pains to disentangle his actions and activities from particular ends. One of the successful forms of laziness, he suggests, would consist in an 'activity that is minimal, gratuitous, without finality' (*ibid.*: 341). In his examples, knitting is one of the practices that might be included in this category, provided that who is knitting does not have in mind the final piece of clothing to be produced. Accordingly, laziness is here embedded in an operation performed simply for its own sake, with no external ends. One can thus claim that one of the first elements defining laziness is the liberation of any activity from externally determining forces and the performance of a certain relation to itself.

If we were to keep following Barthes in his interview, we would easily find a strong reference to what defines laziness by its absence: the category of work. In this sense, a leisurely activity such as reading – experiencing art in

---

6 Although 'boredom' is often listed as one of the foremost traits of certain forms of laziness, its analysis would have necessitated another article.

its diverse manifestations appears very often to be one of the forms active laziness can take – falls outside Barthes’s conceptual grid: ‘So, what do you want someone like me to do if he decides to do nothing? Read? But that’s my work. Write? Again, work’ (*ibid.*: 340). Furthermore, he mentions painting as a form of laziness he would indulge in. Painting was not Barthes’s specific profession and, thus, it was not subjected to any kind of external expectation, either in the form of some level of productivity or meeting a certain threshold of aesthetic quality. Either physically and intellectually active or passive, laziness seems to produce a painful experience of the will insofar as the activities it congeals in become (or are subjected to) work.<sup>7</sup>

Such initial (and partial) understanding of the term appears to draw closer to the well-known Aristotelian concept of *praxis* (action, doing) in contrast to *poiêsis* (making, production). For Aristotle, ‘action and production are generically different, for production aims at an end other than itself; but this is impossible in the case of action, because the end is merely doing well’ (1976: 209). However, Aristotle could formulate the notion of a form of activity freed from external ends only in a society, such as Ancient Greece, which allowed a part of its population to be liberated from the realm of necessity and the performance of necessary tasks for its own reproduction, including restoring oneself from the energies spent in different forms of *poiêsis*, through the use of slaves. Accordingly, we are getting nearer to what renders unfeasible a simple equation of laziness with Aristotle’s general non-instrumental form of activity with ‘no other end beyond the doing’.<sup>8</sup> This is so because, as we will shortly see, the notion of laziness always implies the existence of a social, political, and economic dimension against which the ‘lazy’ individual is measured. As Peter Fleming recently put it, in a

---

7 Here, I am not referring exclusively to salaried work, and the argument should include forms of unpaid labour individuals perform in advance for a future hypothetical (monetary or symbolic) reward that might never arrive, the production of knowledge (academia included) standing as one of the chief examples of what Marco Bascetta termed ‘the political economy of the promise’ (2015).

8 ‘For the arts of making have some other end beyond the making...but in the processes of doing there is no other end beyond the doing’ (*Magna Moralia*, 1197a3-13).

different yet related context, 'The ritual of labour has undoubtedly been existentially entrenched and generalized as the key standard by which we are judged' (2015: 19). At the same time, this dimension markedly goes against any form of non-instrumentalism, as this would be considered as a 'waste' of the individuals' potential to work. Such a dimension – in other words, a specific set of social relations – measures individuals in terms of, amongst other things, their 'productivity'. It is in the range of such framework of measuring that (morally charged) ideological claims flourish and become instrumental in framing certain subjects as 'functioning' (living within their means, disciplined, productive), while others are 'deviant' (lazy, unproductive, parasitic).

The link between laziness and work displays further aspects as soon as our attention shifts to the relation between laziness as commonly understood – by the dominant contemporary ideological discourse with its negative connotations, as we said – and the lack of contribution to (any) society, thus, the allegation of social parasitism. Questioning a widespread understanding of any cultural category implies interrogating the premises on which it appears to be based: what kind of 'contribution' to society are we talking about? And what kind of societal order is the lazy subject being a parasite of, since what seems peculiar in many discussions on laziness is the link to the avoidance of work? The lazy rascals and grasshoppers in Southern Europe must be really damaging something by presumably not working enough – or worse, by doing other things. This something is a specific politico-economic framework ensuring the continuous reconstitution and reproduction of a specific set of social relations. At the same time, it is worth specifying that if laziness is being enquired in relation to the category of work, the latter evidently cannot be posed as an abstract generalisation and must unavoidably be understood as end-oriented, otherwise it would not be 'work' under the specific set of social relations I have been alluding to or, differently stated, labour under capitalism. Let us then check how various thinkers have tackled, in different ways, the ideology of work as a fetter to the development of humanity and society.

## Laziness against (the ideology of) work; idleness as social utility

The 'anti-work' literature is vast. One needn't necessarily turn to Weber to trace the links between an already existing religious blameful attitude towards idleness and its conflation with the needs of the emerging industrial production. It would also be too soon to call to testimony Marx and his lifetime efforts against the brutalities of capitalist exploitation. But one could be content, for the moment, to check what his son-in-law, Paul Lafargue, wrote in a very peculiar pamphlet at the end of the nineteenth century.

Despite its title, Lafargue's 'The right to be lazy' is not so much a polemical defence of the presumed pleasures of idleness or its definition, but rather a harsh anti-capitalist attack against the ideology of work – a 'mental aberration', 'dogma', 'madness', 'mania', 'vice', 'extravagance', 'curse', and 'the most terrible scourge that has ever struck humanity' (Lafargue, 1883). Lafargue's polemic is directed primarily at work in itself, whose intolerability for the working class he somehow, and rightly so, takes almost for granted. Yet in the midst of a very confused (if not superficial) series of justifications of his proposal for a three-hour workday – all his emphasis on overproduction in the central section of the pamphlet seems misplaced – his wordy rage focuses on two categories of people. On the one hand, as the source of the issue *per se*, Lafargue attacks Christian religious thought, liberal thinkers, and moralists for having 'perverted nature' by instilling the disastrous dogma of the virtue of work into the too easily influenced working class. On the other hand, he is even harsher with that same working class for permitting the indoctrination to take place and repeat thoughtlessly, 'like Arcadian parrots', the lesson of classical bourgeois political economy about work increasing the wealth of nations. 'Shame on the proletarians!', he thunders, for allowing themselves to be reduced, throughout their lives, to empty biological containers drained of their energies by the immense efforts of exploited labour. Why can't they even bear the thought of staying with their arms folded? (*ibid.*: 7 and 15).

Work has frightful consequences, it cripples human natural inclinations, and people should do something else instead. What are humanity's inclinations

untampered by work? What could we do instead? How would we spend our time? On this, the literature is vaster than the one on the abolition of work and centuries of politico-philosophical thought differ wildly. Without falling into the trap of discussing (let alone defining) anthropological universals, I just want to dwell on what thinkers agree upon regarding some of the forms laziness can take outside the capital-labour relation. Besides, as Adorno put it, what is ultimately an important consideration for the issue of non-working time is that 'it is hard to ascertain anything in human beings which is not functionally determined' (2001: 188).

With Lafargue – and although he never clearly specifies his assumptions about human nature – there are few references to the 'natural instincts' of the proletariat. For Lafargue man is a free being which should never be subjected to the toil of work. Only when kept to a maximum of three hours per day, work would be useful to the social organism and would function as 'mere condiment to the pleasures of idleness'. Once having proclaimed a generalised 'regime of idleness', the proletariat would in fact reserve 'the rest of the day and night for leisure and feasting' (Lafargue, 1883: 11). However, he comes across as relatively conflicted about whether debauchery is a feasible manifestation of his idea of idleness. Interestingly, the French socialist activist assumes a paradoxical moralising perspective towards debauchery and self-indulgence, but only in settings of aristocratic luxury and enforced consumption. He refers to the first capitalist as 'a steady man of reasonable and peaceable habits...[who] contented himself with one wife or thereabouts' and who left to the aristocracy what he ironically calls 'the noble virtues of debauchery'. With the development of capitalist production, in contrast, the class of non-producers was led to over-consumption, 'unbounded luxury, spicy indigestibles, and syphilitic debauches'. In Lafargue's view, not every capitalist could endure 'the fatigues of debauchery' (*ibid.*: 13–4). Lafargue's point could be thus summarised as follows: firstly, he conceives laziness as an umbrella category for the enjoyment of life's pleasures which, untampered by the obligations to work, would find their appropriate times to be indulged in; secondly, he does not question the actual use of time beyond the obligatory three daily working hours, and does not have any concern in a subjective experience of laziness

for laziness' sake, or liberation from work as generally leading to the realm of play, in other words, a relatively hedonistic and non-instrumental understanding of laziness. Whereas debauchery could easily be included in one of the forms such laziness can take, it is interesting to note how Lafargue's hedonistic viewpoint has some reserves on it, as if he is involuntarily enforcing a further moral differentiation amongst the series of activities in which laziness might crystallise.<sup>9</sup>

Fifty years after Lafargue, Bertrand Russell suggests that a reduction of the workday to four hours would be enough to entitle a man to 'the necessities and elementary comforts of life' (1935: 25). He argues that in the 1930s the advancements in technology and industrial production had already made possible the reduction of the total amount of work required to provide the necessities of life for everyone. Russell is indeed baffled by high rates of unemployment while the employed population is overworked. Surely, he continues, reducing the employees' hours of work and redistributing them amongst the unemployed seems the only reasonable choice.<sup>10</sup> With a fairly distributed four-hour work day, humanity could use the remaining hours as they might see fit, and Russell contends that everyone would give in to their scientific or artistic inclinations, otherwise impaired by fatiguing work. In a world in which the hours of necessary work are kept to a minimum, 'every person possessed of scientific curiosity will be able to indulge it, and every painter will be able to paint without starving, however excellent his pictures may be' (*ibid.*: 27). Others with medical, political, or economic interests could pursue their inclinations and increase their skills, freed from the need to toil for forty hours per week or more. Russell's attention to indulging one's own intellectual, practical, artistic inclinations is tied to a specific understanding of human nature (their eventual contribution to society) and suggests that, left on their own, individuals would not experience their

---

9 As with other 'paths' I necessarily cannot undertake in this article, it would be particularly interesting to embark in future work on a series of reflections regarding further, non-instrumental types of laziness (among which one should admittedly include 'debauchery').

10 Russell is not considering that, often, a high rate of unemployment is what keeps the cost of employed labour to a minimum, see (Marx, 1990: 789).

laziness only as pure frivolity or passive activities. Indeed for Russell, idleness challenges the immoralising and negative connotations of laziness as being an activity without social purpose.

His take on laziness can thus be clearly placed in opposition not only to that of Lafargue, but also contrasted to the one articulated by Barthes. As we have seen earlier, the latter was concerned with identifying particular activities which would be radically freed from external ends, particularly at the individual level – for Barthes at issue is exactly a rupture with the search for an increase of personal productivity or improvement, as these would inevitably be integrated in the category of work. The Marxist historian Peter Linebaugh is aligned with Russell's standpoint when seeking to positively appraise laziness (in terms of social utility), as he shows how the idleness of English weavers in the eighteenth century also allowed important contributions to mathematics. Such a standpoint on idleness is already distant from the negative connotations the term usually takes and shows that 'what was "idleness" to [some] was civilization to others' (Linebaugh, 2006: 263). These perspectives consider the availability of disposable time as ultimately resulting in activities entailing some form or other of general social utility.<sup>11</sup>

These takes on 'laziness' – at any rate outlined here in opposition to work – have evidently not entirely liberated its full subversive potential. In order to understand the structural reasons that support the current ideological discourse which gravitate around the category of laziness and contribute to its constant renewal, reframing this category primarily entails opposing it to how capitalism conceives 'productivity' and to the very capitalist form of wealth. But note, productivity must be understood as inherently the creation of value for capital instead of the satisfaction of needs (creation of use values), whereas the capitalist form of wealth does not assume the form of Marx's 'real wealth' as free disposable time, as he remarkably put it in the *Grundrisse*. Also, although 'laziness' could be understood as indicating a productivity 'other' than that of capital, this does not necessarily mean conceptualising this category as the umbrella term for a 'naturalized

---

11 This seems to be the case also in David Frayne's recent book (2015).

ontology of labor and a utopian vision of a future in which this essence is fully realized in the form of an unhindered productivity' (Weeks, 2011: 81) – as Marx somehow seems to point at, in very different and at times conflicting ways, throughout his work.

In this regard, Marx's perspective is striking in its internal tensions, ongoing unsteadiness and radical displacements, to use Sandro Mezzadra's terms in characterising the development of the German philosopher's thought throughout his life (2018: 28 and *passim*). The following passage in the *Manifesto* is paradigmatic of Marx's general (yet only initial) condemnation of laziness, with some implications on his specific concept of work: 'It has been objected that upon the abolition of private property all work will cease, and universal laziness will overtake us. According to this, bourgeois society ought long ago to have gone to the dogs through sheer idleness; for those of its members who work, acquire nothing, and those who acquire anything do not work' (Marx and Engels, 2002: 238). The same could be said in relation to Marx's later critique of Adam Smith's understanding of 'work as sacrifice', in the *Grundrisse*, whereby laziness is defined in the terms of a 'negative state', alongside unfreedom and unhappiness (1993: 613). This is plainly in opposition to Lafargue's dream of full leisure in a three hour work setting or work as 'mere fun, mere amusement, as Fourier...conceives it' (*ibid.*: 611).<sup>12</sup> On this, even in later years – although in an increasingly conflicting way compared to his first works – Marx seems to retain a productivist perspective on the general concept of labour, possibly due to some remnants of the modern epistemic cage Marx was presumably trapped into, according to Foucault's notorious assertion.<sup>13</sup> Yet at the same time, in the very moment Marx works through his first systematic formulation of what would become his critique of political economy in *Capital*, it is possible to find moments when Marx, while talking about different cases for the emergence of the

---

12 Until the end of his life, Marx never seemed to maintain a particularly friendly relationship with the 'French' way of doing things as concerns theory, politics, and in private life, as he wished his sons in law to be 'taken by the devil' in a letter to Engels in 1882 – 'Longuet as the last Proudhonist and Lafargue as the last Bakuninist! *Que le diable les emporte!*' (Marx and Engels, 1992: 375).

13 "Marxism exists in nineteenth century thought like a fish in water: that is, it is unable to breathe anywhere else" (Foucault, 2003: 285).

availability of freely disposable time, poses laziness (at least) as one of the modes of existence to be coupled alongside the engagement in socially useful activities. Indeed, in keeping with the critique of work in Russell mentioned above, Marx had already advanced claims for which 'the creation of *disposable time* is then also creation of time for the production of science, art etc.' (Marx, 1993: 401n\*), but then added that the reduction of necessary labour involves the appearance of 'both idle time and time for higher activity' (*ibid.*: 712). Moreover, how are we to read Marx's smirking admiration for the '*Quashees* (the free blacks of Jamaica)' who, after the abolition of colonial slavery regarded 'loafing (indulgence and idleness) as the real luxury good' instead of submitting themselves to the imposition of wage-labour demanded by the plantation owners (*ibid.*: 325–6)? Here, as we can see, laziness is also portrayed as that which opposes the capitalist coercive standardization of 'free' wage-labour.

### **Laziness between economic and moral imperatives**

Historically, the religious and moral condemnation of laziness has not been aimed at the prevention of certain activities in themselves. Perhaps better, for the moralists and the 'metaphysical lawyers of the bourgeois revolution' (Lafargue, 1883: 11) the accusatory attitude against laziness was fundamental to justify their aim of preventing disorderly or debauched behaviours. However, in view of reframing the category of laziness while contrasting it to the contemporary discursive use of the term, it is necessary to read it within the history of strategies to avoid exploited work. This does not mean that the earlier Christian vilification of *acedia*, or prohibition against sloth and moral guidance to a life devoted to work, completely withered away with the emergence of the needs of industrial production – physical exhaustion becoming the main issue with the change in the nature of labour (Rabinbach, 1992: 35–6). Rather, the nascent industrial paradigm secularised the earlier religious discourse on laziness (Wendling, 2011: 78).

In a similar vein, it should be noted that the recent accusations of 'laziness' of the PIIGS mentioned in the first part of this article could certainly be interpreted as part of the perennial cultural stereotyping of South-European

lifestyles that for quite some time has been embedded in the history of Europe (and the EU). We should thus bear in mind that the contemporary condemnation of ‘laziness’ cannot be linked only to the aims of neoliberal policies or bound exclusively to the rise of capitalism, as we saw with the fable of the ant and the grasshopper (or any narrative of that type) and the references to the Protestant work ethic. However, in relation to both the secularisation (and, as it were, ‘subsumption’) of the religious discourse on laziness in the nineteenth century and the current renewed occurrence of attacks on supposedly ‘lazy’ countries or individuals (as for instance today’s unemployed population in the Global North, benefit ‘scroungers’ and so on), we should hark back to what Marx argued as regards his reading of the historical episode of ‘the so-called primitive accumulation’, at the end of Volume One of *Capital*. As he put it, ‘The knights of industry...only succeeded in supplanting the knights of the sword by making use of events in which they had played no part whatsoever’ (1990: 975). This is a strikingly compelling formulation as it implies that in the fabrication (and endless maintenance and reproduction) of specific relations of production, capital made (and *makes*) use of a multiplicity of elements that had already emerged or were already present, and which had and have been generated by a diverse array of historical contingencies. This is why, for the purposes of our case, one should indeed consider the religious condemnation of sloth and the perpetual socio-cultural stereotyping of South-European lifestyle – these, evidently, could be dealt with more systematically in future work.

In the course of lectures held at Collège de France in 1973, published with the title of *The punitive society*, Michel Foucault resets the parameters onto which a history of laziness should be genealogically inscribed. This is an extremely important contribution, for it makes intelligible the links between the religious, moral, and then economic demonization of laziness – between the seventeenth and nineteenth century – and the voluntary refusal of exploited labour under capitalism. *The punitive society* is undoubtedly the series of lectures in which Foucault most closely shares with Marx many analytical categories for the study of the emergence of capitalist industrial production. In this sense, Foucault’s arguments in the 1973 lectures remind one of Linebaugh’s comments on the term ‘idleness’ when the latter

contended that “‘Idleness” is both a moral category and an economic one: it is the refusal to accept exploitation’ (2006: 428).

Over the course of the last century or so, laziness has been codified and institutionalised in the distribution of leisure activities. It has also been integrated into the economy by its organisation within a system of consumption, or constructed as functional to the mere regeneration of a capacity for labour expended during work hours ‘in order, presumably, that one can work all the more effectively afterwards’ (Adorno, 2001: 189–90 and 194). Conversely, Foucault’s proposal for a history of laziness in the 1973 lectures includes ‘the ways one evades the obligation of work, steals labor-power, and avoids letting oneself be held and pinned down by the production apparatus’ (2015: 189). On this view, laziness and idleness might take many visible forms, but they are all related to workers (or *potential* workers, such as vagabonds) compromising the idyllic conditions for the extraction of an expected amount of profits, not only as concerns production proper but the overall cycles of the capitalist mode of production. This is a crucial point, for how would a worker ‘steal’ her own labour-power – a capacity for labour that the capitalist considers as belonging to him – if not by dissipating her ability to work and ‘wasting it foolishly’, as the dramatic character of a worker ironically puts it in Marx’s first volume of *Capital*?<sup>14</sup> Gambling, sports, drinking and general debauchery are all activities that, for the bourgeois and the religious moralist alike, dissipate the workers’ full potential to work, that is, to be subjected to exploitation with a specific level of productivity.<sup>15</sup> This is why Foucault’s take on laziness does not (and cannot) consider only leisure and self-indulgence as the main trait for its definition. The point is almost irrelevant, and it bypasses effortlessly any hedonistic conception of laziness that assumes the form of ‘partying hard’ – a reactive approach reminiscent of Nietzsche’s *ressentiment* – so common in

---

14 ‘Very well! Like a sensible, thrifty owner of property I will husband my sole wealth, my labour-power, and abstain from wasting it foolishly’ (Marx, 1990: 343).

15 Without embarking on the more nuanced technicalities of Marx’s labour theory of value and the debates around it, one should bear in mind that the level of capitalist productivity is measured, among other things, in relation to the labour time socially necessary to produce commodities.

overworked metropolitan settings<sup>16</sup> (it is still necessary to consider that this version of being ‘lazy’ is certainly the result of contemporary logics of exploitation, functional to the maintenance of contemporary regimes of valorization and, as if that was not enough already, also becomes a sort of anthropological stigma, as I argued at the beginning of this piece). What is crucial is that which the capitalist mode of production attempts to get hold of so as to adapt it to the necessities of the production apparatus – what in human beings escapes the persistent inscription of the capitalist social relations. Overtly challenging the anthropology of labour of ‘some famous post-Hegelians’, which considers work (and the capacity to work) man’s concrete essence, for Foucault the time and life of man are not labour by nature but ‘pleasure, discontinuity, festivity, rest, need, moments, chance, violence...it is all this explosive energy that needs to be transformed into a continuous labor-power continually offered on the market. Life must be synthesized into labor-power’ (2015: 232).<sup>17</sup>

Thus, as we briefly anticipated earlier in relation to Barthes’s attempts at defining a non-instrumentalist and ‘purer’ understanding of the notion of laziness, since the rise of capitalism the great immorality of workers lies in interfering with the (potential and actual) conditions for the extraction of surplus-value by means of the dissipation or ‘waste’ of one’s capacity for labour.<sup>18</sup> Despite the diversity in the lively debate on Marx’s concept of ‘abstract labour’, the majority of scholars seem to agree on the fact that labour-power (in its dual abstract and concrete character) needs to be socially validated in reference to its expenditure in time. We can see now how the different forms of ‘laziness’ usually put under moral scrutiny appear in their direct implications in terms of economic damage. The war capitalists

---

16 In her lucid analysis of Marx’s work, Amy Wendling seems to reach (although from a different perspective) a similar conclusion on this point when she claims that ‘If I recreate, or “blow off steam” like an engine, in order to work more productively the following day, then my leisure activity is as commodified by the logic of exhaustion as my labor’ (2011: 116).

17 For an interesting perspective on Foucault’s discussion of an ‘untamed ontology’ of life, see Noys (2012).

18 For a lucid analysis of the ways in which liberal thought constructed the category of ‘waste’ (unproductive use of land and labour), see Neocleous (2014).

wage against the working class has one of its kernels in the sequestration of the time of their life and its synthesis in a capacity for labour that needs to be adapted to the different ways the production apparatus extracts surplus-value and its temporalities.<sup>19</sup>

### **Alterity and opposition to capitalist time**

Once fixed to the production apparatus – the previous battle emerged in the second half of the eighteenth century with the illegalization of vagabonds and beggars (Marx, 1990: ch. 28; 1993: 736, 785–6) – the development of the division of labour with manufacture and large-scale industry meant that a worker would not produce a commodity on her own but was subjected to the mechanical measure of labour time and synchronization to the work of others (in this way also reproducing and maintaining the average of socially necessary labour time for the calculation of the value of all commodities). As Linebaugh remarks, ‘it was probably Marx who first recognized that “idleness”, more than anything else, was the form of resistance most effective in “the period of manufacture”’ (2006: 225). In this respect, Marx’s position on laziness can be certainly seen at first as a condemnation of the idleness of those living out of revenue but, as we saw above, also as a strategic resistance to the wage-labour form and the imposition of the abstractions of its temporal measuring. Laziness in its confrontation to capital’s set of temporalities is one of the most effective ways to unbalance the ideal conditions for the extraction of profits, and it is enacted against *and* beyond the capital-labour relation, theoretically and practically. Only when considered in the way outlined here it can be politicised.

In *Discipline and punish* (1975), Foucault shows that between the end of the eighteenth and the first half of the nineteenth century a whole series of

---

19 The anecdote at the beginning of this article seems to have been influenced by an old Hungarian fairy tale in which a very old woman tries to escape Death. After the first visit, she convinces Death to come the following day asking him to write ‘Tomorrow’ on her door – ‘The Old Woman who Outwitted Death’, in Stanovský and Vladislav (1961). Pulcinella’s trick to defer and avoid work curiously puts under a different light the relation between work and death, cf. Baudrillard (1993: 38–43).

disciplinary mechanisms appeared in conjunction with the emergence of industrial production. What is interesting in the lectures he gave only two years earlier is that these disciplinary apparatuses aimed at capturing (and penalizing) specific modes of existence that appeared to fall outside the temporalities of capitalist production. As he puts it in *The punitive society*, ‘The time of people’s existence had to be fitted and subjected to the temporal system of the cycle of production’ (2015: 211). Laziness in all its forms is in harsh contrast with such a homogenization of the time of life in relation to the homogenized (and measurable) time of the continuity of production.<sup>20</sup> When what is targeted is a mode of existence that is at odds with the conditions for the existence of abstract time in capitalist production, then, laziness as the refusal to be subsumed by capital’s set of temporalities becomes a process of subjectivation in itself – if we follow Deleuze in his reading of Foucault’s ‘subjectivation’ as the making of a mode of existence. In this sense laziness should be thought of as a mode of existence that confronts and challenges a diverse array of mechanisms set up for the reproduction of specific conditions of production and the resulting extraction of profit. In particular, laziness disrupts capital’s apparatus of sequestration of people’s lives by unbalancing its ideal set of dynamic (yet fixed) temporalities and which the immediate concreteness of individual lives perceives them as ‘a real [*phenomenon*], not a merely *supposed one* existing merely in the imagination’ (Marx, 1993: 831).<sup>21</sup>

Perhaps the point *is* to unbalance and interrupt the chronocratic continuity of capitalist temporality, a temporality pre-established in keeping with capital’s intrinsic need for self-valorisation *via* exploited work. This means thinking about strategies to destabilise and interfere with the imposition of (abstract) labour as ‘the labour of socially necessary labour time’.<sup>22</sup> Is this a battle on such a social average? Very likely so, and the spectre of Foucault’s

---

20 See also the fundamental Thompson (1967). It is in relation to these points that Linebaugh can argue that ‘In the eighteenth century the watch assumed new functions; it became a measure of labour time or a means of quantifying “idleness”’ (2006: 225).

21 For a compelling reading of the complex concept of ‘real abstraction’ in Marx’s tool-box, see Toscano (2008).

22 Bonefeld (2011); see also his (2010).

critique of the fabrication of the 'norm' invisibly yet inevitably haunts this article. The ideological discourses on 'laziness' spread in so far as the lazy mode of existence systematically challenges the reproduction of the unbalanced set of social relations allowing this very discourse to emerge. To bring exploited work to an end and rethink the category of wealth as freely disposable time, as Marx posed it, capital's temporal grids must be confronted and tampered with. Being strategically lazy – in the way described here, within, against, *and* beyond the capital-labour relation, as the claim of alterity in opposition to the needs and the conditions posited by capital – jeopardises such a pre-empted set of calculable temporalities so that not even Punch's illusory psychic trick of 'doing it tomorrow' will be necessary.

\*

While revising this article according to the feedback provided by the reviewers and the editorial board of this journal, I was disturbingly aware of the internal contradictions of writing about laziness as a way of tampering with the temporal requirements of capital, broadly speaking, and simultaneously being subjected to a deadline and/or the not-too-subtle pressures to write and publish in contemporary academia. My ostensible hypocritical position in completing this text simply shows the extent to which I have been compelled to internalise 'the political economy of the promise' (*supra*, n7) as one of the modes of existence of the personification of my economic function. In the poignant words of Francesco Di Bernardo: 'precariousness is...quite simply the condition of the working class under capitalism. It always has been, and it always will be' (2016: 14).

## references

- Adorno, T.W. (2001/1966) 'Free time', in *The culture industry: Selected essays on mass culture*. London and New York: Routledge, pp. 187-197.
- Aristotle (1976) *The nicomachean ethics*, trans. J.A.K. Thomson. Harmondsworth: Penguin.

- Barthes, R. (1985) 'Dare to be lazy', in L. Coverdale (ed.) *The grain of the voice: Interviews 1962-1980*. London: Cape.
- Bascetta, M. (ed.) (2015) *Economia politica della promessa*. Roma: manifestolibri.
- Baudrillard, J. (1993) *Symbolic exchange and death*. London and Thousand Oaks: Sage Publications.
- Böll, S. and D. Böcking (2011) 'The myth of a lazy Southern Europe: Merkel's clichés Debunked by statistics', *Spiegel Online*, 19 May. [<http://www.spiegel.de/international/europe/the-myth-of-a-lazy-southern-europe-merkel-s-cliches-debunked-by-statistics-a-763618.html>]
- Bonefeld, W. (2010) 'Abstract labour: Against its nature and on its time', *Capital & Class* 34(2): 257-276.
- Bonefeld, W. (2011) 'Debating abstract labour', *Capital & Class*, 35(3): 475-479.
- Brooks, D. (2011) 'The spirit of enterprise', *The New York Times*, 1 December. [<https://www.nytimes.com/2011/12/02/opinion/brooks-the-spirit-of-enterprise.html>]
- Cambridge, E. (2017) 'Here comes the sun', *The Sun*, 21 May. [<https://www.thesun.co.uk/news/3613957/uk-weather-britain-28c-heat-hottest-day-year-suspicious-sick-days/>]
- Di Bernardo, F. (2016) 'The impossibility of precarity', *Radical Philosophy*, (198): 7-14.
- Fleming, P. (2015) *The mythology of work: How capitalism persists despite itself*. London: Pluto Press.
- Foucault, M. (2003/1966) *The order of things: An archaeology of the human sciences*. London: Routledge.
- Foucault, M. (2010) *The birth of biopolitics: Lectures at the Collège de France 1978-79*, trans. G. Burchell. Basingstoke: Palgrave Macmillan.
- Foucault, M. (2015) *The punitive society: Lectures at the Collège de France 1972-73*. trans. G. Burchell. Basingstoke: Palgrave Macmillan.

- Frayne, D. (2015) *The refusal of work: The theory and practice of resistance to work*. London: Zed Books.
- Lafargue, P. (1883) 'The right to be lazy', *The Anarchist Library*. [<https://theanarchistlibrary.org/library/paul-lafargue-the-right-to-be-lazy.pdf>]
- Linebaugh, P. (2006) *The London hanged: Crime and civil society in the eighteenth century*. London; New York: Verso.
- Marx, K. (1990/1867) *Capital: A critique of political economy, vol. 1*, trans. B. Fowkes. London: Penguin Books.
- Marx, K. (1993/1857–8) *Grundrisse: Foundations of the critique of political economy*, trans. M. Nicolaus. London: Penguin Books.
- Marx, K. and F. Engels (1992) *Collected works: Vol. 46, letters 1880-83*. London: Lawrence and Wishart.
- Marx, K. and F. Engels (2002/1848) *The communist manifesto*. London: Penguin Books.
- Mezzadra, S. (2018) *In the Marxian workshops: Producing subjects*, trans. Y. Lanci. London and New York: Rowman and Littlefield International.
- Mitropoulos, A. (2005) 'Precari-us?', *Mute* 2(0): 12-9.
- Neilson, B. and N. Rossiter (2008) 'Precarity as a political concept, or, Fordism as exception', *Theory, Culture & Society*, 25(7-8): 51-72.
- Neocleous, M. (2014) *War power, police power*. Edinburgh University Press.
- Noys, B. (2012) 'Savage life and the ontology of capital', paper presented at the 'The ontological turn in contemporary philosophy', PUCRS, Porto Alegre, Brazil.
- Rabinbach, A. (1992) *The human motor: Energy, fatigue, and the origins of modernity*. Berkeley: University of California Press.
- Russell, B. (1935) *In praise of idleness' and other essays*. London: George Allen and Unwin Ltd.
- Stanovský, V. and J. Vladislav (1961) *The fairy tale tree: Stories from all over the world*. New York: Putnam.

- Stretch, E. (2015) 'UK weather: It will be hotter than Hawaii but the smog is returning', *Mirror Online*, 13 April. [<http://www.mirror.co.uk/news/uk-news/uk-weather-hotter-hawaii-smog-5513880>]
- Thompson, E.P. (1967) 'Time, work-discipline, and industrial capitalism', *Past and Present*, 38(1): 56-97.
- Toscano, A. (2008) 'The open secret of real abstraction', *Rethinking Marxism*, 20(2): 273-87.
- Tsianos, V. and D. Papadopoulos (2006) 'Precarity: A savage journey to the heart of embodied capitalism', *Eipcp*. [<http://eipcp.net/transversal/1106/tsianospapadopoulos/en>]
- Weeks, K. (2011) *The problem with work: Feminism, Marxism, antiwork politics, and postwork imaginaries*. Durham: Duke University Press.
- Wendling, A.E. (2011) *Karl Marx on technology and alienation*. Basingstoke: Palgrave Macmillan.

## acknowledgment

A very early version of this text appeared translated in Bulgarian for the magazine *дВЕРСИЯ*, #5/2016 (<http://dversia.net>). I want to thank Neda Genova for giving me the chance to write on this topic and translating my original version. I also want to thank her for having provided insightful feedback since the first draft and unlocked more than a few impasses amidst the muddled thoughts I had on this theme.

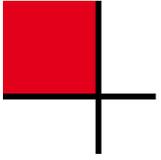
## the author

Yari Lanci is a doctoral candidate in the Department of Sociology at Goldsmiths, University of London. Against the grain of common sense and public construction of an 'employable' persona, he is trying to justify theoretically that, as many others (who however do not often overtly claim it), he cannot bear the thought and everyday experience of working in general, and even more so in today's form of generalised regime of precarity. His research project focuses on the role of capital's sequestration and government of time in the fabrication of exploitable subjectivities, with particular attention to the readings of these processes in the works of Karl Marx and Michel Foucault. He is the co-editor of *Foucault and the history of our present* (Palgrave, 2015) and the translator of Sandro Mezzadra's

monograph on Marx titled *In the Marxian workshops: Producing subjects* (Rowman and Littlefield International, 2018).

Email: [yarilanci@gmail.com](mailto:yarilanci@gmail.com)





# Evaluation and the tension between generalization and particularity: The negotiation of supplementary child allowance in a collective firm

Nina Pohler

## abstract

This paper follows the negotiations for a model to calculate supplementary child allowance inside a radical democratic organization based in Germany. This model is conceptualized as an evaluation device: a device that standardizes how people and things are evaluated. To understand the process in which the collective tries to come to a shared understanding of fair supplementary child allowance, the paper utilizes Boltanski and Thévenot's notion of the test. The solution the collective eventually settles on is a compromise between the need for a general solution and the hesitation to use a standardized format to evaluate the financial needs of different parents and their children. By highlighting the tension between the general and the particular in evaluation practices, the paper contributes to studies of evaluation in contexts of moral complexity.

## Introduction

This paper follows the negotiations of a model to calculate supplementary child allowance inside a radical democratic organization – the Radical Cola Collective (RCC) – that pays equal hourly wages to all. With equal wages, the RCC originally refrains from evaluating differences of worth, but also

differences of need. The inclusion of new members with children leads the collective to reconsider this decision. The RCC embarks on a process of discovery and negotiation to find a model for calculating fair supplementary child allowance.

Analyzing this intra-organizational process of valuation directs attention to the always already present ‘highly complex socio-technical orderings involving several actors and instruments’ which together perform valuation (Helgesson and Muniesa, 2013: 3). Brighenti (2017) has recently proposed to conceptualize these socio-technical orderings as ‘measure-value environments’, which highlight that ‘measure and value exist in an entangled relation’ (*ibid.*: 16f). Organizations are one such ‘measure-value environment’ where evaluation devices have to conform with existing values and norms. The organization this article is concerned with is based on values of radical equality and inclusivity. Theoretically, everyone who feels affected by the RCC is eligible to take part in their decision-making processes. This creates a setting in which there is ample opportunity for competing moral considerations and values to emerge. Negotiation processes in this context are ‘hot situations’ in which everything can become controversial (Callon, 1998: 260). This makes the study especially interesting to understand valuation as a social practice (Doganova et al., 2018).

The situation in which the collective realizes that it has to find a way to pay supplementary allowance constitutes a critical moment (Boltanski and Thévenot, 1999) in which there is radical uncertainty about how to move on. The collective engages in a process in which it tries to move from a shared *appreciation* of children, to the *appraisal* of the share of the costs of raising children that should be paid by it. The challenge is how to translate the appreciation of something into an organizational, monetary valuation practice. This task is especially complex since the object to be evaluated is ambiguous. Zelizer (1994), in her work on the changing social value of children in the U.S., traces how different conceptions of childhood influence the monetary evaluation of children. In particular, she shows that, when children became economically ‘useless’ and emotionally ‘priceless’,

profound interpretative challenges emerged around children.<sup>1</sup> There is a common understanding at the RCC that children are valuable. However, this understanding lacks any explicit formulation to clarify *for whom* exactly children are valuable, *why* children are valuable, and *who* is responsible for ensuring the good life of children. While children may be priceless, raising them is certainly not costless. But what are legitimate costs of raising children? Can some children be more expensive than others?

The task of finding a model for supplementary child allowance is made more complex since a connection has to be made between the value of children and the amount of costs an employer should take care of in addition to the state. Processes of evaluation are fundamentally processes in which relations and their meaning are negotiated and defined (Espeland and Stevens, 1998; Fourcade, 2011; Zelizer, 1994). By negotiating a model for fair supplementary child allowance, the collective is negotiating the employer-employee relationship. Are employers responsible for the costs of employees children? The RCC, which is concerned with being a social collective, has to come up with a shared understanding of how much of the costs of raising children of employees a social collective has to take care of.

The language around valuation is not always clear, and meanings and definitions are blurry in both ordinary language use and academic disciplines. To clarify the different layers of valuation as a social practice, the paper follows suggestions from the field of Valuation Studies, where Beljean and Lamont have proposed to differentiate between evaluation as the process of assessing worth and valuation as the process of giving worth (Kjellberg et al., 2013: 20). Vatin (2013), meanwhile, differentiates between evaluation as assessment and valorization as the production of value. The paper draws on three meanings that are often encompassed by the term 'valuation' in ordinary language: (1) The RCC is *valuing* children, in the sense of appreciating them; (2) As a consequence, the RCC is looking for a way to *evaluate* the costs of raising children and, furthermore, the share of

---

1 While Zelizer's study only looks at the US, similar processes related to a 'sacralization of children' have been taken place in Europe as well, i.e. a ban on child labor, and universal compulsory education.

these costs a good employer should pay; (3) By considering implementing supplementary child allowance, they are *valorizing* children, as such a practice ‘gives worth’ to children in the performative sense in which bonuses, prizes or medals signify value. An evaluation device, then, structures a process of assessment or calculation (Callon and Muniesa, 2005). It determines ex-ante how people and objects have to be evaluated, and it treats all according to the same rules, regardless of their specific characteristics. It achieves what Callon calls ‘framing’, establishing ‘a boundary within which interactions take place more or less independently of their surrounding context’ (Callon, 1998: 248). Furthermore, an evaluation device is used to standardize evaluation, to repeat the same process of assessment for different objects over time. Evaluation is a complex, critical, and highly moral task, especially when ambiguous objects and multiple values are at stake. In evaluation processes, the moral sense of people cannot always be satisfied with the application of universal principles, it might require to consider what is ethical in context (Reinecke and Ansari, 2015). An attempt at standardized evaluation thus entails the moral tension between using general principles and considering what is just in a particular context.

Standardized evaluation is linked to the core function of organizations: it ensures ongoing coordination by limiting uncertainty through coordinating forms that standardize and thus create calculability. Organizations are compromising devices: by combining different values and rationalities, organizations organize (moral) complexity (Thévenot, 1984; 2001). This paper deals with the moral tension between generalized evaluation procedures and their implied sacrifices. This is the tension between what is generalizable and can be measured and what is considered incommensurable and immeasurable. By following the process of negotiating supplementary child allowance, the paper contributes to an understanding of organizational practices and processes through which things get constituted as valuable (Kornberger, 2017), highlighting the role of an organization’s self-image in valuation practices, as well as how the tension between generalization and particularity can lead to the establishment of compromises.

To understand how members of the collective negotiate supplementary child allowance, Boltanski and Thévenot's sociology of critical capacities (1999; 2006), and specifically the notions of the test and compromise, will be used as heuristic framework. These concepts have been developed in 'On justification' (2006), henceforth OJ, as well as in further work of Boltanski (2011) and Thévenot (2001). In organization studies, the test and the compromise have been used to explain the maintenance of legitimacy in public discourses (Patriotta, Gond and Schulz, 2011; Taupin, 2012), as well as the compromising of conflicting values in the contexts of public management (Oldenhof, Postma and Putters, 2013), entrepreneurs in biotechnology and sustainability markets (Kaplan and Murray, 2010; Suckert, 2014) and knowledge commercialization (Mailhot and Langley, 2017). Of particular interest for the purposes of this paper are studies influenced by OJ that are concerned with processes of commensuration and analyze the emergence, critique and legitimization of calculative or evaluation devices (Annisette et al., 2017; Fourcade, 2011; Huault and Rainelli-Weiss, 2011; Reinecke, 2010). Using the notions of the test and compromise will illuminate the complex entanglements between values and measures in organizational valuation practices.

In the following sections, the paper will give an overview of the economies of worth framework developed by Boltanski and Thévenot (2006), outline the concepts of test and compromise, and discuss studies of evaluation devices that utilize Boltanski and Thévenot's framework, before turning to the case of the RCC.

### **The economies of worth framework: Tests and compromises**

Boltanski and Thévenot's 'On justification' (2006) develops a framework to explain the competences that enable actors to make critiques or to justify themselves in the face of critique. In a dispute, actors use principles of equivalence that make it possible to assess the relative value of the people and things engaged in a dispute, or their worth. OJ introduces six orders of worth that can serve as frame of reference in a dispute, and each of these orders specifies a form of common good. These orders of worth construct a

model of a society that is just because it is a meritocratic society in which members are ordered according to their worth, determined by their contribution to the common good. In the civic polity, for instance, the worthiest people are the ones that are concerned with the interest of all and can embody the general will. In the market polity, the worthiest people are the wealthy, who maintain competition in a marketplace. Based on the polities, OJ develops 'common worlds' (*ibid.*: 130ff), which are historically developed, socio-material instantiations of orders of worth, inhabited by qualified persons and objects. It is a necessary step for the framework to include the modeling of critical competences since it allows us to pay attention to material devices and objects that can be used to demonstrate, test, criticize or legitimize worth in a situation. In the civic world, for instance, the highest states of worth are attributed to collective persons and their representations; important subjects are parties, public collectives and elected officials; important objects are rights, legislation, order, program; and the state of worth is tested through mobilization or democratic votes. Cloutier et al. (2017) note that OJ has been a catalyst for sociological developments in valuation studies and offers a useful conceptual apparatus to study valuation and evaluation both within and across organizations.<sup>2</sup> In order to understand the process by which the collective tries to come to a shared understanding of a fair model to pay supplementary child allowance, this paper uses Boltanski and Thévenot's notions of the test and the compromise.

Boltanski and Thévenot developed the notion of the test to explain how people can move from a critical moment in which there is a disagreement regarding the appropriate order of beings in a situation to a moment in which the dispute has been resolved. A central principle of equivalence, the higher common good of each of the common worlds, determines how test formats can be established. Each world thus entails its own standards for

---

2 For a general overview of research inspired by OJ in *Organization Studies*, see the introduction to the *Research in the Sociology of Organizations* special issue on 'Justification, evaluation and critiques in the study of organizations' (Cloutier et al., 2017).

proving the value of any object or idea. In each world, different objects and ideas are relevant for the testing of worth.

OJ defines two different tests, as a result of two different critiques of a social order: a ‘radical critique’ and a ‘reformative critique’. A radical critique leads to a ‘clash of worlds’ in which the adequate way to evaluate a situation is not certain anymore. For instance, if payment in a firm is primarily based on formal qualification, an exceptional salesman without any higher education might criticize the way that wages are determined from the point of view of the market world, in which a university degree is not of relevance, unless it leads to more sales. In order to come to an understanding regarding the adequate state of the world, the involved participants will have to decide on one order of worth from which to evaluate the situation at hand. Thus, they have to conduct a ‘test of order of worth’ (Dansou and Langley, 2012: 511). A ‘reformative critique’, meanwhile, does not radically criticize the order of worth that is underlying an situation, but rather criticizes the correct execution of evaluation. For instance, a person with a PhD claims that he has been falsely put into a category together with colleagues who only have a master’s degree. A reformative critique may lead to a ‘test of state of worth’ (*ibid.*) in which people move from a dispute to a new agreement by bringing people and objects in their appropriate order, according to a central principle of equivalence that is related to one world.

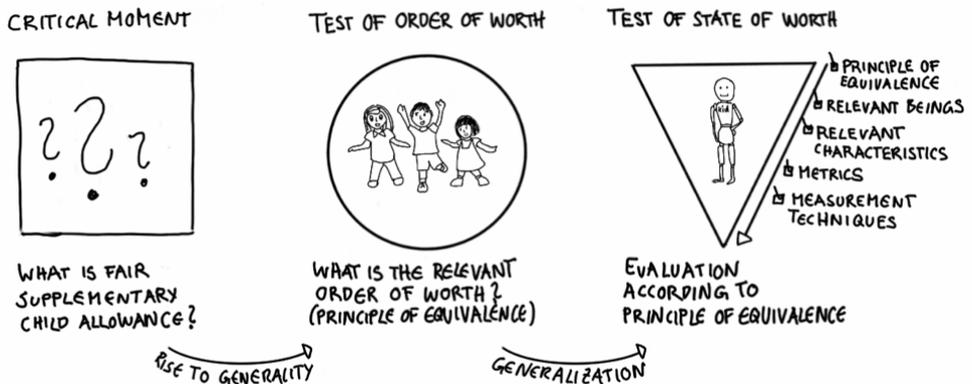


Figure 1: Ideal-typical movement from critical moment to test of state of worth

Dansou and Langley (2012) argue that the notion of the test allows us to examine three key dimensions related to how actors question or reproduce constitutive value frameworks: agency, relationality, and temporality. In order to mobilize the test for empirical studies, and to make use of the potential of the conceptual apparatus of Boltanski and Thévenot's pragmatic sociology of critique, tests should not be seen as linear endpoints but as 'temporary truces' with varying degrees of stability (Reinecke et al., 2017).

In their study of the evolution of biotechnology, Kaplan and Murray (2008) argue that the shape of this field, initially uncertain and equivocal, emerged through the resolution of contests around multiple interpretations of the value of its technology. The central task of entrepreneurs in biotechnology was to actively construct and reconstruct justifications for the value of their firms by arguing for particular tests of value and mobilizing evidence to satisfy those tests (*ibid.*: 12). Kaplan and Murray describe a discovery process spanning three eras, in which the predominant test formats and the respective interpretations of value and formats of evidence were contested and changed. Only after thirty years in which test arrangements were contested, changed and adapted, a stable definition of the field of biotechnology emerged. The stabilized field is a compromise constituted through a complex network of interactions between organizational actors with different rationalities (*ibid.*: 36).

Compromises between different rationalities are a central concept in Boltanski and Thévenot's sociology of critical capacities. A compromise suspends a dispute that involves more than one world without settling the dispute in only one of these worlds. The resulting setup is a composite arrangement that involves persons and things that can be identified in different worlds. A compromise is less stable than an agreement based on a test in one world. Since in a compromise entities are not unambiguously ordered according to one principle of equivalence, it is easy to point out inconsistencies in the evaluation. A compromise needs the involved participants to be 'favorably disposed toward the notion of a common good', while at the same time they 'do not attempt to clarify the principle of their agreement' (*ibid.*: 326). Compromises can be made more stable by the creation of objects composed of elements stemming from different worlds

which are endowed with their own identity 'in such a way that their form will no longer be recognizable if one of the disparate elements of which they are formed is removed'. An example, here, is the compromise object of a 'competitive public service' that entails the higher common principles of the civic world (public service) and the market world (competition) (*ibid.*: 278).

According to Thévenot (2001), all organizations are fundamentally arrays of compromises, 'compromising devices' between different repertoires of evaluation. Organizations achieve a compromise and coupling between different practices and their respective rationalities by combining devices (*ibid.*). With this, organizations create structures that are able to deal with (evaluative) ambiguity (Knoll, 2014) and allow them to overcome the uncertainty and tension that emerges from the simultaneous presence of different values.

### **Evaluation devices as compromises that achieve generalization over time and space**

In this paper, a model for supplementary child allowance is conceptualized as an evaluation device. An evaluation device standardizes how people and things are evaluated. It is what Thévenot (1984) calls an investment in forms, a rule that supports a stable connection and the establishment of equivalency and calculability between different entities. Form investments generalize relations between actors and their environment over time and space, specifying what has to be done in a given situation and thus making coordination less uncertain and less costly. Form investments thus sacrifice 'particularization or characterizations of entities' (Thévenot, 2011: 41) in order to facilitate such coordination. A wage payment scheme, for instance, can specify that workers will be remunerated by hours worked, which means that their actual performance is not evaluated, or by piece work, which means that their time spent working for the company is not evaluated. Every evaluation device sustains a certain form of evaluation which is based on specific principles of equivalence (time, piece) and, at the same time, excludes other possible principles. In this sense, evaluation devices can be

either test arrangements based on one order of worth or, conversely, they can be compromises based on different principles of equivalence.

In most empirical situations, evaluation devices have to achieve a complex commensuration between different principles of equivalence in order to sustain standardized ways of evaluation. The compromise is a useful concept to understand commensuration, which is 'the expression or measurement of characteristics normally represented by different units according to a common metric' (Espeland and Stevens, 1998: 315). For example, Reinecke (2010) analyses the determination of Fairtrade minimum prices for coffee as the establishment of a compromise between different orders of worth. In the beginning, when Fairtrade products were not marketed to a mainstream audience and significantly smaller, fair prices were established in face-to-face negotiations between producers and independent fair trading organizations, which created personal, long-term relationships based on trust and mutual recognition. These personal negotiations were later substituted with a formalized price determination based on the Cost of Sustainable Production methodology (CoSP), which calculates the cost of production. The CoSP methodology is an evaluation device, in the sense that it sustains a standardized way of evaluating the situation of different coffee producers.

Since evaluation devices create categories and standards, they are never just pragmatic, but also ethical and political choices since 'each standard and each category valorizes some point of view and silences another' (Bowker and Star, 2000: 5). An evaluation device renders certain characteristics measurable and others immeasurable, or not worth measuring. An evaluation device thus entails tradeoffs between different values, and between generalization and particularities in a given situation. By abstracting from particularities and creating general categories, evaluation 'flattens' the world (Kornberger, 2017: 19). Regardless of the underlying principles of evaluation, all evaluation devices express a specific idea of justice based on the notion of equality, where all people/objects/situations have to be treated equal if they share certain characteristics. To come to justifiable agreements and orderings, people have to 'divest themselves of their singularity and converge towards a form of generality transcending

persons and the situations in which they interrelate' (Boltanski and Thévenot, 1999: 363). However, by considering only that what is or can be made general, people lose the ability to consider what is particular and might be incommensurable or immeasurable. Considering particularities and context might be a part of an ordinary sense of justice. From this viewpoint, it may seem unjust to abstract from the particularities of something in order to measure only specific characteristics. Thus, the tension between two different moral orientations – focused on either generalization or particularity – might be an obstacle to the development and application of an evaluation device.

In her study, Reinecke analyses tensions regarding the calculation of minimum prices for coffee and the adequacy of CoSP as an evaluation method for a large number of coffee farmers with differing production and cost structures:

What level of labor costs should be used? What was a decent wage in different local contexts? Whose labour should be taken into account? The labour of the farmer, or the labour of his entire family? What did sustainability mean? And what was sustainable – compared to inefficient production? (2010: 574)

The resulting compromise combines the CoSP methodology with democratic decision making of all stakeholders. Reinecke interprets the result as a compromise between the industrial world on the one hand, in which productivity and efficiency are values measured by standardized criteria, and the civic world on the other, where the collective interest expressed through formal and democratic procedures is valued. Considering the inherent tension between generalization and particularity in evaluation devices, the result can also be interpreted as a compromise between generalization and leaving space for the negotiation of particularities. It therefore combines an evaluation device that is based on generalization with a procedural rules for decision making, which integrates the particular voices of different stakeholders and leaves room for considering particular circumstances *in situ*.

Annisette et al. (2017) describe the development of an evaluation device for large-scale capital investment projects of a water utility in Western Australia

as a 'test of worths in compromise' that calculates the financial, social and environmental impact of a project. This compromise device represents a site for ongoing critique, targeted at the mechanics of calculation, i.e. the inclusion of appropriate objects and measures. One of these critiques targets the fact that Aboriginal cultural and heritage issues were not included in the valuation. In response, the developers of the evaluation device argue that certain types of values 'are not appropriate values to be monetized' (*ibid.*: 231). Instead of trying to integrate everything that is deemed valuable in the evaluation device, the developers acknowledge that some environmental and social costs and benefits cannot be monetized or may be inappropriate to monetize. The developers therefore argue that the evaluation device itself should play an important, but not exclusive, role in the decision making process and should be supplemented by other tools, such as multi criteria analysis (*ibid.*). This study is another example of the combination of an evaluation device with a less standardized method that is better able to include incommensurable values in the evaluation.

Both studies by Reinecke (2010) and Annisette et al. (2017) analyze a context in which there is a high potential for contestation due to the need to come to an agreement which is considered fair by a variety of different stakeholders. In both cases, an evaluation device is contested and has to be supplemented by methods that allow one to consider particular situations and characteristics that cannot easily be generalized. In the following, this paper analyses a context that bears similarities to Reinecke and Annisette et al.'s studies. The RCC is a collective that has to come up with an evaluation device for calculating supplementary child allowance that is considered fair by a variety of people. The collective, however, fails to develop such a generalizing device, and instead settles on a device that signifies worth but refrains from evaluation. It thus achieves a compromise between generalization and particularity.

## Methods and case

The Radical Cola Collective (RCC) is a virtual organization that emerged out of a collective of loosely coupled people, connected through the internet.

These people wanted to create an economic organization which satisfied their ideas of a just economy. One of their central ideas is that the economy is a collective endeavor and therefore all people affected by a company should have the possibility to directly influence production, including suppliers, subcontractors and wholesalers, as well as end-consumers. At the center of the RCC is a compromise between the civic, the industrial, and the market world. On one hand, it is a cooperative in which equality and solidarity are important (civic worth), but it is also an organization that uses planning methods for coordination and efficiency (industrial worth) and an organization that cares about its survival on the market and considers prices and costs (market worth).

The RCC organizes the supply-chain for their signature product, a cola with less sugar and more caffeine than usual, as well as beer and lemonade. It is based in Germany but also sell their products in two neighboring countries. It has been very slowly but steadily growing from selling a 1000 bottles to its members and friends in 2001, to selling more than one million bottles in 2015. The RCC has a very specific system of distribution that is based on so-called 'ambassadors'. These are people who want to be part of the RCC and act as semi-professional, semi-activist, local salesmen. In every city in which the RCC's products are distributed, this is due to an ambassador who started talking to small retailers, restaurants and bars about the RCC project. Apart from the ambassadors, there are six people working part-time for the RCC on day-to-day operations. All the other people involved in the RCC network are business partners, like the bottler and the manufacturer, as well as the wholesalers and retailers. In keeping with its conviction that the economy is a collective endeavor, the RCC organizes itself in large part through an online board where decisions are taken according to consensus. This means that decisions are taken as long as there is no strong rejection in the form of a veto. Theoretically, everyone who feels affected by the RCC can access the online board and take part in the decision making process, although it is mostly people who directly work with or for the RCC who take part in these online discussions.

The RCC combines characteristics of a business with a social collective as well as a social movement. While it has been selling cola, lemonade and beer

for more than 15 years now, throughout these years the RCC distinguishes itself from conventional businesses. Membership is open, in principle, to anyone; community members are geographically dispersed; and decisions are taken according to consensus and adhere to a broad agenda of anti-corporate activism and sustainability. The RCC pays equal hourly wages to all, that is, the members of the organization team and the members of the collective who do project-based work, like updating their website. The RCC decided that everyone is equally worthy, a decision that is – although the word ‘equal’ suggests otherwise – not based on an actual belief in equivalence, but a sensibility towards the particular, individual and incommensurable contributions of everyone working for the RCC. According to Espeland and Stevens, ‘incommensurables can be vital expressions of core values, signaling to people how they should act toward those things. Identities and crucial roles are often defined with incommensurable categories. Believing that something is incommensurable can qualify one for some kinds of relationships’ (1998: 327). By paying equal wages, the RCC signals their core values and secures an identity that is based on collective solidarity. With equal wages, the RCC originally refrained from setting up differences of worth, but also of need, between them. This decision was questioned, however, when a father and potential new ambassador for the RCC asked if he would get the same pay as people without children.

Drawing on the analysis of online discussions, this paper will illustrate how the tension between generalization and considering particularities is negotiated during a ‘critical moment’ in which there is uncertainty over an adequate evaluation device for supplementary child allowance. The negotiation of supplementary child allowance has two parts. The first part of the negotiation is an email conversation with 30 emails over 7 days with 9 participants. During this discussion, people decide on an evaluation device to calculate supplementary child allowance, although no one ends up claiming child allowance. The second part of the negotiation happens a year later, when a freelancer who is supposed to do project-based work for the RCC asks for child allowance. During this second part, the evaluation device is tested by calculating its concrete outcomes, which leads to a radical critique and eventually a new proposal. Since the RCC has in the meantime

switched to using an online board, the second phase lasts for 41 days, with 32 posts and 6 participants. Of this 6 participants 3 have been involved in the first phase as well.

The material of both discussions has been analyzed with MaxQDA using a coding scheme that included codes for three categories: (1) codes that were related to discursive movements and inspired by conversation analysis (i.e. explanatory introduction, apologizing), (2) codes that were related to justification work and testing (i.e. critique, industrial worth, compromise), and (3) codes that were related to content (i.e. payment, good collective member).

### **Testing for supplementary child allowance**

The use of Boltanski and Thévenot's framework for conducting the analysis of the discussions showed that people did not follow the ideal-typical route from uncertainty to deciding on relevant worlds and eventually to a test of state of worth. Instead, their negotiation resembles a discovery process: at stake was not only who should be evaluated and how, but also if it was possible to develop a fair model for all situations in the first place.

*Phase One: Questioning the justness of generalization, but still adopting an evaluation device from family law*

Shortly before this discussion happens, it was decided that ambassadors who work for the RCC should get their working hours paid in order for them to establish a network of customers. A father of three children asks one of the core-members (Udo) if he would get the same hourly wage as all the others if he would start working as ambassador. Udo in turn asks the collective whether they ought to think about adding supplementary child allowance to their salary scheme and how much it should be:

We decided that we will pay new ambassadors the hours they have to work in the beginning to set up a network. So now we have the first ambassador who asks (rightfully so) if he will get paid as much as everyone else, although he has three children. Without really knowing what would be fair, I told him I would say something like 'additional five Euros per child', but this is just me guessing. Should it be more, should it be less, should it decrease with every

additional child? And can we as the RCC afford to pay this? These are complex questions, but we have to provide an answer to this potential ambassador.

This open question sets up a critical moment in which there is uncertainty over the correct amount of supplementary child allowance. The question *if* the RCC should pay extra to parents was already decided at an annual meeting a few months before. Even though Udo does not question the necessity to pay, he seems to be inclined to find a solution that weighs the survival of the company ('can we afford to pay this?') with the importance of some idea, though not explicitly stated, of justice ('without really knowing what would be fair').

The first response to Udo's question comes from Theodore, who thinks that it is in principle important to have a 'social component' in the payment scheme. However, he highlights that the RCC will never be able to create a scheme that does justice to every individual case, not least because there are also public child benefits:

On one hand, there is a system of public child benefits, but we also have injustices in exactly this system (single parents have to pay more taxes than couples, people who are in the highest income class receive child benefits as well). We can't account for all of these differences and compensate for injustices. We would have to collect so much information for each individual case to achieve justice for each individual case.

Thus, the tradeoff between treating particular cases and using general formulas is present already from the start of the discussion. Theodore continues with a proposal for the amount of child allowance: 30 percent supplement for the first child, 20 percent for the second child and 10 percent for the third child. Even though Theodore thinks it is not fair to use a general solution for each particular case, he weighs the coordination savings of an evaluation device against the costs – in terms of time and resources – and introduces a compromise between his awareness of particular circumstances and the concession that the RCC needs a general solution.

Udo in turn asks if someone with children could confirm that more children are related to decreasing marginal costs. The father of three answers that there is a decrease of costs to some extent and that he would be OK with the

30%, 20%, 10% model. At this point. Karin adds that the father of three is not the only person with children at the RCC, since she has been part-time-mother of her partner's children for over 2 years now and also contributes to the payment for these children's expenses for vacation, education and hobbies. Next, Udo wants to draw a line between one's own children and children that someone feels responsible for. This is countered by Anna, who criticizes Udo for sticking to an outdated idea of family:

I think it would be extremely unfair, in a time of patchwork families and alternative family concepts, to punish people who can't have children of their own, or fall in love with someone who already has children, or who are homosexual and adopt children.

This exchange between Karin, Anne and Udo shows that the question of the relevant beings that should be included in the test has not yet been exhausted. While the idea seems to have been to pay child allowance for parents, it is not clear who counts as a parent. Udo responds that he did not know that Karin is actually living with her partner's children part-time and adds that the supplementary child allowance should of course apply to patchwork parents as well. He says that he has learned that there is another member of the RCC with four children, so when they decide on supplementary child allowance it will be very expensive, but he still thinks it is important.

If we want to be a socially minded project, that is a part of it. In this case, the ambassadors will just have to become even more reliable and efficient.

Here we can see that it is not only the question of who parents are and how much children cost that is put to a test in this discussion. The question of child allowance is also a test of the nature of the employer. If the RCC wants to be a 'socially minded project', it has to pay an adequate amount of child allowance. Next, Udo actually calculates what the 30:20:10 model would mean in absolute terms and does not think it would be a good model:

The 30:20:10 percent model was just an estimation that Theodore threw in, and it seemed to make sense for the potential new ambassador. However, did any of you actually calculate what this means in absolute numbers? For someone working full-time and calculated with 15 Euro per hour, 30 percent means 720 per month and 10 percent 240 per month. This is a complicated

topic because there are also public child benefits and reliefs and, therefore, children don't have to be supported by their parent's income alone. But still: To me, 720 per month seems too much and 240 and not enough. What do you think?

Udo puts the proposed evaluation device to a new test by calculating what it would actually mean. He doesn't like the outcome and, though he can't actually explain *why* 720 is too much and 240 not enough, he tries to delegitimize the device by pointing out that it was just something someone threw in. Again we can see that he is worried about the status of the RCC as a good employer who, it seems, has to make sure that their employees earn enough to cover the cost of their children. Martin, not responding to Udo, but asking another fundamental question, wonders why there should be a specific consideration of the situation of people with children and not also other situations where people have more need. He thinks that parents are not necessarily more entitled to additional remuneration than people who are engaged in other activities that are for the common good, such as voluntary work. Martin, like Karin before, criticizes the determination of relevant beings for the test. To him, it is not only parents who deserve supplementary allowance, but all people who contribute to the common good, which is framed according to the civic order of worth.

Udo counters that voluntary work is voluntary and can be done flexibly and to varying degrees, whereas people cannot decide how much care they want to give to their children, or whether they want to care for ill relatives. He asks if they should include care work for relatives in their deliberations. Beppo, a father of two children, wants to clarify that not everyone has increased costs due to children because, for him, the child benefits paid by the state are already sufficient. He proposes to use the *Düsseldorfer Tabelle* (Düsseldorfer Table), developed by judges specialized in family law in order to calculate alimony payments, as orientation for the rates of supplementary child allowance and only pay supplementary child allowance if people explicitly ask for it. But Beppo's contribution also contains a critique of generalization: while he thinks he does not need supplementary child allowance, he does not want to speak for all other parents. His proposed compromise between generalization and particularity is to pay child allowance only when people explicitly ask for it and to use an evaluation

device from family law, thus combining civic, domestic and market orders of worth.

Udo likes the proposal and formulates a possible resolution, namely, to use the *Düsseldorfer Tabelle* only on the condition that people ask for child allowance. As a reaction, three people raise concerns because to them it would be fairer if people had to individually propose their own wages, since one solution for all is by definition unfair to individual cases. For instance, Arno says:

My ideal would be that everyone who works for the RCC and wants money for their work can negotiate their wages freely with the collective [...] the person can ask for what they actually need, not some approximate value derived from some table. I think it is kind of awkward to say that we all get equal wages, but because we know this is not fair under this or that circumstance we pay +X percent and actually we know, that this is still not really fair.

Udo reacts by drawing a line between a decision for the same wages for everyone and a decision for paying higher wages to people with children. Regarding the same wages for everyone, he recalls the discussions they’ve already had where, in the end, they decided that all people who work for the RCC are equally valuable. In the end, there is no veto against Udo’s proposal for resolution.

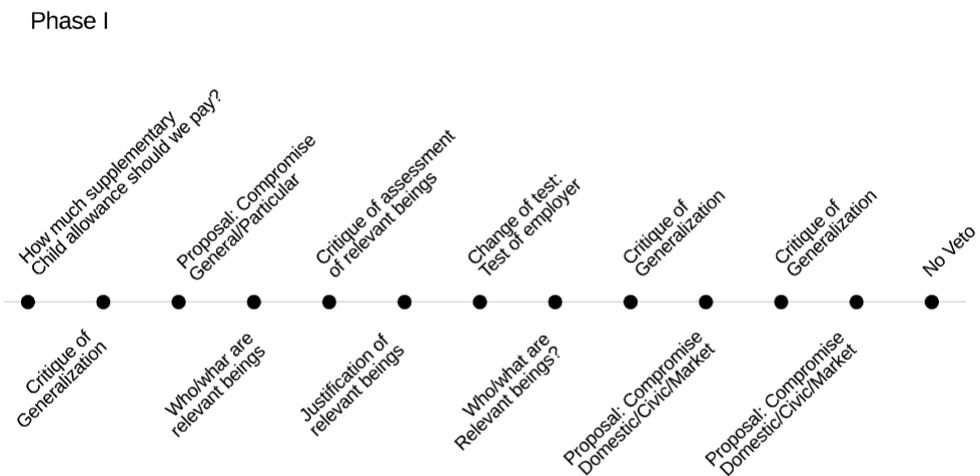


Figure 2: Negotiation of supplementary child allowance, phase 1

This first phase delivers three insights that are relevant for a sociology of critique and valuation. First, inside a critical moment, there might be the need to negotiate two different test arrangements at the same time: the search for fair child allowance involves a test of the RCC as good employer, as well as the costs of children. Second, while trying to figure out a test arrangement, people might realize that they have to clarify or change the relevant beings that should be tested. In the beginning it is neither clear if only parents deserve additional pay nor what exactly qualifies one as a parent. Third, people might not always consider ‘a rise towards generality’ as just. In this discussion, many people voice a critique of generalization as unjust. However, most are also willing to settle with a compromise between generalization and particularity. These compromises involve a standardized model which is supplemented with methods that open up a space for considering particularities in the evaluation.

*Phase Two: Fundamental critique of calculation device, questioning the justness of generalization and resorting to a compromise*

Phase 2 starts when Kate, the accountant, opens a discussion thread in the board in which she reminds everyone that the decision has been taken to pay supplementary child allowance. She then calculates what this would mean in absolute terms and asks if people are still OK with this. She adds that this has not been applied yet, but that a potential contractor has asked for child allowance. Frank, the freelancer with children who will be doing project work for the RCC in the future, then asks if everyone was aware of these sums when they decided on the *Düsseldorfer Tabelle* as a reference point for the supplementary child allowance. While the amounts seem reasonable to him (he would get approx. €8.50 per hour more than the others), they are also quite high. Kate responds that for someone working full time, the *Düsseldorfer Tabelle* would mean an additional income of €522 per month for a small child and she thinks this is too much. Instead, she proposes a pay raise for everyone to €20 per hour:

In general, I think we should pay everyone €20 per hour, regardless if they have children or not. This will save us individual administration efforts and freelancers don't have to tell us how many children they have. :-)

Here, we can see something that already happened before: an evaluation device is tested by looking at its actual outcomes and then criticized, not for the principles of methods of calculation, but because the outcome does not 'feel' right. Furthermore, Kate proposes a new evaluation formula that would mean higher, but equal, pay for everyone, a proposal that is accompanied by a reference to efficiency and transparency. Next, Theodore criticizes the *Düsseldorfer Tabelle* because it is not intended to calculate supplementary child allowance:

I'm asking myself if the *Düsseldorfer Tabelle* is the right measure. To remind you: the function of the table is to secure the livelihood of a child through payments by the separated parent. The table is originally NOT intended to calculate supplementary child allowances by the employer.

He also adds that in order to find a fair solution, the RCC would have to deal with every case individually which it cannot do due to data protection rights and administrative overhead. Theodore would like to make the supplementary child allowance lower than the amounts calculated by the *Düsseldorfer Tabelle* and instead increase the hourly wage for everyone. Furthermore, while he is for paying supplementary child allowance, it is normal that expenses for children are paid for by the wages of the parents, as well as the public child benefits. Theodore provides a new, radical critique of the evaluation device: The *Düsseldorfer Tabelle's* intention is not to calculate supplementary child allowance in the first place. This critique is radical in the sense of Boltanski and Thévenot, since it argues, that the formula at hand is employing an inappropriate evaluative frame, one that belongs to a different 'world'. Furthermore, by stating that it is 'normal' that parents pay for their children with their wages, he 'relativizes' (Boltanski and Thévenot, 2006: 336f) the character of supplementary child allowance: It is not a right of parents and not an obligation for a good employer, it is just a nice gift, a private arrangement between the RCC and its members that does not refer to a general good. Frank and Theodore then both discuss if children are more expensive when the parents are separated, due to higher rent and child care costs. Frank also notes that the RCC will probably not find a ready-made solution out there and asks what exactly the supplementary child allowance should achieve: a gradual improvement of the financial situation of people with children, or a coverage of the costs of children, minus public child

benefits? Theodore responds by once more stating that what the *Düsseldorfer Tabelle* wants to achieve is not what the RCC wants to do with supplementary child allowance. Then he proposes to think again what exactly they want to achieve with supplementary child allowance and if maybe they could just agree on an additional €2 or €2.50 per child and hour. With this, Theodore is the first person that proposes to discuss what exactly the purpose of paying child allowance should be. However, instead of providing possible answers for his question Theodore immediately proposes a relatively simple solution, which is not further legitimized. Frank agrees with the proposal:

So I've thought about this again and I've realized that my more complex considerations on the calculation might drive me to insanity so I've just calculated my income if I would work for 40 hours, and would get additional €2 or €2.50 and this would be fine for me. Therefore, I have no objection against the proposal.

Frank's argument that complex considerations might lead to insanity suggests the relevance of using a kind of 'satisficing' logic (Simon, 1956) for legitimization: although there is a desire to achieve true justice here, it seems that, as people realize how complex the question is, at some point finding a totally fair and adequate evaluation device does not seem important anymore. Instead, a simple solution, with no complex calculations attached, is deemed to be legitimate. Anton joins the discussion to add that people should just say how much additional pay they need. He adds that this makes more sense since people could have higher financial needs due to various reasons – not only children. He proposes a compromise between generalization and particularity:

We will never be able to discuss and consider all potential situations! But we can develop a system which will allow us in the future, if needed, to incorporate different situations. I am thinking of a system in which higher financial needs of people could be described as prototypical cases in order to allow orientation. These prototypical cases could be extended whenever needed.

We have seen this before, Anton both criticizes attempts to find general solutions for particular cases *and* the beings chosen for this evaluation test. To him, it is not only the situations of parents that should be considered.

Frank responds to this and says that a solution like this would end in overly complex calculations and he thinks the +€2 proposal makes sense. Several people agree with Frank. In the end, there are no critical concerns and they decide on €2 per child and hour, provided that people ask for it.

In the second phase of the discussion there are three insights for a sociology of critique and evaluation. First, a calculation device is criticized due to its outcome, not the principles that are used for calculation. Second, the complexity of trying to find a general solution that can do justice to plenty of different and particular cases can lead to a point where the objective of finding a just model does not seem enough to justify complexity. On the contrary, it can ‘lead to insanity’! Third, the compromise that the collective eventually agrees on can be understood as the outcome of a discussion in which the tension between generalization and particularity has been discussed exhaustively to the point where people agreed on a ‘satisficing’ solution.

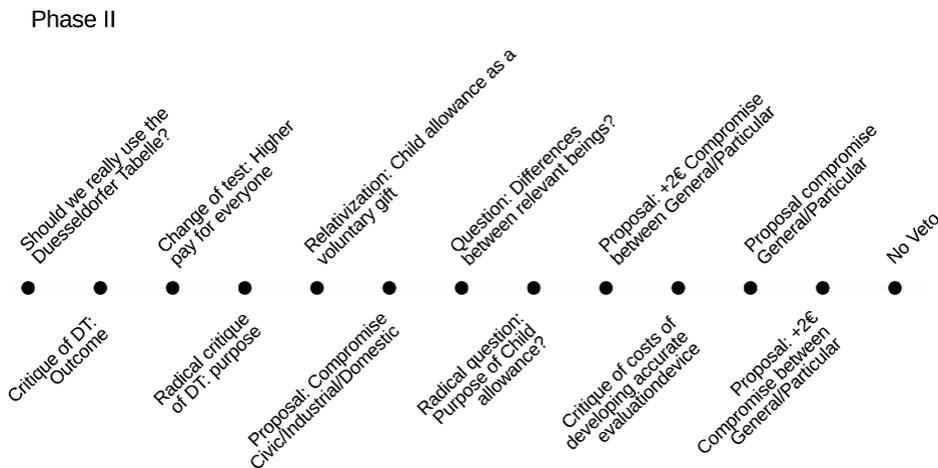


Figure 3: Negotiation of supplementary child allowance, phase 2

## Discussion

The process by which the RCC tries to collectively find a model for paying fair supplementary child allowance has been analyzed by utilizing Boltanski and Thévenot’s notion of the test as a heuristic framework. By following the

justification work of members of the collective, the analysis showed that actors in a situation of radical uncertainty do not necessarily follow a linear path from giving worth to its assessment. Rather, actors conduct a collective negotiation process by which values and their appropriate translation into measures are simultaneously discovered and created. In a testing situation like this, together with the prevalent ideas of justice, the aims, subjects and objects of a test may change. The test is more a discovery process than an implementation of established ideas or values; it is more exploration than exploitation. In this process, people discover what they actually mean when they value something and the possibilities of assessing worth influence the ways of valuing. When the RCC starts discussing supplementary child allowance, there is initially no certainty about which beings are put to a test. It appears that it is not only parents that are (financially) responsible for the up-bringing of children. Problematizing the concept of parents in turn brings up the consideration of other relations of care, posing the question of whether indeed every kind of responsibility for people in need of care should be considered for supplementary allowances. Even when these questions are answered, the RCC has to develop an evaluation device that can simultaneously assess the costs of raising children and what it means to be a good employer with regard to these costs. The paper further illustrates that in order to mobilize the test for empirical studies and to make use of the potential of the conceptual apparatus of Boltanski and Thévenot's pragmatic sociology of critique, tests should not be seen as linear endpoints, but rather as 'temporary truces' with varying degrees of stability (Reinecke et al., 2017). While, in a first phase, the RCC agrees on an evaluation device for calculating supplementary child allowance, this is criticized and subsequently replaced in the second phase.

Supplementary child allowance is conceptualized as an evaluation device. The concept of the evaluation device captures the double moral complexity of both developing a formula for assessing worth and using this formula to standardize evaluation over time and space. In both Reinecke's (2010) study on Fairtrade minimum prices for coffee, as well as Annisette et al.'s (2017) study on evaluating large-scale capital investment projects of a water utility in Western Australia, an evaluation device is contested on the grounds that

it does not allow to consider particular situations and characteristics that cannot easily be generalized. While Reinecke and Annisette et al. discuss their findings as compromises between different worlds, this paper contributes a different possibility for interpretation: compromises between generalization and particularity. The tension between generalization and particularity in evaluation and, especially, evaluation devices is illustrated and further elaborated by the analysis of the (failed) development of an evaluation device in the RCC. In the end, the RCC settles for a compromise between the need to find a generalizable agreement and the hesitation to use a standardized format to evaluate the situation of particular parents and their children. The final solution is a compromise, since the +€2 model answers to the need of making a generalized difference between people with children and people without children. It is also a formula that offers a clear answer to the question of how much supplementary child allowance a person with one, two or three children should get. In that sense, the formula can be seen as a form investment that stabilizes relations. However, it is a very specific device in that the +€2 model lacks any concrete foundation of legitimization. No one actually knows how these +€2 are supposed to be related to the situation of parents with children; it is not clear what this €2 should achieve and why it has to be exactly this amount. It is an arrangement that allows to calculate the future, but in itself does not calculate, i.e. it does not specify a principle of equivalence that could explain itself. The +€2 model is a valuation and valorizing device that signifies and remunerates value, but abstains from evaluation.

There are, then, at least two coordinating forms that accomplish a compromise between the general and the particular. On one hand, the combination of evaluation devices with methods that can consider particularities and, on the other hand, valorizing devices that signify and remunerate value, but are void of concrete evaluation based on principles of equivalence.<sup>3</sup>

---

3 Practices that merely signify and remunerate value, without actually evaluating value, are probably most often non-monetary, like honorary titles or ceremonial rituals. But one could think of certain bonuses or concessions as valorizing

Boltanski and Thévenot's economies of worth framework allows us to view organizations as structures that compromise multiple orders of worth. In this paper, the framework has been successfully applied to deal with normative tensions in organizations. However, the tensions that the framework is able to capture are limited to those that can be related to competing higher common goods. In the economies of worth framework, legitimacy is always related to a 'rise to generality'. Considering particularity, in contrast, problematizes all attempts to establish equivalency between different particularities, which is the basis for any generalization. By analyzing the justification work accompanying the failed attempt to develop an evaluation device, this paper points to a different tension that organizations have to deal with, as well as a different compromise. The tension between the general and the particular is especially relevant to consider when studying valuation in organizations, since organizations have to create generalization and standardization in order to guarantee certainty and stability for coordination (Thévenot, 2001). This need for generalization can come into tension with considerations of particularity, as has been demonstrated in the case of the RCC negotiating supplementary child allowance.

## **Conclusion**

Evaluation can be a highly uncertain process: the final outcome as well as what exactly might constitute worth can be unclear. Evaluation can be made less uncertain and less costly if established evaluation devices are used. This paper analyzed the attempt to develop an evaluation device that was used to calculate fair supplementary child allowance in a collective based on radical democracy. To understand the process by which the collective tries to come to a shared understanding of a fair model to pay supplementary child allowance, the paper utilized Boltanski and Thévenot's notion of the test. By applying the test as heuristic framework, the analysis offers two insights relevant for the literature on test. First, the analysis shows that actors in

---

devices, if they combine symbolic valuation with monetary remuneration, while abstaining from evaluation.

situations of radical uncertainty do not necessarily follow a linear path from giving worth to its assessment. It is rather a discovery process in which people learn what their values imply and how they can be realized in practice. Second, in following the justification work to develop a fair model to pay supplementary child allowance, the analysis furthermore shows that even in a situation that is characterized by an imperative to justification, people might settle for solutions that are good enough, or 'satisficing'. By bringing in a consideration of the tension between the general and the particular in evaluation practices, the paper thus contributes to studies of evaluation in contexts of moral complexity.

## references

- Annisette, M., G. Vesty and T. Amslem (2017) 'Accounting values, controversies, and compromises in tests of worth', *Research in the Sociology of Organizations*, 52: 209-239.
- Brighenti, A.M. (2018) 'The social life of measures: Conceptualizing measure-value environments', *Theory, Culture & Society*, 35(1): 23-44.
- Callon, M. (1998) 'An essay on framing and overflowing: economic externalities revisited by sociology.' *The Sociological Review*, 46(S1): 244-269.
- Cloutier, C. and A. Langley (2017) 'Negotiating the moral aspects of purpose in single and cross-sectoral collaborations', *Journal of Business Ethics*, 141(1): 103-131.
- Dansou, K., and A. Langley (2012) 'Institutional work and the notion of test', *M@n@gement*, 15(5): 503-527.
- Espeland, W. and M. Stevens (1998) 'Commensuration as a social process', *Annual Review of Sociology*, 24(1): 313-343.
- Doganova, L., M. Giraudeau, H. Kjellberg, C.F. Helgesson, F. Lee, A. Mallard, A. Mennicken, F. Muniesa, E. Sjögren and T. Zuiderent-Jerak (2018) 'Five years! Have we not had enough of valuation studies by now?', *Valuation Studies*, 5(2): 83-91.

- Fourcade, M. (2011) 'Cents and sensibility: Economic valuation and the nature of "nature"', *American Journal of Sociology*, 116(6): 1721-77.
- Helgesson, C-F. and F. Muniesa (2013) 'For what it's worth: An introduction to valuation studies', *Valuation Studies*, 1(1): 1-10.
- Honneth, A. (2010) 'Dissolutions of the social: On the social theory of Luc Boltanski and Laurent Thévenot', *Constellations*, 17(3): 376-389.
- Huault, I. and H. Rainelli-Weiss (2011) 'A market for weather risk? Conflicting metrics, attempts at compromise, and limits to commensuration', *Organization Studies*, 32(10): 1395-1419.
- Jagd, S. (2011) 'Pragmatic sociology and competing orders of worth in organizations.' *European Journal of Social Theory*, 14(3): 343-359.
- Kaplan, S. and F. Murray (2010) 'Entrepreneurship and the construction of value in biotechnology', *Research in the Sociology of Organizations*, 29: 107-147.
- Kjellberg, H. et al. (2013) 'Valuation studies? Our collective two cents', *Valuation Studies*, 1(1): 11-30.
- Knoll, L. (2015) 'Einleitung', in L. Knoll (ed.) *Organisationen und Konventionen*. Wiesbaden: Springer.
- Kornberger, M. (2017) 'The values of strategy: Valuation practices, rivalry and strategic agency', *Organization Studies*, 38(12): 1753-1773.
- Lamont, M. (2012) 'Toward a comparative sociology of valuation and evaluation', *Annual Review of Sociology*, 38: 201-221.
- Mailhot, C. and A. Langley (2017) 'Commercializing academic knowledge in a business school: Orders of worth and value assemblages', *Research in the Sociology of Organizations*, 52: 241-269.
- Millo, Y. and D. MacKenzie (2009) 'The usefulness of inaccurate models: Towards an understanding of the emergence of financial risk management', *Accounting, Organizations and Society*, 34(5): 638-653.
- Oldenhof, L., J. Postma and K. Putters (2014) 'On justification work: How compromising enables public managers to deal with conflicting values', *Public Administration Review*, 74(1): 52-63.

- Patriotta G., J.P. Gond and F. Schultz (2011) 'Maintaining legitimacy: Controversies, orders of worth, and public justifications', *Journal of Management Studies*, 48(8): 1804-1836.
- Reinecke J. (2010) 'Beyond a subjective theory of value and towards a "fair price": An organizational perspective on Fairtrade minimum price setting', *Organization*, 17(5): 563-581.
- Reinecke J. and S. Ansari (2015) 'What is a "fair" price? Ethics as sensemaking', *Organization Science*, 26(3): 867-888.
- Reinecke, J., K. van Bommel and A. Spicer (2017) 'When orders of worth clash: Negotiating legitimacy in situations of moral multiplexity', *Research in the Sociology of Organizations*, 52: 33-72.
- Simon, H.A. (1956) 'Rational choice and the structure of the environment', *Psychological Review*, 63(2): 129-138.
- Taupin, B. (2013) 'The more things change...Institutional maintenance as justification work in the credit rating industry', *M@n@gement*, 15(5): 529-562.
- Thévenot, L. (1984) 'Rules and implements: Investment in forms', *Social Science Information*, 23(1): 1-45.
- Thévenot, L. (2001) 'Organized complexity: Conventions of coordination and the composition of economic arrangements', *European Journal of Social Theory*, 4(4): 405-425.
- Zelizer VA. (1994) *Pricing the priceless child: The changing social value of children*. Princeton: Princeton University Press.

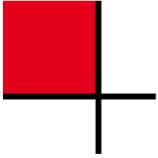
## acknowledgement

I am grateful to Karin Lohr and two anonymous reviewers for comments and suggestions. I also received valuable feedback from other speakers at the *ephemera* 'Beyond measure' conference, Stockholm, June 2017. I thank the members of RCC for being courageous and inspiring, and for letting me spend time with them.

## **the author**

Nina Pohler is a PhD candidate at Humboldt-Universität zu Berlin, Department of Social Sciences and a research and teaching associate at the Social Design Studio, University of Applied Arts Vienna. Her research interests include economic sociology, urban studies, organization studies and valuation studies.

Email: [nina.pohler@uni.ak.ac.at](mailto:nina.pohler@uni.ak.ac.at)



# A number is worth more than a thousand pictures: The case of designers' cynical resistance through quantification

Ulises Navarro Aguiar

## abstract

This article draws on an ethnographic investigation of product development at an engineering organization to examine the struggle faced by designers in justifying design proposals when cooperating with engineers and managers. Frustrated by the priority given to numbers over other modes of evaluation traditionally used in design, designers in this case developed and mobilized their own evaluation device to quantitatively prove the validity and worth of their work. This quasi-parodic form of evaluation enables designers to criticize and influence strategic project decisions. At the same time, this cynical act of resistance paradoxically endorses the quantitative approach and undermines designers' own professional expertise as a valid way of conceiving worth, which ultimately renders this move more indeterminate than what a distinction between resistance and conformity denotes. Overall, the study adds to our understanding of how modes and principles of justification typically embraced by professional groups can be unsettled by attempts to protect them. In doing so, it brings to light the ambivalent nature of resistance through a cynical embrace of quantification.

## Introduction

In the wake of a wide-ranging neoliberal impulse to 'modernize' organizations, attempts to evaluate, monitor, rank and audit performance in

the name of accountability, transparency and efficiency have become common features of organizational life (Dahler-Larsen, 2012; Muller, 2018). The development and implementation of evaluation devices and indicators underpins much of the project of Strategic Management and the orientation known as New Public Management. The use of these tools is often justified as a universal good that helps organizations meet market demands and ensure quality standards. This presentation of evaluation devices and indicators as uncontroversially beneficial has helped them proliferate to such an extent that we can now talk of the widespread institutionalization of evaluation in contemporary culture. However, as many critics have argued, the zeal for such approaches has increasingly led to evaluations being treated as ends in themselves, conducted for their own sake in a manner that amounts to little more than a 'shallow ritual' (Power, 1997) or even a 'tyranny' (Muller, 2018). For instance, the introduction of evaluation devices and indicators has been said to undermine the autonomy and discretion of professionals (Champy, 2006; Dahler-Larsen, 2012; Shore and Wright, 2015; Styhre, 2013) and to trigger dynamics of conformity and resistance (Espeland and Sauder, 2007; Forseth et al., 2019; Townley et al., 2003).

This article contributes to the growing literature on valuation studies (Helgesson and Muniesa, 2013; Lamont, 2012), as well as to debates on the managerialization of professional work (Noordegraaf, 2011; Styhre, 2013). It does so by examining how two professional groups with distinct concerns and conceptions of value – designers and engineers – negotiate tensions as they grapple with the imperative of measured performance in the context of a large manufacturing company with a long engineering tradition, *Ares Construction Machinery* (ACM). To put it crudely, while engineers in the study tend to adhere to a prevailing managerial regime tied to principles of efficiency and optimization, designers are habitually more concerned with principles of aesthetics and perception. In a context that is committed to the notion of measurable efficiency, designers struggle to justify their design proposals and communicate their concerns effectively in their cooperation with engineers. Frustrated by the widespread acceptance of a value framework that is unable to account for the aesthetic contribution of their work, some designers engage in an experimental political manoeuvre with

cynical undertones: the concoction of their own evaluation device to quantitatively ‘prove’ the validity and worth of their work. This quasi-parodic form of evaluation enables designers to influence strategic project decisions. However, the use of the device, and in particular its implicit – albeit ironic – endorsement of the evaluation agenda, leaves an ambivalent aftertaste that proves controversial among designers. This study probes this ambiguous blurring of boundaries, drawing on insights from organizational literature on cynicism and resistance (Butler et al., 2015; Fleming and Spicer, 2002; 2003; Karlsen and Villadsen, 2015).

Following recent calls for the study of the ‘dynamic intertwinement’ between devices of valuation and valuation cultures (Zuiderent-Jerak and van Egmond, 2015: 66), this article focuses on the performativity of the novel evaluation device as it intersects with the working values of professionals labouring at ACM. The study adopts a ‘post-critical perspective’ that foregrounds the critical capacities (Boltanski and Thévenot, 2006) and experimental dispositions of actors in the field (Winthereik and Jensen, 2017) in order to illustrate how unsettled values are inherent to situations in which collectives of people and technologies vie to shape what counts in an organization (Dussauge et al., 2015; Hauge, 2018). It tells the story of a group of designers who develop an evaluation device to measure their own work and then mobilize the numerical output as a form of critique and justification (Boltanski and Thévenot, 2006). I argue that this critical experiment can be viewed as an organizational micropolitical variety of ‘statactivism’ (Bruno, Didier and Prévieux, 2014), that is, the use of quantification for purposes of critique and emancipation. This approach enables designers to reconfigure power relations and secure room for manoeuvre in ways that obfuscate any neat distinction between conformity and resistance to the managerial regime.

In the first section of the article, I delineate the theoretical background of the study, before going on to describe the methods and the research setting. The empirical narrative is divided into two parts: the first describes the struggles designers face in justifying their views when they disagree with engineers and managers; the second describes the genesis and deployment of the evaluation device as an experimental form of critique and resistance.

The discussion section then expounds upon the implications of this research. The study contributes to the literature on (e)valuations in organizations by illustrating how efforts to quantify the unquantifiable as a form of cynical resistance can afford punctual political victories for professional groups, while at the same time implicitly endorsing the disregard of values that cannot be measured.

## **Theoretical background**

### *Towards a post-critical approach to measurement and managerialism*

In *The postmodern condition*, Jean-François Lyotard (1984) delineated a profound cultural shift in the status of knowledge in computerized societies, arguing that the apparatus of legitimation hitherto supplied by grand narratives had come to be replaced by a generalized spirit of performativity. By this he meant that, after the deflation of the teleological claims associated with modernity, the worth and legitimacy of knowledge had now become a function of the technological criterion of efficiency; that is, the telos of knowledge was no longer 'truth' but heightened performance measured in terms of an input-output ratio. One could argue that the subsequent proliferation of evaluation systems in organizations constitutes a manifest confirmation of this aspect of Lyotard's (1984) thesis.

In resonance with Lyotard's analysis (1984), critics of audit and measurement cultures have thereafter argued that the credo of measured performance betrays an obsession with efficiency and control as paramount principles (Muller, 2018; Power, 1997). Such unbridled impetus for efficiency, Lyotard (1984: xxiv) argued, is neither harmless nor neutral for it 'entails a certain level of terror, whether soft or hard: be operational (that is, commensurable) or disappear'. Following this line of thought, it is not shocking that some have postulated that the ghost of Taylorism still lingers and haunts the ideal of managerial efficiency underpinning and justifying the cognate projects of Strategic Management (Stoney, 2001) and New Public Management (Tolsby, 2000).

In fact, many scholars in the social sciences have opted for a largely tyrannical or oppressive reading of the spread of quantitative measures in organizations (see e.g. S.J. Ball, 2003; K. Ball, 2010; Larner and Le Heron, 2005; Muller, 2018; Shore and Wright, 2015; Strathern, 2000). One recurrent aspect of this line of critique is that, as Shore and Wright (2015: 25) argued, the drive for performance measurement ‘reshapes organizations into ever-expanding systems of measuring, costing, monitoring and ranking’, instituting new authoritarian forms of governance to ‘manage’ and ‘control’ employees, who, wittingly or not, end up ‘calibrat[ing] their work and worth against their organisation’s performance indicators’ (*ibid.*: 26). Even more nuanced analyses have drawn similar conclusions, underscoring the self-disciplining effects wrought by quantitative measures (Sauder and Espeland, 2009) and showing how people alter their behaviour when subjected to evaluation in ways that conform to or resist those measures (Espeland and Sauder, 2007; Townley et al., 2003).

Widely similar critiques have been undertaken within the sociological literature on professions, where the pressures of managerialism and quantification have drawn a great deal of attention (see e.g. Ackroyd et al., 2007; Farrell and Morris, 2003; Leicht et al., 2009; Leicht and Fennell, 1997; Styhre, 2013). Such critiques depart from the premise that the very idea and institution of professionalism is under threat by managerialist interventions and instruments. Professionals are now expected to justify their work and meet principles of evaluation prescribed in balanced scorecards, key performance indicators and other quantitative assessments, under whose authority professional judgement and discretion find themselves increasingly subsumed (Leicht et al., 2009; Styhre, 2013). However, these overlapping critiques on the effects of performance evaluation in organizations and the managerialization of professions, respectively, tend to ‘victimize’ the subjects of evaluation, generating unhelpful purified dichotomies between managerialism and professionalism (Noordegraaf, 2011; 2016), between structure and agency (Gleeson and Knights, 2006). Here, evaluation is liable to be portrayed as an overwhelming external pressure or a management-sanctioned initiative of which employees or professionals are either the helpless victims or the strategic dissenters. Such

analyses tend to assume the efficacy of technologies of quantification, their normative pressure being explicitly or implicitly characterized as a unilateral *fait accompli*, allowing for only two possible responses: conformity or resistance.

This article, by contrast, seeks to engage in a different critical gesture that is more aligned with what some have called a ‘post-critical perspective’ (Winthereik and Jensen, 2017), drawing inspiration from the ‘symmetrical twins’ (Guggenheim and Potthast, 2012) of actor-network theory (ANT) (Latour, 2005) and the sociology of critical capacity (Boltanski and Thévenot, 2006). Such perspective entails a ‘lateral’ movement to displace the task of critique from the privileged position of the analyst to the actors themselves (Guggenheim and Potthast, 2012), replacing the notion of critical distance for a probing empirical proximity to everyday controversies and the critical reactions they elicit from those involved in them (Boltanski and Thévenot, 2006). Here the critical edge lies in the production of descriptions that refrain from cleaning up controversies (Latour, 1993), bringing matters of concern to the fore (Latour, 2004). So, rather than reifying the ‘evaluation monster’ as managerialism personified, this study seeks to foreground its *contingent* character (O’Doherty and Ratner, 2017) by approaching evaluation as a *distributed set of practices* that are mobilized for justification and critique by actors in the field, and whose performative effects entail more indeterminacy than what a straightforward distinction between conformity and resistance lets on. To develop this post-critical perspective I rely on the conceptual resources offered by the aforementioned ‘symmetrical twins’ not only in relation to the notion of critique, as presented above, but also in relation to evaluation, with the aid of literature on valuation studies.

### *Justification work and valuation devices*

As Zuiderent-Jerak and van Egmond (2015: 47) argued, the field of valuation studies has two main inspirations: economic sociology and science and technology studies. Within these disciplines, the sociology of critical capacity and ANT remain two very influential approaches, respectively. Both have been widely mobilized in the transdisciplinary domain of valuation

studies: the former notably in relation to its attention to how people assign worth to things based on a variety of principles of justification (Boltanski and Thévenot, 2006), and the latter notably in relation to the role of devices in the construction of collectives, such as markets (Muniesa et al., 2007).

On the one hand, with respect to the sociology of critical capacity, this article particularly draws on its emphasis on ‘justification work’ (Jagd, 2011). Boltanski and Thévenot (2006) focus on those everyday moments of tension in which people are compelled to justify their actions during the course of a disagreement or dispute. They observed that, confronted to this imperative of justification, people may appeal to different and incompatible modes or principles of evaluation to prove the justness or correctness of their claims or actions. Distinct modes are incommensurable since they embrace particular notions of the good, the right, the desirable, and thus conceive of value in a fundamentally different manner by mobilizing ‘discrete metrics, measuring “instruments,” and proofs of worth objectified in artefacts and objects in the material world’ (Stark, 2009: 13).

On the other hand, with respect to ANT, this article emulates the focus on devices that emerged in STS (Akrich, 1992; Callon, 1987) and was further developed in social studies of markets (Callon, 1998; Callon et al., 2007). The latter stream of literature has demonstrated how devices such as benchmarking procedures or accounting methods are neither mere instruments in the hands of economic actors nor tokens of some version of technological determinism, but can be better grasped as ‘material and discursive assemblages that intervene in the construction of markets’ (Muniesa et al., 2007: 2). By transcending in this manner traditional human/non-human agency divides, this perspective foregrounds how devices perform and organize collective action in a variety of ways, attending to the mechanisms that facilitate and solidify economic valuations. Recently, this notion of device has become an entry point for the analysis of situations of valuation that go beyond marketization to include a variety of ‘*valuation devices* that are mobilised in queries about the value of things and attempts at making things valuable’ (Doganova, 2019: 256).

Indeed, several studies of valuation in organizations have paid particular attention to the work of devices (see e.g. Espeland and Sauder, 2007; Forseth et al., 2019; Muniesa and Linhardt, 2011; Sauder and Espeland, 2009). By surveying their effects, studies in this vein recount how evaluation devices do not simply measure the value of something, but actually intervene in making things valuable (Kornberger et al., 2015). That is to say, devices such as rankings or key performance indicators shape the phenomena they are supposed to evaluate.

Now, while both of the symmetrical twins converge on a broad definition of valuation as ‘any social practice where the value or values of something is established, assessed, negotiated, provoked, maintained, constructed and/or contested’ (Doganova et al., 2014: 87), they diverge in their understanding of the ‘stuff’ that makes these valuation practices (Hauge, 2016; Zuiderent-Jerak and van Egmond, 2015): whereas ANT-informed accounts emphasize the stern influence of devices (Doganova, 2019), perspectives informed by Boltanski and Thévenot (2006) give pre-eminence to the role of cultures or worlds of worth said to ultimately frame the work of devices. This problematic culture-device opposition has led to calls for greater attention to their ‘dynamic intertwinement’ (Zuiderent-Jerak and van Egmond, 2015: 66) so as to avoid reproducing stale, deterministic debates that oppose ‘the social’ to ‘the technical’, which has prompted suggestions for an ‘organizational turn’ in valuation studies (Hauge, 2016). The empirical case of this article lends itself to this effort by unfolding how the deployment of an evaluation device intersects with and unsettles the working values of professionals whose expertise is suffused with particular principles and ideas of what constitutes worth.

#### *The politics of quantified measurement: Activist and cynical forms of resistance*

The study of valuation is intrinsically tied to political questions (Helgesson et al., 2017). Since evaluation devices and measurement techniques establish demarcations of what gets valued in the first place, of what gets ‘taken into account’ (Whittle and Mueller, 2010), they are irremediably bounded up with issues of inclusion and exclusion (Mennicken and Sjögren, 2015). Here, the dominance of quantification as the prime technology of performance

assessment (Espeland and Stevens, 2008) and the power of numbers as a privileged mode of communication and persuasion in social life more broadly (Porter, 1995) cannot be overlooked. Indeed, numbers entail commensuration, that is, they turn qualities into quantities and transform all difference into a question of magnitude, which implies a repudiation of incommensurable values (Espeland and Stevens, 1998).

That said, there are two contrasting senses in which evaluation devices and measuring instruments are often deemed 'political' (Helgesson et al., 2017). One has to do with the idea of considering these technologies as a means of control, as most critical perspectives tend to do; the other one refers to 'situations of disruption, conflict, dissent and controversy, rather than of control' (*ibid.*: 3). The latter sense best aligns with the post-critical perspective adopted in this study. Rather than viewing quantification as a tool of oppression and control unilaterally wielded by the powerful (i.e. management), here the researcher is encouraged to scrutinize how it is put on trial (Muniesa and Linhardt, 2011), enacted at the margins (Mennicken and Sjögren, 2015), and maintained across collectives of people and artefacts (O'Doherty and Ratner, 2017).

Not only does this perspective allow for the consideration of quantification as an arena of political struggle, but also of experimentation (Winthereik and Jensen, 2017). The notion of 'statactivism' (Bruno, Didier and Prévieux, 2014) seeks to designate those subversive enactments of quantification at the margins. Proponents of this neologism, formed by the contraction of *statistics* and *activism*, use it to describe those experiments aimed at deploying statistics and other forms of quantification as means of activist contention and resistance to criticize and influence particular states of affairs (Bruno, Didier and Prévieux, 2014; Bruno, Didier and Vitale, 2014; Didier, 2018). Resistance to the monopoly of statistics and the proliferation of managerialist instruments takes on an active form wherein fire is fought with fire, as it were. In this manner, statactivism underscores that quantification can also be a mode of resistance that galvanizes collective action, contrasting heavily with more 'passive' notions of resistance to measurement in organizations characterized by scepticism and cynicism (see e.g. Townley et al., 2003).

Indeed, cynicism, like humour more generally (Butler, 2015), constitutes an ambiguous mode of resistance in organizational life (Fleming and Spicer, 2002; 2003; Karlsen and Villadsen, 2015). A stream of critical management research has argued that, despite exuding an aura of transgression, the act of keeping a 'cynical distance' often assumes the status of consent or conformity (Fleming and Spicer, 2002); that is, even if employees distance themselves by being sceptical or scoffing about managerial claims or demands, they end up performing their prescribed roles in everyday practices, ultimately reinforcing the power relations they meant to criticize (du Gay and Salaman, 1992; Fleming and Spicer, 2003; Kunda, 1991). In other words, cynicism inadvertently bolsters up managerial prescriptions by the very fact that it gives cynical employees the illusion that they are detached, autonomous agents (Fleming and Spicer, 2002; 2003), ultimately granting cynical resistance a rather passive, if not futile, character. This impasse has prompted efforts to revisit cynicism's critical-subversive potential (Karlsen and Villadsen, 2015). Yet what is clear from this literature is that it is very difficult to make a clear-cut distinction between conformity and resistance when it comes to cynical attitudes towards managerial instruments and prescriptions; what is transgressive and subversive in a particular sense and set of circumstances, may be conservative and subservient in others (Fleming and Spicer, 2002).

This article deploys these insights to probe into the ambiguities found in the empirical case, which, as will be shown, displays a curious amalgamation between activist and cynical forms of resistance. However, consistent with the post-critical perspective delineated above, this analysis rejects the top-down version of critique espoused in critical management literature and thus refrains from any attempt to 'unveil' actors' illusions, letting them instead perform their own critiques.

## **Method and setting**

This article draws on an ethnographic study of design work at a manufacturing firm. The study sought to gain an in-depth understanding of organizational life at the company's design department. The fieldwork was

carried out between 2012 and 2015 and included participant and non-participant observation of team meetings, meetings with engineers and product planners, design reviews, presentations, strategy workshops, exhibitions and informal gatherings. Digital documentation such as slide-decks, spreadsheets, posters, mood boards, reports, prototypes, diagrams, videos and other digital artefacts of the sort were also gathered. Most of the observational material was recorded using field notes, except for two meetings that were audio-recorded. There are approximately 50 fieldwork entries corresponding to the observed events. The field notes included a record of interactions, conversations, and the use of artefacts. Also, 32 semi-structured interviews were conducted, generating around 40 hours of recordings. The semi-structured interviews were designed drawing on the insights derived from fieldwork observations. Most of the interviewees were people working at the design studio, but several people external to it were also interviewed. The interviews were all audio-recorded and lasted between 45 and 100 minutes each. Almost all interviews were fully transcribed.

In ethnography, as Kunda (2013) argued, ‘data collection’, ‘data analysis’ and ‘writing’ are not distinct stages on a conceptual, practical or temporal level. So, when it comes to collecting and analysing the material, I set out to abide by an emic commitment to withhold pre-established analytical categories and let the actors deploy their own worlds. More specifically, my aim was to let the actors perform their own critiques and articulate their own ideas of what is valuable, as I followed their evaluation practices. By using controversies as a focal point to examine rich articulations of conflicting values (Dussauge et al., 2015), I was able to construct a picture of engineers’ and designers’ particular conceptions of value and position it in relation to managerial demands of performance evaluation. This picture was further informed by interviews and documentary analysis of reports and evaluations. The analysis of evaluation practices consisted in unfolding the performative capacity of the evaluation device with special attention to its ‘script’ (Akrich, 1992), that is, the assumptions that devices ‘embed on what is valuable, who is entitled to value and whom is to be valued’ (Doganova, 2019: 260). At the same time, I moved strategically between emic and etic registers to attempt to generate novel interpretations of ‘what is going on

here' (Barley and Kunda, 2001). The use of the notions of 'conformity' and 'resistance', 'cynicism' and 'stactivism' reveals a clear example of such move towards the etic in an endeavour to further the academic discussion around the effects of quantitative measures in organizations. In this manner, the present account was constructed through an iterative movement between the emic and the etic, between the empirical material and the literature.

The design team at the centre of this study worked at the design department of a large manufacturer of construction machinery and equipment, pseudonymously referred to as *Ares Construction Machinery* (ACM) in the study. Over the years, ACM expanded its product range and market penetration by means of a series of acquisitions. This meant that, as a result of this growth strategy, ACM had different product platforms located in different countries around the world with dedicated engineering teams specialized in particular product ranges (e.g. excavators, wheel loaders, pavers, etc.), but with a centralized product planning function (PPL) located in Sweden.

As a corollary, brand consistency became a continual challenge for ACM. In the mid-2000's, the first design director for ACM was appointed, assembling the first in-house design team at the company in an attempt to create a consistent range of ACM products and promote commonality between the different technology platforms. Prior to this, design work was done by engineers or often commissioned to external design consultants. So, at the time of the study, the in-house design team was still a relatively new addition to the organization, and was still in the process of building legitimacy at ACM. In this context, PPL acted as management, coordinating the work of engineers and designers in product development efforts.

Here, it is worth noting that the professions of design that emerged in the wake of the industrial revolution, such as industrial design, have not attained the same stature as more established professions such as engineering or architecture. In the construction equipment industry, moreover, the contribution of designers is not as celebrated as in other branches of the automotive industry. Indeed, construction vehicles are

sturdy, rational machines considerably less glamourized than transportation vehicles.

On top of that, at the time of the study, cost reduction had become an operational priority at ACM. The company had been struggling to boost profitability ever since the financial crisis. In 2013, sales fell almost 10 percent and net profit dropped by two-thirds. This prompted job cuts and a series of operational restrictions to reduce costs. In response to the underwhelming financial results, the company launched a ‘cost-efficiency strategy’ running until the end of 2015. In this context, cost-efficiency became the default principle of evaluation and a central arbiter in the definition of what counts.

### **Justification struggles – or the problem of measuring design**

Since the advent of integrated product development, designers working in industrial settings have been expected to participate in the early stages of the product development process as members of cross-functional teams. As a company, ACM strove for working in this manner through the establishment of support processes to inscribe and facilitate the early involvement of relevant actors in product development projects, but having geographically spread-out product platforms made this ambition difficult to realize. On repeated occasions, projects started without designers being involved from the outset. And while they were used to negotiate and integrate competing interests and concerns to deliver a design, some designers felt like they were not operating on a level playing field, as one designer pointed out: ‘It’s frustrating that we don’t have an authority. We’re not seen as the experts, but more like a supporting function’. They connected this perceived lack of authority to the fact that their concerns frequently failed to resonate with engineers and carried little weight in project decisions. In this context, designers and engineers would often find themselves in principled disagreements over what counts.

Added to this, following the new operational restrictions, key performance indicators (KPIs) were established to reward employees for furthering cost-saving efforts in development projects. This reduced design work to a

redundant, cost-adding activity in the eyes of many engineers who perceived the involvement of designers as a hindrance rather than an aid. Designers, on the other hand, felt threatened by what they viewed as an excessive focus on cost reduction and operational efficiency. As one designer put it, 'there's a focus on reducing costs that resembles a fetish, and it consumes every decision'. In internal meetings at the design department, designers often discussed and complained about this. Design proposals to change the colour of handrails or add a bend on a panel became a matter of contestation as engineers scrutinized every cost-adding move set forth by designers. One designer qualified this state of affairs as 'Tayloristic' and 'very mechanical', and another likened it to working with a 'hand tied on your back.' As it stood, efforts to promote 'good design' were at odds with a prevalent fixation on cost reduction. A fixation that left them in a weak position to make their concerns count, as one designer underscored: 'you have us trying to push for good design in projects, and we don't have that much pull because the people making the decision, they only make decisions driven by cost.'

Their work being considered largely superfluous and peripheral compared to the centrality of cost considerations, operational efficiency and technical precision, designers were constantly faced with the challenge of going an extra length to provide justifications for their work, which proved to be no easy task in an engineering-oriented context, let alone in a cost-sensitive one. The emphasis on efficiency as preferred principle of evaluation enacted in various performance indicators often undermined designers' efforts to articulate their own conception of value. But what did designers conceive as valuable? What was at stake for them when stepping into a project?

The designers in the study often tied their conception of value to principles of aesthetics, understood in a broad sense as the experience of the embodied senses. During weekly meetings, designers gathered to comment on each other's ongoing work and, in their discussions, they often underscored the importance of building compelling in-vehicle experiences whereby operators could feel supported to complete their tasks. Their attentiveness to how people experience things was closely connected to a strong sense of craftsmanship and attention to material details. As a general rule, designers

cared deeply about the ‘character’ and the ‘look and feel’ of products, taking great pride in translating the ACM brand into designs characterized by a certain style that could be consistently recognized across product ranges, as stated in documents describing their ‘design philosophy’. The ‘impression’ generated by their designs was also a critical factor for many of them. That is to say, designers generally had great regard for how designs affected people emotionally.

Engineers in the study, on the other hand, often tied their conception of value to principles of efficiency in relation to technical aspects such as reliability, safety and productivity, but also operational aspects such as cost. These concerns were also largely upheld by management, that is, PPL, which was mainly made up of engineers. As Styhre (2013: 203) pointed out, engineers are among the professional categories that are more likely to embrace or actively participate in the development of certain managerial initiatives or routines. In company reports, ACM engineers were celebrated for developing ‘world-class technical solutions’. This conception of value rooted on technical efficiency was also made evident in situations of dispute whereby some engineers produced justifications to support their criticism of designers’ work by appealing to cost and emphasizing compliance with technical specifications as the chief concern. For many engineers, matters of technical performance took precedence over matters pertaining to ‘character’ or ‘impression’, which were more or less dispensable aspects as evinced in their negotiations with designers.

At the same time, disagreements between designers and engineers played out not only at the level of principles, but also – necessarily – at the level of measures of performance. Crucially, contrary to the work of designers, engineering work was quantifiable. When developing a product, engineers’ performance could be measured in a very straightforward fashion. For example, fuel efficiency, the relationship between distance travelled and the amount of fuel consumed by a construction vehicle, could be accurately calculated. The same went for engine power, travel speed, engine noise, cost, etc. Design work, by contrast, could not be measured in the same manner. How does one measure the look and feel of a product? The character? The impression? There were no unequivocal metrics or

performance indicators to account for that. For designers, 'measuring performance' was closest to the notion of providing constructive critique to an evolving design proposal, rather than establishing metrics tabulated in a list of specifications. Formal design reviews took place at different stages of the design process in which people internal and external to the design department were gathered to evaluate and comment on a particular design. In addition to this, life in the design studio was imbued with informal, evaluative engagements whereby designers would casually invite colleagues to judge their work and provide feedback. In this manner, designers measured performance by making qualitative judgements, not by performing numerical calculations.

These struggles were often a matter of formal and informal discussion among designers. One time, during their annual 'strategy workshop', designers discussed at length how hard it was to communicate the 'value' that design 'brings to the table' outside of the design department. This was attributed to the notion that, unlike engineering, design was a practice richly informed by 'intangibles,' such as 'values and emotions' which were hard to articulate. Encapsulating the quandary they found themselves in, one senior designer emphasized: 'We need to convey what we do, essentially. The thing is that engineers can measure everything they do, but what about us?' Some designers concluded that traditional 'measures of performance' carried out in the design studio were insufficient, since these were performed *on their own terms*. Typically, designers raised their concerns through visualizations in an attempt to bring their perspectives to bear upon project decisions and future strategies. They crafted sophisticated visuals to explain what was at stake in the project and to justify design decisions. Measures of performance were tied to the attribution of aesthetic and perceptual qualities to designs, using words and images. For instance, documents detailing the evaluation of design work on certain products included descriptions abounding in qualificatives such as 'emotional', 'stylish', 'smart', 'open', 'nice', 'caring', 'warm', 'friendly', 'rounded', 'pleasing', 'flowing', 'streamlined'.

In short, whereas the concerns of designers were expressed in words and images, the concerns of engineers were expressed in numbers. Therefore, as it turned out, the issue for designers was not only about upholding their

conception of value in principle, but also about finding the right ways to assess or evaluate their concerns in order to make them compelling to others in determining courses of action. This led designers to rethink the question of measurement altogether.

### **Critique through an evaluation device – or the work of measuring design**

A controversial incident during a project would prove decisive in the emergence of a new measurement technology, an evaluation device for design features. The project in question was the development of a soil compactor machine. To define a positioning strategy, PPL usually employed a standardized system which listed, ranked and compared the technical features of all the machines within the same category, competing in the same market (e.g. fuel efficiency, vibration frequency, oscillation angle, centrifugal force). Through a formula, the system calculated a feature index, which allowed PPL to examine the relationship between feature offering, price and market share, thus providing a frame to define a target position for ACM products in relation to the competition.

At the time, a competitor was producing and commercializing high-quality soil compactors in the same market. So, in the customary analysis performed by PPL at the outset of the development process, not unexpectedly, this competitor got a fair score of 75 percent in feature offering. It was then decided that ACM's soil compactor would compete in this market by outperforming this competitor in technical features. The goal was to produce a machine with a feature index of 90 percent. The dedicated product platform for this type of machine was based in a remote location, where engineers began working on the project. With the imperative of cost-efficiency bestriding operations at ACM, these engineers set out to make the cheapest possible machine without compromising the feature offering previously determined by PPL.

The project was well under way when designers got involved after a late-coming management decision. The engineers had basically designed the machine by themselves at that point. Usually, designers hated it whenever

that happened because it meant they had simply been called to provide ‘cosmetic fixes’ to an almost finished design. ‘If we just come now really late and painted the pig, would that matter?’, told me one designer when asked about their late involvement in the project. However, this time a certain sense of satisfaction and even hilarity accompanied their sense of injustice. What the engineers had come up with looked utterly precarious, far from the stylish appearance that designers thought preferable. During one internal meeting at the design department, the CAD model made by the engineers was shown, producing a steady stream of laughter in the room.

Some of the senior designers thought that maybe this turning of events would help them drive their criticism home and get more recognition for their work. Assuming that the problem would be self-evident, two senior designers approached PPL expecting they would recognize that the machine was clearly not acceptable, that this was not ‘good design’. However, they were left perplexed when PPL did not ‘see’ the problem. One of them recalled: ‘We showed this to really high up managers, and they said: what do you mean? They just couldn’t see it. That’s kind of amazing!’

PPL’s justification was that the machine was fulfilling the identity manual. This was a document authored by the design department and updated every year detailing a series of guidelines and recommendations to be taken into account when designing ACM machines. Considered an asset by designers in the beginning, the identity manual became a matter of controversy over the years. With no little derision, some designers called it ‘the cookbook’ because it purportedly reduced design to a recipe. Essentially, the manual established rules for colour schemes for different parts, iron mark applications, gauge positions, and so on. The identity manual was useful over time because it set a standard that enabled designers to create a consistent range of ACM machines across the different product platforms.

However, according to some designers, the identity manual gave a wrong impression of what design work really entailed. When it came to project decisions, the authority of designers was limited to the guidelines established in the identity manual, and in situations where disagreements went beyond the elements included in the document, designers remained

unable to defend what was at stake for them. Since the authority rested on the manual rather than on their professional judgment, many designers felt like they had no significant influence. Therefore, most designers were critical towards the identity manual and wanted to do away with it altogether. In their view, compliance with the identity manual could not be equated with 'good design'. In this case, the engineers involved in the project had simply followed the recommendations laid out in the identity manual. And ugly and misshapen though it might have been, the result was acceptable to PPL because it was compliant with the identity manual and had the necessary technical features. This was hard to swallow for designers in the project, who tried to reason with PPL by explaining why the machine, as it stood, did not 'look right'. Yet their critique of the poor aesthetic quality of the machine seemed to fall on deaf ears. As it turned out, what constituted 'evidence' for these designers was not evident to PPL or engineers.

Designers were then left with very little room for manoeuvre. They came up with a few proposals, but this state of affairs exuded an air of injustice that motivated them to experiment using quantification to defend their own agenda. Inspired by the feature index employed by PPL, designers came up with their own 'design feature index tool'. One designer amusedly explained the rationale underpinning this experiment: 'design is not measurable and that's what we are trying to fix'. So, they decided to measure what they called 'effort spent on design'. Here, effort was defined in terms of how much money was needed to produce a particular feature by looking at the materials and techniques employed. It was about the 'complexity' of a feature. Generally, the more complex it was, the costlier it was to produce. To put it another way, to get top score one would have to do something really expensive and complex. The objective of this evaluation device was one of critique; they sought to empirically verify how much competitors were willing to invest in design features, and contrast that with ACM's poor commitment to design investment.

Designers in the project identified all the soil compactors competing in the market. They looked at what they considered to be the most important and visually differentiating components of the machine and identified the

features that, in their eyes, drove cost and quality by analysing the materials and production techniques employed. They set a scale from 0 to 100, and assigned each feature area a weight relative to its importance. The results confirmed what was already obvious to them: although technically capable and efficient, the ACM machine was not up to par aesthetically. The distinctions produced by the scores had already been predicted by designers, but the evaluation device allowed them to define these distinctions as ‘real’ for others to see, confirming and amplifying designers’ initial expectation. Now, armed with more than just their aesthetic judgment, they had ‘factual evidence’ to make their case: numbers and graphs.

Next, one senior designer called for a new meeting with PPL. During the meeting, the design team showed the results of their assessment. While the image of the CAD model had previously failed to make an impression, this time numbers proved to be a strong enough argument for PPL to recognize the existence of a problem. The senior designer leading the meeting was astonished by this, as he told me in an interview shortly after the meeting: ‘Nobody asked me how I came up with the figures, no one was interested in that. But once I had a figure, we had a problem’.

The deployment of the device secured room for manoeuvre for designers in the negotiations, making their concerns visible and worthy of consideration only thanks to these numerical comparisons. Through the act of measuring, not only were designers making different machines commensurable with each other, but they were also making commensurable the separate worlds of their concerns and those of engineers and managers. At ACM, a number seemed to be worth more than a thousand pictures, disrupting the old adage. The replacement of the aesthetics of images with the parsimony of numbers in the presentation of design work was willingly, if insincerely, embraced by some designers, as one of them put it in a somewhat derisive tone:

Even if it’s basically the same work [...], we’re actually now putting some figures on it, and people start trusting it. It’s an Excel file so it looks scientific [chuckles], and now it becomes something. But if it’s a picture in a PowerPoint presentation, or a picture on a board, forget about it.

As informants, designers did not shy away from highlighting the parodical nature of the whole operation; it was all a delicately staged performance, a sort of charade. The striking effect of the scores as they travelled reinforced the cynical attitude underlying the experiment. ‘That’s the beauty of it: there is a number’, said one designer bemused during an interview. ‘It’s quantified! Graphs! Numbers! This company is run by engineers, and they love those things, so we can speak the right language’, he added. Another designer highlighted that quantification was their ‘game to play now’. And play the game they did.

After this, designers decided to systematize the approach and use it at the beginning of every new project. They set out to fine-tune and further standardize the scoring procedure, in an attempt to look rational and reliable. Designers upheld the device’s seriousness in external interactions with engineers and managers, but internally, the quantification exercise was taken with a dose of humour by some designers, including its main proponents, who made fun of the fact that they had to go to such lengths for their work to be valued. ‘If we were at Apple or a car company where design is more integrated, we wouldn’t need [the device]’, one designer said to me, ‘but here we are so heavily an engineering organization, so this is the stuff we need [chuckles]’. Clearly, the designers that developed the device did not entertain any presumptions of objectivity, their goal being first and foremost political in character. One of them described the device as an ‘anchoring material’ that he used for ‘political reasons’ consisting in ‘actually putting a value to design in numbers, not because it’s totally correct, but just for something that other people can do some tangible stuff with’, referring to engineers taking designers’ proposals on board.

Concomitantly, this systematization of the procedure led to a concerted effort to repress aesthetic discourse in project negotiations. This marked an important change of approach for designers who, as a professional group, prided themselves on their sense of being an ‘odd’ community or ‘sub-culture’ of ‘creatives’ in this large organization. Now, rather than affirming their difference as a value, they began to downplay it for the sake of extending their influence in project decisions. Though insincerely done and humorously rationalized, designers began to effectively import and embrace

the formalized reporting and measuring techniques used by engineers and managers, paradoxically, in their battle to defend aesthetic considerations and push back against the managerial regime, thus cultivating a form of ‘cynical proximity’. Where previously associations with artistry and the aesthetic were unapologetically embraced and adamantly promoted, now some designers opted for cautious restraint and focused instead on bolstering techno-scientific associations with new aplomb.

The irony of this move was not lost on designers. In fact, this new direction was not met without pushback from within the design department. Some designers expressed concerns that the translation of design qualities into numerical valuations was misleading. They complained that the device wrongly equated high scores with ‘good design’. The focus on ‘features’ implied that design meant adding more and more elements, contradicting one of the celebrated principles of good design by Dieter Rams, the influential industrial designer of Braun whose work was venerated by designers at ACM: ‘good design is as little design as possible’. Therefore, some designers argued that removing and simplifying was often more fundamental to improve a design rather than adding. While sympathetic with the political cause of the promoters of the device, designers who expressed disagreement thought that the device reproduced the mistake of the identity manual: sending the wrong signals as to what the value of design ‘really’ was.

## **Discussion**

Demortain (2019) argued that the sociological interest in quantification is split into two strains of research corresponding to two distinct ‘regimes of quantification’ (see also Mennicken and Espeland, 2019). One is concerned with quantification as a technology of governmental and managerial control contributing to the expansion of disciplinary power and neoliberal tendencies in the administration of societies (e.g. Larner and Le Heron, 2005; Shore and Wright, 2015). The other (more emergent) one underscores that quantification is also a technology that can be subverted and appropriated to facilitate collective action and mobilization (e.g. Bruno,

Didier and Vitale, 2014; Didier, 2018). Social studies of valuations in organizations have tended to enlist in the first regime by focusing on the disciplinary effects of evaluation on organizational members whose reaction is often characterized in terms of conformity or resistance. For instance, in their seminal study on reactivity and public measures, Espeland and Sauder (2007) showed how the introduction of rankings changed the way in which people made sense of and reacted to situations at educational institutions, inducing important organizational changes that enhanced conformance with ranking criteria. Forseth et al. (2019) complemented these insights by showing how patterns of reactivity can also morph from initial agreement into discord and resistance over time. The present study identifies a different pattern in which quantification is not merely a unilateral fait accompli disciplining individuals who either provide consent or resist the colonization of numerical targets and indicators, but reveals itself as a form of subversive mobilization, which aligns more with the second regime identified by Demortain (2019).

Indeed, more than a measure, the quantification of design work described in the study can be viewed as a micropolitical variety of 'statactivism' (Bruno, Didier and Prévieux, 2014), understood as the use of quantification as a tool for struggle and resistance. For designers in the study, quantification and commensuration were never ends but means of overcoming their justification quandaries. Their main concern was not the issue of the truthfulness of numbers as precise representations, but the capacity afforded by numbers to promote design interests and resist their drowning out by other considerations. This was done duplicitously with a conspicuous self-awareness that the whole operation of quantifying design work was nothing more than a ridiculous but necessary *mise-en-scène* for them to be taken seriously. Hence, the quantification of design work can be viewed as a cynical experiment in emancipation, which, as shown before, enabled the effective articulation of justifications and new forms of coordination by rendering designers' concerns intelligible and visible to engineers and managers. The study contributes in this way to a limited body of research concerned with quantification as a form of critique and mobilization in

organizational life, providing an unconventional account of resistance to measurement *by measurement*.

At the same time, a closer look at the empirical case reveals that there is more than simply a shift of regime from quantification as a form of control to quantification as a form of collective action at play in the focal organization. In fact, considering the two regimes separately would seem to reproduce the perennial distinction between structure and agency that has long afflicted the social sciences. Demortain (2019) suggested that a fruitful avenue of research lies at the frontier of the two regimes, arguing that it is by bridging this ‘gap’ that a more nuanced understanding of the aggregate political effects of quantification can emerge. The present research straddles both regimes and thus contributes to this end at the organizational level by illustrating how quantification, as a prevalent mode of justification, imposes its discipline yet is also enacted at the margins for subversive ends in a manner that introduces new indeterminacies and blurs any straightforward distinction between conformity and resistance, between structure and agency. The ANT-derived notion of device deployed in the study, in particular, is helpful not so much in that it bridges the ‘gap’ between structure and agency, but in that it reframes the question altogether by offering a different perspective concerning the political character of quantified measurement.

In line with previous studies on the performative capacity of devices to reconfigure situations of valuation (Doganova, 2019), the study illustrates how the evaluation device intervened in the redistribution of agency by expanding the demarcation of what counts. Yet, this was not just the mere instrumentalization of a particular technology by politically-minded individuals. To analyse the work of the device as an ‘assemblage’ (Muniesa et al., 2007) implies paying closer attention to how the subject/professional is enacted through it. That is, it implies attending to the ‘script’ of the device (Akrich, 1992; Doganova, 2019). As previously discussed, the device *did* contribute to the coordination of action, but what was being valued by it? By means of commensuration, the device indeed valorised concrete designs, which, in one sense, was expedient to designers’ activist ambitions. Yet, in another sense, the political expediency of shifting the basis of justification

from professional judgment and expertise to quantification came at a cost. Values related to aesthetics and perception – core to the design profession – eluded the device’s script, and purposefully so, as shown in the repression of aesthetic vocabulary. However, it is precisely this consistent profession of a specific set of values and principles attached to their expertise which defines the distinction and legitimacy of professional groups (Abbott, 1988). So viewed, the deployment of the device as a form of organizational stactivism had the collateral effect of undermining the value of designers’ aesthetic judgment, reinforcing the misapprehension of their expertise, and weakening their professional distinctiveness. These findings suggest that, well-intentioned though it may be, the phenomenon of organizational stactivism raises questions about the unintended consequences of such a disinhibited universalization of quantification. More and more, quantification becomes less of an imposition and more of a shared framework of worth that, regardless of political intent, concedes an understanding of value as rational efficiency.

The device was not, therefore, a mere tool subordinated to the interests and intentions of designers. To construe it as a mere extension of their agency is untenable in light of the empirical evidence. Rather, the device introduced new uncertainties that worked to unsettle the bounds of ideas and principles of what is valuable among designers. For instance, it gave rise to a contest about the precise meaning of ‘good design’. The notion of ‘good design’ enacted by the device was a major issue of contention; it favoured an analytic rationale of efficiency which stood at odds with the synthetic unity of aesthetics. Some designers were not comfortable with the standard or rationale that the device embedded, whereas its promoters justified it on the basis of the immediate political gains it afforded them. The empirical insights thus reveal the instability of values in situations of dissent and controversy wherein different devices and collectives vie to shape what counts in an organization (Dussauge et al., 2015; Hauge, 2018). In this manner, the study contributes to the analytic rapprochement between devices and particular cultures or worlds of worth that has been called for in valuation studies (Hauge, 2016; Zuiderent-Jerak and van Egmond, 2015), adding to our understanding of how the bounds of modes or principles of

justification typically embraced by professional groups can be unsettled in the very attempt to protect them by means of quantification.

In this light, the fundamental political problem of quantified measurement in organizations does not simply pertain to the struggle between managerialism and professionalism or between ‘dominant’ and ‘dominated’ groups that critical postures have tended to highlight, but rather it concerns how quantification, as a technology of valuation, partakes in the composition or institution of particular organizational realities, favouring specific modes of being in organizational life over others. As evidenced in the study, the ‘managerial regime’ and its measuring instruments are not some sort of reification of hegemonic corporate power, but a distributed phenomenon that struggles to reproduce itself in mundane practices across collectives of people and technologies (Law, 1994; O’Doherty and Ratner, 2017), and whose translation, appropriation, or subversion can be generative of unforeseen effects that defy easy categorizations that posit domination versus emancipation. This perspective challenges anthropocentric readings of organizational life by eschewing any recourse to a distinction between structure and agency, between an objective technical domain and a subjective cultural one. In this manner, this research follows the line of inquiry of other post-critical studies of management and measurement that have sought to deal with the impasse that traditional critique has generated in our understanding of managerial activities (O’Doherty, 2017; O’Doherty and Ratner, 2017; Winthereik and Jensen, 2017), as well as of previous research in the sociology of professions that has sought a more thoughtful engagement with the phenomenon of managerialism as more than a mere offshoot of neoliberalism (Gleeson and Knights, 2006; Noordegraaf, 2011; 2016).

So, what to make, ultimately, of designers’ cynical resistance through quantification? The ambiguity at the heart of their cynical use of quantitative measures disturbs any assessment of the aggregate political effect of quantification – and of cynicism, for that matter – in definite terms, and commands nuance instead (Demortain, 2019). What is less ambiguous, perhaps, is how cynicism, despite its ambivalent status as a mode of resistance (Fleming and Spicer, 2002; 2003), made the work of

quantifying design more tolerable, if no less absurd. As Muniesa (2018: 498) playfully observed, the practices connected to the realm of postmodern knowledge in the sense of Lyotard (1984) seem to be bearable only insofar as they are accompanied by a sense of derision at the entertaining sight of their constitutive contrivances.

## **Concluding remarks**

This article has presented an empirical account of how professional designers mobilized quantitative measures to critique a reality and gain political leverage in a context where numbers were worth more than pictures. It has illustrated how the experimental translation of qualities into quantities afforded comparisons that enabled the effective articulation of justifications and new forms of coordination. Nevertheless, this movement towards emancipation had paradoxical repercussions. Not only was the act of cynical resistance through quantification duplicitous in its motive, but also in its effects for designers: helpful to influence concrete product decisions, but unhelpful to legitimize their aesthetic judgment and expertise. The empirical insights point to the problematic orientation pervading organizational life whereby that which cannot be measured falls outside of the realm of what can be valued – and managed. This is why, as Painter-Morland (2017) argued, organizations struggle to factor in aesthetic considerations, an aspect of design that remains too incalculable (Tonkinwise, 2011). This raises important questions about the implications that the implementation of quantification as a monistic measuring rod has for resources and forms of professional expertise that elude this general standard of value. As Espeland and Stevens (2008: 432) argued in their case for an ‘ethics of quantification’, measurement ‘can narrow our appraisal of value and relevance to what can be measured easily, at the expense of other ways of knowing’. So perhaps an attention to aesthetics in all its ordinariness as the experience of the embodied senses can be helpful in acknowledging the limits of quantitative calculation and enable the re-discovery of modes of being in organizational life that have been obscured by an obsession with the pretence of mastery and control that is often enacted through measurement.

**references**

- Abbott, A. (1988) *The system of professions: An essay on the division of expert labor*. Chicago: University of Chicago Press.
- Ackroyd, S., I. Kirkpatrick and R.M. Walker (2007) 'Public management reform in the UK and its consequences for professional organization: A comparative analysis', *Public Administration*, 85(1): 9–26.
- Akrich, M. (1992) 'The de-description of technical objects', in W.E. Bijker and J. Law (eds.) *Shaping technology, building society*. Cambridge, MA: MIT Press.
- Ball, K. (2010) 'Workplace surveillance: An overview', *Labor History*, 51(1): 87–106.
- Ball, S.J. (2003) 'The teacher's soul and the terrors of performativity', *Journal of Education Policy*, 18(2): 215–228.
- Barley, S.R. and G. Kunda (2001) 'Bringing work back in', *Organization Science*, 12(1): 76–95.
- Boltanski, L. and L. Thévenot (2006) *On justification: Economies of worth*, trans. C. Porter. Princeton, NJ: Princeton University Press.
- Bruno, I., E. Didier and J. Prévieux (2014) *Statactivisme: Comment lutter avec des nombres*. Paris: Zones.
- Bruno, I., E. Didier and T. Vitale (2014) 'Statactivism: Forms of action between disclosure and affirmation', *Partecipazione e Conflitto*, 7(2): 198–220.
- Butler, N. (2015) 'Joking aside: Theorizing laughter in organizations', *Culture and Organization*, 21(1): 42–58.
- Butler, N., C. Hoedemaekers and D. Stoyanova Russell (2015) 'The comic organization', *ephemera*, 15(3): 497–512.
- Callon, M. (1987) 'Society in the making: The study of technology as a tool for sociological analysis', in W.E. Bijker, T.P. Hughes and T. Pinch (eds.) *The social construction of technological systems: New directions in the sociology and history of technology*. Cambridge, MA: MIT Press.
- Callon, M. (ed.) (1998) *Laws of the markets*. Oxford: Blackwell.

- Callon, M., Y. Millo and F. Muniesa (eds.) (2007) *Market devices*. Oxford: Blackwell.
- Champy, F. (2006) 'Professional discourses under the pressure of economic values', *Current Sociology*, 54(4): 649–661.
- Dahler-Larsen, P. (2012) *The evaluation society*, trans. S. Sampson. Stanford, CA: Stanford University Press.
- Demortain, D. (2019) 'The politics of calculation: Towards a sociology of quantification in governance', *Revue d'Anthropologie des Connaissances*, 13(4): 347–369.
- Didier, E. (2018) 'Globalization of quantitative policing: Between management and stactivism', *Annual Review of Sociology*, 44(1): 515–534.
- Doganova, L. (2019) 'What is the value of ANT research into economic valuation devices?', in A. Blok, I. Fariás and C. Roberts (eds.) *The routledge companion to actor-network theory*. London: Routledge.
- Doganova, L., M. Giraudeau, C.-F. Helgesson, H. Kjellberg, F. Lee, A. Mallard, A. Mennicken, F. Muniesa, E. Sjögren and T. Zuiderent-Jerak (2014) 'Valuation studies and the critique of valuation', *Valuation Studies*, 2(2): 87–96.
- du Gay, P. and G. Salaman (1992) 'The cult[ure] of the customer', *Journal of Management Studies*, 29(5): 615–633.
- Dussauge, I., C.-F. Helgesson and F. Lee (2015) 'Valuography: Studying the making of values', in I. Dussauge, C.-F. Helgesson and F. Lee (eds.) *Value practices in the life sciences and medicine*. Oxford: Oxford University Press.
- Espeland, W.N. and M. Sauder (2007) 'Rankings and reactivity: How public measures recreate social worlds', *American Journal of Sociology*, 113(1): 1–40.
- Espeland, W.N. and M.L. Stevens (2008) 'A sociology of quantification', *European Journal of Sociology*, 49(3): 401–436.
- Espeland, W.N. and M.L. Stevens (1998) 'Commensuration as a social process', *Annual Review of Sociology*, 24(1): 313–343.

- Farrell, C. and J. Morris (2003) 'The "neo-bureaucratic" state: Professionals, managers and professional managers in schools, general practices and social work', *Organization*, 10(1): 129–156.
- Fleming, P. and A. Spicer (2002) 'Workers' playtime? Unravelling the paradox of covert resistance in organizations', in S. Clegg (ed.) *Management and organization paradoxes*. Amsterdam: John Benjamins.
- Fleming, P. and A. Spicer (2003) 'Working at a cynical distance: Implications for power, subjectivity and resistance', *Organization*, 10(1): 157–179.
- Forseth, U., S. Clegg and E. Røyrvik (2019) 'Reactivity and resistance to evaluation devices', *Valuation Studies*, 6(1): 31–61.
- Gleeson, D. and D. Knights (2006) 'Challenging dualism: Public professionalism in "troubled" times', *Sociology*, 40(2): 277–295.
- Guggenheim, M. and J. Potthast (2012) 'Symmetrical twins: On the relationship between actor-network theory and the sociology of critical capacities', *European Journal of Social Theory*, 15(2): 157–178.
- Hauge, A.M. (2018) 'Organizational trials of valuation: Insights from the work of lean in the patient distribution process at a children's hospital', *Journal of Cultural Economy*, 12(1): 54–69.
- Hauge, A.M. (2016) 'The organizational valuation of valuation devices: Putting lean whiteboard management to work in a hospital department', *Valuation Studies*, 4(2): 125–151.
- Helgesson, C.-F. and F. Muniesa (2013) 'For what it's worth: An introduction to valuation studies', *Valuation Studies*, 1(1): 1–10.
- Helgesson, C.-F., M. Krause and F. Muniesa (2017) 'Attempting to bring valuation and politics together: The politics of valuation studies at a series of sessions in Copenhagen', *Valuation Studies*, 5(1): 1–6.
- Jagd, S. (2011) 'Pragmatic sociology and competing orders of worth in organizations', *European Journal of Social Theory*, 14(3): 343–359.
- Karlsen, M. P. and K. Villadsen (2015) 'Laughing for real? Humour, management power and subversion', *ephemera*, 15(3): 513–535.
- Kornberger, M., L. Justesen, A.K. Madsen and J. Mouritsen (eds.) (2015) *Making things valuable*. Oxford: Oxford University Press.

- Kunda, G. (1991) *Engineering culture: Control and commitment in a high-tech corporation*. Philadelphia: Temple University Press.
- Kunda, G. (2013) 'Reflections on becoming an ethnographer', *Journal of Organizational Ethnography*, 2(1): 4–22.
- Lamont, M. (2012) 'Toward a comparative sociology of valuation and evaluation', *Annual Review of Sociology*, 38(1): 201–221.
- Larner, W. and R. Le Heron (2005) 'Neo-liberalizing spaces and subjectivities: Reinventing New Zealand universities', *Organization*, 12(6): 843–862.
- Latour, B. (1993) *We have never been modern*, trans. C. Porter. Cambridge, MA: Harvard University Press.
- Latour, B. (2005) *Reassembling the social: An introduction to actor-network theory*. Oxford: Oxford University Press.
- Latour, B. (2004) 'Why has critique run out of steam? From matters of fact to matters of concern', *Critical Inquiry*, 30(2): 225–248.
- Law, J. (1994) *Organizing modernity*. Oxford: Blackwell.
- Leicht, K.T. and M.L. Fennell (1997) 'The changing organizational context of professional work', *Annual Review of Sociology*, 23(1): 215–231.
- Leicht, K.T., T. Walter, I. Sainsaulieu and S. Davies (2009) 'New public management and new professionalism across nations and contexts', *Current Sociology*, 57(4): 581–605.
- Lyotard, J.-F. (1984) *The postmodern condition: A report on knowledge*, trans. G. Bennington and B. Massumi. Minneapolis: University of Minnesota Press.
- Mennicken, A. and W.N. Espeland (2019) 'What's new with numbers? Sociological approaches to the study of quantification', *Annual Review of Sociology*, 45(24): 1–23.
- Mennicken, A. and E. Sjögren (2015) 'Valuation and calculation at the margins', *Valuation Studies*, 3(1): 1–7.
- Muller, J.Z. (2018) *The tyranny of metrics*. Princeton, NJ: Princeton University Press.

- Muniesa, F. (2018) 'Grappling with the performative condition', *Long Range Planning*, 51(3): 495–499.
- Muniesa, F. and D. Linhardt (2011) 'Trials of explicitness in the implementation of public management reform', *Critical Perspectives on Accounting*, 22(6): 550–566.
- Muniesa, F., Y. Millo and M. Callon (2007) 'An introduction to market devices', in M. Callon, Y. Millo and F. Muniesa (eds.) *Market devices*. Oxford: Blackwell
- Noordegraaf, M. (2016) 'Reconfiguring professional work', *Administration & Society*, 48(7): 783–810.
- Noordegraaf, M. (2011) 'Risky business: How professionals and professional fields (must) deal with organizational issues', *Organization Studies*, 32(10): 1349–1371.
- O'Doherty, D. and H. Ratner (2017) 'The break-up of management: Critique inside-out', *Journal of Cultural Economy*, 10(3): 231–236.
- O'Doherty, D. (2017) *Reconstructing organization: The loungification of society*. London: Palgrave Macmillan.
- Painter-Morland, M. (2017) 'The problem with the idea that "only what can be measured can be managed": Batailleian intuitions', *Rue Descartes*, 91(1): 150–11.
- Porter, T.M. (1995) *Trust in numbers: The pursuit of objectivity in science and public life*. Princeton, NJ: Princeton University Press.
- Power, M. (1997) *The audit society: Rituals of verification*. Oxford: Oxford University Press.
- Sauder, M. and W.N. Espeland (2009) 'The discipline of rankings: Tight coupling and organizational change', *American Sociological Review*, 74(1): 63–82.
- Shore, C. and S. Wright (2015) 'Governing by numbers: Audit culture, rankings and the new world order', *Social Anthropology*, 23(1): 22–28.
- Stark, D. (2009) *The sense of dissonance: Accounts of worth in economic life*. Princeton, NJ: Princeton University Press.

- Stoney, C. (2001) 'Strategic management or strategic Taylorism?', *International Journal of Public Sector Management*, 14(1): 27–42.
- Strathern, M. (2000) 'The tyranny of transparency', *British Educational Research Journal*, 26(3): 309–321.
- Styhre, A. (2013) *Professionals making judgments: The professional skill of valuing and assessing*. London: Palgrave Macmillan.
- Tolsby, J. (2000) 'Taylorism given a helping hand: How an IT system changed employees' flexibility and personal involvement in their work', *Journal of Organizational Change Management*, 13(5): 482–492.
- Tonkinwise, C. (2011) 'A taste for practices: Unrepressing style in design thinking', *Design Studies*, 32(6): 533–545.
- Townley, B., D. Cooper and L. Oakes (2003) 'Performance measures and the rationalization of organizations', *Organization Studies*, 24(7): 1045–1071.
- Whittle, A. and F. Mueller (2010) 'Strategy, enrolment and accounting: The politics of strategic ideas', *Accounting, Auditing & Accountability Journal*, 23(5): 626–646.
- Winthereik, B.R. and C.B. Jensen (2017) 'Learning from experiments in optimization: Post-critical perspectives on monitoring and evaluation', *Journal of Cultural Economy*, 10(3): 251–264.
- Zuiderent-Jerak, T. and S. van Egmond (2015) 'Ineffable cultures or material devices: What valuation studies can learn from the disappearance of ensured solidarity in a health care market', *Valuation Studies*, 3(1): 45–73.

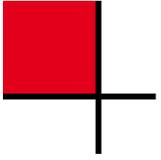
## acknowledgement

I would like to thank Barbara Czarniawska, Fabian Muniesa, Elena Raviola, and Sabina Siebert for their valuable comments on earlier versions of this paper. My colleagues at the Gothenburg Research Institute also provided useful suggestions during a seminar in autumn 2018. Many thanks also to the anonymous reviewers for their constructive feedback and to the editors of this special issue for their guidance. I am grateful to Jens Rennstam for suggesting the wordplay in the title. This research received financial support from Torsten Söderbergs Stiftelse.

## **the author**

Ulises Navarro Aguiar is a postdoctoral researcher at HDK-Valand, Academy of Art and Design, University of Gothenburg, and a member of the research collective Origens Media Lab. His work is located at the intersection of organization studies, design studies, and STS.

Email: [ulises.navarro.aguiar@gu.se](mailto:ulises.navarro.aguiar@gu.se)



# Sucking stones: Absurdity, paradox and quantifying the unquantifiable in cross cultural management studies

Gregory Allen and Robert Campbell

## abstract

This short paper attempts to highlight ontological paradoxes and examples of the absurd in cross cultural management (CCM) studies. The philosophical perspectives of absurdism and logical paradox are adopted as a novel approach through which CCM's Hofstede paradigm can be viewed. Examples are taken from literature and philosophy in an attempt to highlight the juxtaposition between the complexity of the predominant method and enormity of the data set in CCM studies on the one hand, and the simplistic and relatively meaningless nature of the resulting outputs on the other.

## Introduction

There is a scene in *Molloy*, the first novel of Samuel Beckett's absurdist trilogy, in which Molloy, an elderly homeless drunk, wanders a pebbled beach collecting 'sucking stones'. The problem for Molloy, to which Beckett dedicates one paragraph over five pages, is how to distribute his sucking stones amongst his four pockets such that he sucks each stone in turn while rotating them round his four pockets thus avoiding the 'diabolical hazard' of 'only sucking four, always the same, turn and turn about' (Beckett, 1955: 70).

In the end, and after great deliberations, Molloy comes to the realisation that ‘it was all the same to me whether I sucked a different stone each time or always the same stone, until the end of time. For they all tasted exactly the same’ (*ibid*: 74). And the solution to which Molloy finally rallies in the end ‘was to throw away all the stones but one, which I kept now in one pocket, now in another, and which of course I soon lost, or threw away, or gave away, or swallowed...’ (*ibid*).

Molloy’s quasi-mathematical sucking-stone conundrum provides a novel and unorthodox metaphor for a critical perspective on the field of cross cultural management (CCM). CCM studies have embarked over the past four decades on a mission to quantify cultural difference in a workplace context underpinned by a Western-centric, postcolonial and expansionist discourse focussing on new ‘markets’ and ‘opportunities’ (Ailon, 2008: 885). Examined from an absurdist perspective, a disconnect can be observed between the search for meaning practitioners, researchers and educators apply to the masses of data collected in CCM studies and the apparent meaninglessness of its subsequent analysis and application. It could be said, in other words, that the cultural differences observed by cross-culturalists are the Business/Management equivalent of Molloy’s sucking stones. Great effort is taken in the positivistic collection, manipulation and analysis of the data before their inherent meaninglessness results in them being, to paraphrase Beckett, simply lost, thrown away, given away, or swallowed.

This short article explores philosophical absurdism and related epistemological paradoxes in positivist Hofstedian CCM studies. Over the past four decades, Geert Hofstede’s work on national management cultures has become a staple of international management studies. Originally based on an international survey of IBM employees, the Hofstede database now consists of data from 76 countries from which Hofstede has produced his ‘dimensions of culture’ (originally 4, now 6). This dimensionalisation ‘groups together a number of phenomena in a society that were empirically found to occur in combination, regardless of whether there seems to be a logical necessity for their going together’ (Hofstede et al., 2010: 31). In other words, the Hofstede paradigm is based on ‘analyzing survey-based values data at the national level and quantifying differences between national

cultures by positions on cultural dimensions' (Hofstede, 2011: 16). The popularity of Hofstede's approach is such that it has become the main reference point for cross-cultural studies in international management studies as well as being hugely influential amongst practitioners (Kolman et al., 2002). The paradigm has not been without its critics however and, in recent years, critiquing Hofstede has become the academic equivalent of dead horse flogging. This paper however is unique in its use of philosophical absurdism and logical paradox as critical perspectives.

The first section of the paper ponders the merit of philosophical absurdism as a critical perspective for the paradigm. The related notion of self-referential logical paradox is subsequently introduced in order to undermine the foundations of the positivistic CCM method. Rather than attempting to 'prove' anything, the paper merely and humbly casts a novel perspective on what has become 'the dominant culture paradigm in business studies' (Nakata, 2009: 3) since its origins in 1980. The aim is to encourage an increase in head scratching amongst scholars in a field which has too seldom come under the spotlight of critical academic rigour that one might expect (Jack and Westwood, 2009).

### **An absurdist critique**

In the most general terms, philosophical absurdism is based on the existentialist position that life is devoid of any objective meaning and that any attempts to find meaning within it are doomed to failure and, as such, absurd. Standing under this expansive umbrella however are various strands which find expression not only in philosophical texts, but in literature, theatre, art and dance. These stances are not contradictory, but rather can be understood as differing manifestations of the realisation of the lack of inherent meaning in differing aspects of our lives. Kierkegaard focussed on the absurdity of religious faith and Camus on the absurdity of the human quest for meaning in a world devoid of any. This paper, however, focusses on the human compulsion to structure and code our understanding of the world despite the impossibility of the task and the lack of inherent meaning or value that results from these efforts. The working definition of the absurd

adopted in this paper is therefore one that considers absurdism as ‘a philosophical stance embracing a wide range of relativist perspectives, which implies that the efforts of humanity to find or absolutely define, limit, express or exclude the inherent meanings of anything, including metaphysical and theological claims, but especially claims concerning the human existence, are absurd because the qualities of communicable information available to the human mind, and relationships within reality makes any certainty about such impossible’ (New World Encyclopaedia, 2018). It is not, therefore, the counting and ordering of stones in our earlier example that is absurd, nor is it our homeless, drunken anti-hero Molloy himself. It is the ends to which he carries out this exercise and, crucially, his later reflective realisation that the act serves no purpose and has no meaning. Mooney describes Beckett’s character as a ‘suffering Cartesian’, ‘paralysed by the inability of Cartesian rationalism to order his life’ (1978: 39). It is, in other words, Descartes’ meticulously followed method which produces the absurd for Molloy.

### **Descartes’ *Meditations***

The link between Beckett and Descartes is far from a tenuous one. ‘Beckett absorbed a number of philosophical ideas but was particularly fascinated by Cartesianism, by the consequences of Descartes’ revolution in philosophy’ (Campbell, 1980). Descartes’s epistemology formalises, in the *Meditations on first philosophy*, (Descartes, 1996) the conception of knowledge and importantly, the notion of clear and distinct perception. This lays the groundwork for building knowledge on the foundations of prior knowledge. Descartes was trying to find a case for believing that science could give us reliable and useful knowledge about the world. The model he chose for this was Euclid’s *Elements* which derived theorems by deduction from definitions and axioms. So, in order for this to work for knowledge about the world rather than knowledge about straight lines and circles, Descartes needed a foundational axiom from which everything else could be deduced. And it had to be an axiom which no one could argue with. This may have set the standard a little too high because it meant that rather than looking for something which was beyond all reasonable doubt, Descartes was looking for

something beyond all possible doubt. And he found it in the most famous line in philosophy *cogito ergo sum*. For, if I am doubting everything that it is possible to doubt (remember, that's the standard which has been set), then the one thing I cannot doubt is that I am doing the doubting. (As the apocryphal lecturer is supposed to have said to the student who wondered, after listening to a lecture on Descartes' method of doubt, whether she actually existed, 'Who wants to know?').

There are major problems with this. The most significant is a real doubt that very much at all can be built on (deduced from) this foundation. Descartes did it by building a conception of God into the self and thence a guarantee (because God is benevolent) that clear and distinct perceptions won't be unreasonably misleading. But you don't have to be an atheist to think that this is a dodgy move.

The upshot of this is that Descartes' method only really works for self-contained, deductive systems – given a foundation we can all agree on, then you can deduce with certainty the implications of those foundations. It won't, however, provide you with new knowledge. That is why, despite the Cartesian method being one of the bases for the mathematical and natural sciences (e.g. physics, chemistry, geology, biology), conventional claims that Descartes was the founder of modern science are misleading at best (see e.g. Sorell, 2000).

A second limitation of Cartesian deductive systems was pointed out by the logician, Kurt Gödel in his incompleteness theorem. This showed that for any deductive system, there will be truths in that system which cannot be shown to be true by the system itself. All logical systems are incomplete. So however powerful Descartes' logico-deductive method is, there will always be truths which elude it.

The Hofstede paradigm adopts (whether practitioners are aware of it or not) a similar Cartesian approach. This is one example of the movement within the social sciences in the second half of the 20<sup>th</sup> century to attempt to replicate the methods of the natural sciences (Winch, 2008). Whilst it may not adhere to the methodological rigour of Cartesian doubt, the Hofstede

paradigm (as well as similar methodological frameworks) provides a clear example of epistemological Cartesianism, building what is claimed to be objective fact upon objective fact. Descartes argued that any system of knowledge must be built rigorously on these foundations and, through this process, knowledge can be built and expanded upon. This positivistic approach to knowledge must assume, however, that at every stage the prior knowledge is sound and incontrovertible. Hofstede, with his attempts to quantify culture, can be described, like Beckett's Molloy, as a victim of Cartesian rationalism. Hofstede's paradigm has become obsessed with the method and has, as a result, lost sight of the reason. While Molloy becomes aware of the futility of his endeavour before ridding himself of his sucking stones however, Hofstede lacks such awareness and, as such, fails to acknowledge the absurd juxtaposition between the means and the ends of his project. Like Beckett's Molloy, the Hofstede paradigm goes to great lengths (analysis of 116,000 surveys from employees in 72 countries at last count) to achieve its questionable ends.

A further example of the absurd with uncanny relevance to the Hofstede paradigm can be found in Daniel Boorstin's unfortunately under-acknowledged *The sociology of the absurd, or, The application of Professor X*. The novella begins as the fictionalised, but completely believable, tale of an academic reviewing funding proposals for the fictitious *Institute for Democratic Studies* who one day receives, after three years' service, 'at least one application that had some thrust, some imagination, some élan' (1969: 11). The radical submission, from the anonymous Professor X and 'a small cadre of dedicated, concerned social scientists', proposes the sociological quantification of culture, ethnicity and social status 'to fashion gloriously simple solutions to the problems of all oppressed peoples' (ibid.: 33). The products of the group's endeavours are two sociological quantifications which provide the means to 'express quantitatively even the subtlest qualitative facts' (ibid.). Professor X's two formulae are:

The Ethnicity Quotient (EQ):

Drawing on genealogy, skin-pigmentation tests, somatometric and physiognometric devices, and linguistic and attitudinal measurements, and

other data, the EQ provides a keyed series of numbers accurately indicative of each individual's ethnicity' (ibid: 29).

The Merit Quotient (MQ):

$$\frac{I}{TS} - \frac{TP}{I} = MQ$$

Where I = intensity coefficient, T = time, S = suffering, and P = pleasure (ibid.: 41).

Compare, for example, Boorstin's quotients with McSweeney's formalisation of the three-discrete-component assumption of the Hofstede paradigm:

The reductive and mechanical basis of Hofstede's tri-partiate cultural component assumption can be seen from its expression below as an equation:

$$(NC1 + OrC + OcC) - (NC2 + OrC + OcC) = NC1 - NC2$$

in which NC = National Culture, OrC = Organizational culture, OcC = Occupational Cultures, and NC1 - NC2 = Difference (s) between two national cultures. (McSweeney, 2002: 96)

The complexity of the paradigm's analytical methods – 'a factor analysis of a matrix of sixty-one questions by twenty units; for each unit, a mean score was computed on each question across all respondents' (Hofstede, 2001: 354) – seems at odds with the simplistic generalisations that represent the paradigm's outputs. Boorstin's MQ formula focuses our attention on the absurdity of quantifying the unquantifiable with tongue firmly rooted in cheek. McSweeney's formalisation of the Hofstede paradigm makes the same point by illustrating the arbitrary nature of the quantification of cultural difference.

The following, typical example comes from the *Hofstede Insights* website:

If we explore the British culture through the lens of the 6-D Model©, we can get a good overview of the deep drivers of British culture relative to other world cultures [...] At 35 the UK has a low score on Uncertainty Avoidance which means that as a nation they are quite happy to wake up not knowing what the day brings and they are happy to 'make it up as they go along' changing plans as new information comes to light. As a low UAI country the British are comfortable in ambiguous situations – the term 'muddling

through' is a very British way of expressing this. There are generally not too many rules in British society, but those that are there are adhered to. (<https://www.hofstede-insights.com/country-comparison/the-uk/>)

Just as Boorstin relishes in emphasising the complete absurdity of Professor X's sociological quantifications, McSweeney takes a similar pleasure in mocking Hofstede's own claim to have 'uncover[ed] the secrets of entire national cultures' (Hofstede, in McSweeney, 2002: 89). McSweeney concludes that 'Hofstede's claims are excessive and unbalanced; excessive because they claim far more in terms of identifiable characteristics and consequences than is justified; unbalanced, because there is too great a desire to "prove" his a priori convictions rather than evaluate the adequacy of his "findings"' (McSweeney, 2002: 115). Hofstede's *overview of the deep drivers of British culture* above is just one example of this excess and imbalance.

Let us recall Sisyphus at this point – absurdism's poster child thanks to Albert Camus's *The myth of Sisyphus* (2000). As an exemplary punishment for his deceit and betrayals, the Gods condemned Sisyphus to an eternity of rolling a large block of stone up a hill, only for it to roll back down to the bottom each time he nears the completion of his task (Graves, 2011: 131). Sisyphean absurdism highlights the juxtaposition between the great effort repeatedly expended and the repeated failure to produce meaningful outcomes. Similarly, Boorstin's *Sociology of the absurd* is not so much a critique of the quantification of the unquantifiable in general as it is a harsh commentary on the utter meaninglessness of the quantification of culture contrasted with the absolute seriousness with which the team of academics treat Professor X's method and its related outputs. Boorstin utilises absurdism sublimely as a critical framework. Although the novella was published a decade before Hofstede began his research into the quantification of national cultures, the relevance could hardly be greater. Hofstede's summary of British culture above is a similarly trivial conclusion based on an extensive data set and complex statistical analyses. This collection of data and related complex analyses represent, to use a Sisyphean analogy, rolling the stone up the hill, while the related vapid generalisations this produces are the stone tumbling back down.

## Self-referential paradox in CCM studies

Paradox is defined in the *Cambridge dictionary of philosophy* as:

A seemingly sound piece of reasoning based on seemingly true assumptions, that leads to a contradiction (or other obviously false conclusion). A paradox reveals that either the principles of reasoning or the assumptions on which it is based are faulty. It is said to be solved when the mistaken principles or assumptions are clearly identified and rejected. The philosophical interest in paradoxes arises from the fact that they sometimes reveal fundamentally mistaken assumptions or reasoning techniques. (Audi, 2015: 643)

Logical paradox can be seen as falling under the umbrella of philosophical absurdism as inputs into complex systems produce outputs which are contradictory, devoid of meaning, or both. The category of paradox which is of interest in this critique of the Hofstede paradigm is that containing paradoxes of self-reference. As we will see, reflection (self-reflectiveness) and universality lead to self-reference. Self-reference, in turn, can result in logical paradox, a trap into which many (but not all) CCM studies fall. It will be argued, however, that those studies which do not fall into the paradoxical, or vicious self-reference trap are the ones open to the popular critique of ethnocentrism.

Let us begin with a simple, historic and aptly relevant example of vicious self-reference which we will return to again later: the Epimenides paradox. In the New Testament, Book of Titus, Paul writes the following account of Epimenides (a Cretan) to Titus:

Even one of their own Prophets has said, 'All Cretans are liars, evil brutes, lazy gluttons'. This testimony is true. (Titus 1:12-13)

The Epimenides paradox is an example of a paradox of self-reference, a category which includes the liar paradox: *This sentence is false*. But with regards to the Hofstede paradigm, we are most interested in the Epimenides case as it combines reflection (a Cretan describing Cretans) with universality (all Cretans are...). The paradox is further and unknowingly reinforced by the addition that the testimony is true. This case is relevant in that 'reflection and universality together necessarily lead to self-reference' (Bolander, 2002: 11). Self-reference itself, however, does not necessarily result in paradox.

Innocuous self-reference, e.g. *I am Canadian and Canadians are friendly*, may or may not produce reliable results, but the results are consistent as they do not contradict themselves. Vicious self-reference however, e.g. *I am Canadian and Canadians can't be believed*, is a statement which questions its own validity and, as such, is inconsistent. Douglas Hofstadter (1979 and 2007), not to be confused with CCM's Geert Hofstede, refers to such inconsistent self-references as an example of 'strange loops' which relate to Gödel's previously mentioned incompleteness theorems which show the inherent inconsistency of any complex logical or arithmetic system resulting from self-referencing strange loops. The same inconsistencies can be found in naïve set theory as famously discovered by Bertrand Russell, resulting in what is widely known as the barber paradox. (The 'set of all sets which are not members of themselves' both is and is not a member of itself. See e.g. Ayer [1988]). It is exactly this issue of agent introspection (self-reference) which, we propose, casts doubt on the validity of the Hofstede paradigm.

Relating this back to the problem of the Hofstede paradigm in which researchers (from a given national culture) attempt to quantify and define national cultures (their own and others), there are a number of ways in which to formalise the paradox. But first, let us consider the problem by utilising naïve set theory. Cantor's definition (1932) describes a set as any collection of mathematical objects, including sets. Therefore, a set is defined in terms of mathematical objects which can in themselves be sets. This self-referential definition leads to inconsistency as explained by Cantor's paradox, but we are getting ahead of ourselves. Think of set R as the set of all national cultures which are, in turn, sets themselves made up of all the elements the Hofstede paradigm uses to define a national culture. Not all subsets are equal of course as they differ by the Hofstede dimensions of national culture. One of the differences amongst the subsets is that there exists a set of a national culture (or cultures) which produced the Hofstede dimensions of national culture itself. We could claim this as Dutch (Hofstede is from Holland), or a set of sets which we will call W, where W = the group of Western business cultures. One of the common critiques of Hofstede after all is that his paradigm is a cultural construct (Ailon, 2008). This leaves us with two possibilities:

Set W utilises the paradigm to study other sets/subsets (e.g. a Dutch study of Korean business culture).

Set W utilises the paradigm to study sets within W (e.g. a Dutch study of French business culture, or even a Dutch study of Dutch business culture).

The first option is free of logical paradox, but produces outputs which are inherently subjective as they are the product of a Western narrative and, moreover, the paradigm reproduces this narrative. The second option, by Bolander's earlier definition, must result in self-reference as it represents a study of a given culture from within that same culture, utilising a methodology which is a construct of that culture.

The issue of the methodology being a cultural construct leads us to a related self-reference paradoxical problem resulting from its origins as a theory contained in its own subject matter. The Hofstede paradigm studies national cultures (many of which are Western cultures) yet the paradigm is itself very much a construct of Western culture. Indeed, Ailon helpfully notes that Hofstede himself admitted the Western bias in the questionnaire in the 1991 edition of his book (2008). The paradigm is, in other words, a theory that is part of its own subject matter. It attempts to define national culture whilst also being a cultural construct. As Bolander notes, 'any theory that is part of its own subject matter has reflection. Thus, if these theories make use of universal statements as well, then the paradoxes of self-reference will not be far away' (2002: 11). The outputs of the Hofstede paradigm are examples of such ungrounded self-reference in which every output refers, through the paradigm's origins, to itself. Such self-referencing theories are extremely vulnerable to inconsistent axioms which neatly brings us back to the previously discussed Cartesian problem as a theory built on inconsistent axioms will produce inconsistent (i.e. contradictory and therefore false) results.

### **Concluding remarks**

Absurdism, especially as Camus uses the term, is an expression of the pointlessness of everything – that nothing matters. But, as Tom Nagel has pointed out (1971), if nothing matters, then that fact itself is one of those

things that doesn't matter; it doesn't matter that nothing matters. As a metaphysical perspective therefore, absurdism can be seen as self-defeating. This strange loop renders absurdism, to put it another way, absurd. There is merit however in the perspective as it highlights 'some of the difficulties which arise if we try to base our understanding of societies on the methods of natural science' (Winch, 2008: 62).

The identification and, where possible, resolution of paradox also provides a worthwhile form of critique. Such approaches have 'performed significant functions in the development of seminal ideas in physics and mathematics' (Doeker-Mach et al., 2004: 202). The Epimenides paradox ('all Cretans are liars') combines elements of both self-referential paradox and universal generalisations which are arrived at via the Hofstede paradigm and abundant in the CCM literature. The very fact that such self-referential systems can lead to paradoxes 'is the main reason why so much effort has been put into understanding, modelling and 'taming' self-reference' (Bolander, 2002: 1).

The absurdity highlighted in the Hofstede paradigm may simply be the result of modelling a study on something as complex and clearly subjective as culture on a Cartesian, natural sciences model. As Sartre summarises: 'Subjectivism means, on the one hand, that an individual chooses and makes himself; and, on the other, that it is impossible for man to transcend human subjectivity' (Sartre, 1957: 37).

We will end this brief paper with a perfectly relevant (in the cross-cultural sense) example of absurdism from Julian Barnes's fictionalised biography of the Soviet composer Shostakovich. The setting is a party at which the composer's son is entertaining the guests with his depiction of a Bulgarian policeman (an ethnocentric, cross-cultural representation) tying his bootlaces:

He would come on, his laces hanging loose, carrying a chair which he would frowningly arrange in the middle of the room, slowly moving it to the best position. Then, putting on a pompous face, and using both hands, he would lift and lever his right foot up on to the chair. He would look around, very pleased by this simple triumph. Then, with an awkward manoeuvre which spectators might not at first understand, he would bend over, ignoring the foot on the chair, and tie the laces on the other shoe, the one flat on the floor.

Immensely pleased with the result, he would swap legs, lifting his left foot up on to the chair before bending down to tie the laces of his right shoe...

Over-complicated manoeuvres to achieve the simplest of ends; stupidity; self-congratulation; imperviousness to outside opinion; repetition of the same mistakes. (Barnes, 2016: 174)

Barnes's last sentence brings us full circle to the working definition of absurdism adopted for this paper as well as, we would argue, a fitting summary of the Hofstede paradigm.

## references

- Ayer, A.J. (1988/1972) *Bertrand Russell*. Chicago: Chicago University Press.
- Audi, R. (2015) *The Cambridge dictionary of philosophy, 3rd edition*. New York: Cambridge University Press.
- Ailon, G. (2008) 'Mirror, mirror on the wall: Culture's consequences in a value test of its own design', *Academy of Management Review*, 33(4): 885-904.
- Barnes, J. (2016) *The noise of time*. New York: Alfred A. Knopf.
- Beckett, S. (2010) *Malone dies*. London: Faber and Faber.
- Beckett, S. (2009) *Molloy*. London: Faber and Faber.
- Bolander, T. (2002) 'Self-reference and logic', *Phi News*, 9(44).
- Boorstin, D.J. (1970) *The sociology of the absurd, or, The application of Professor X*. London: Thames and Hudson.
- Butler, L.S., R.J. Davis, B. Fraser. (eds.) (1997) *Rethinking Beckett: A collection of critical essays*. London: Macmillan.
- Campbell, R.J. (1980) 'On saying the unsayable', *Critical Quarterly*, 22(3): 69-78.
- Camus, A. (2000) *The myth of Sisyphus*. London: Penguin.
- Clark, M. (2007) *Paradoxes from A to Z, 2nd edition*. New York: Routledge.

- Cornwell, N. (2006) *The absurd in literature*. London: Manchester University Press.
- Descartes, R. (1996) *Meditations on first philosophy*. Cambridge: Cambridge University Press.
- Doeker-Mach, G. and K.A Ziegert (eds.) (2004) *Law and legal culture in comparative perspective*. Munich: Franz Steiner Verlag.
- Graves, R. (2011) *The Greek myths: The complete and definitive edition*. London: Penguin.
- Hofstadter, D. R. (2007) *I am a strange loop*. New York: Basic Books.
- Hofstadter, D. R. (1979) *Gödel, Escher, Bach: An eternal golden braid*. London: Harvester Press.
- Hofstede, G.H. (2001) *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations, 2<sup>nd</sup> edition*. London: SAGE.
- Hofstede, G.H. (2010) *Cultures and organizations: Software of the mind – Intercultural cooperation and its importance for survival, 3<sup>rd</sup> edition*. New York and London: McGraw-Hill.
- McSweeney, B. (2002) 'Hofstede's model of national culture, differences and their consequences: A triumph of faith – A failure of analysis', *Human Relations*, 55(1): 89-118.
- Mooney, M.E. (1978) 'Molloy, part 1: Beckett's "Discourse on method"', *Journal of Beckett Studies*, 3: 40-55.
- Nagel, T. (2008) 'The absurd', in E.D. Klemke and S. Cahn (eds.) *The meaning of life*. Oxford: Oxford University Press.
- Nakata, C. (2009) *Beyond Hofstede: Culture frameworks for global marketing and management*. London: Palgrave Macmillan.
- Newworldencyclopedia.org (2018) 'Absurdism'. [<http://www.newworldencyclopedia.org/entry/Absurdism>]
- Sartre, J. (1957) *Existentialism and human emotions*. New York: Philosophical Library.
- Smith, P. (2013) *An introduction to Gödel's theorems, 2<sup>nd</sup> edition*. Cambridge: Cambridge University Press.

Sorell, T. (2000) *Descartes: A very short introduction*. Oxford: Oxford University Press.

Uhlmann, A. (1999) *Beckett and poststructuralism*. Cambridge: Cambridge University Press.

Winch, P. (2008) *The idea of a social science and its relation to philosophy, new edition*. London: Routledge.

## **the author**

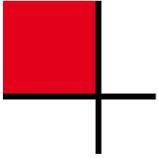
Gregory Allen is an Associate Lecturer at Anglia Ruskin University, Cambridge. His main research interest is the (mis)use of postcolonial theory in Central and Eastern Europe.

Email: allen.greg@outlook.com

Robert Campbell is Emeritus Professor of Philosophy at the University of Bolton, and until March 2015, was Pro Vice Chancellor (Academic) at the University. His research interests focus on ethics and Beckett studies.

Email: robertjohncampbell@btinternet.com





# **‘This bag provides 185 school meals’: Ethical commodities and the quantification of good**

Lisa Daily

## **Introduction**

When I came back from my travels, eager to rally my peers to get involved in the fight to end childhood hunger, I knew that I wanted to create a unique way to activate people – something that didn’t require writing a big check or attending a fancy gala. I wanted to create something that felt accessible and solution oriented. And then I had the aha-moment for the first FEED bag, which I designed to resemble the sacs of food I saw being delivered by the UN. As part of the design, there was a number represented on each bag, which signified the number of meals donated with each purchase. The decision to create a bag, and not a different product, was one grounded in both accessibility and functionality (everyone carries a bag) and design (a clear connection to the cause). Nine years later, FEED has provided over 94 million meals through the sale of numbered bags and accessories.

– Lauren Bush Lauren, CEO and co-founder of FEED Project (*The Journal*, 2016)

The expansion of late capital ‘into hitherto uncommodified areas’, as Fredric Jameson (1984: 78) states, recognizes that all aspects of daily life become subsumed under the economic rationalization of exchange-value. As demonstrated by Lauren Bush Lauren – one among many other socially-conscious entrepreneurs – even systemic problems such as poverty and

hunger become seemingly solvable through commodification and its appendage of quantifiable and individualized giving. Hence, 'this bag provides 185 school meals' simultaneously represents the quantification of capitalist 'good' in the most palpable way, while also ultimately placing the responsibility of fighting childhood hunger on individual ethical consumers to buy the bag (who may then subsequently be measured according to their consumption of ethical products and brands). This is a different and more emotionally charged manifestation of capitalist measurability, expanding beyond the more traditional calculation of surplus-value and the production of value. Whereas Marx (1990) sees value determined by socially necessary labor-time and manifested in exchange-value, the ethical commodity adds an additional dimension to the exchangeability of commodities through its symbolic use (and symbolic value) as the arbiter of 'good'. It further constructs new affective social relations not between the laborer and the capitalist, but rather between the ethical brand, the consumer-giver, and the imagined 'person in need'.

FEED Project is not alone in the measuring of good: TOMS Shoes abides by its trademarked 'One for One' model with each product purchased resulting in the giving of a like-product. BOBS, a brand by Skechers, initially mimicked the TOMS 'One for One' model with the selling and subsequent giving of shoes to kids in need. It now also partners with Best Friends Animal Society, an American non-profit organization that seeks to save all rescue animals and eradicate the need to euthanize in kill-shelters. The eyewear company, Warby Parker, relies on the slogan: 'For every pair purchased, a pair is distributed to someone in need' (Warby Parker, 2017). Like FEED Project, a smaller company, Half-United, also seeks to produce 'Fashion that Feeds' and links its various commodities such as the \$36 'Giving Back is the New Black' T-shirt to '7 meals for children in need', 'result[ing] in lots of hugs and high fives' (Half United, 2017). Even Walgreens measures its giving – albeit in a less holistic way – with its yearly 'Get a Shot. Give a Shot' campaign: 'Get a flu shot or any other vaccine at Walgreens and help provide a lifesaving vaccine to a child in a developing country' (Walgreens, 2017). The Walgreens campaign has 'provide[d] more than 20 million lifesaving vaccines to children in need around the world' (*ibid.*).

These formations of capital go beyond mere corporate donations and instead embed giving into the very framework of the business structure. Within this note, I am most interested in considering the particular logic(s) of quantification within ethical capitalism as well as the elisions that occur with this quantification wherein giving appears as an objective numerical truth realized through the formula of *commodity x bought = commodity y given*. I ask, then, what remains unmeasured or immeasurable? Throughout this note, I argue that the sort of quantification and measurement that occurs within ethical capitalism is troubling, especially with regards to its oversimplification of complex and historically situated crises and forms of oppression that are reduced to numerical and individualized solutions. Hunger, thus, is rendered not as a systemic problem – one connected to inequality, poverty, environmental conditions, precarious labor, conflict, colonialism, or even capitalism – but rather as single meals served exclusively to children. This metric of giving may initially seem to counter the cold calculability of capitalism through emotional appeals, but in fact extends its logics through the naturalized impact of ‘good’ and socially conscious entrepreneurialism. In a recent interview with *Forbes*, Lauren Bush Lauren discussed the need for businesses to have this ‘extra layer’ of a socially-conscious mission to get ‘authentic traction’ with consumers (Drewry, 2018). This note, then, proceeds by first describing the logic of ethical capitalism, as situated within neoliberal rationality and subjectivity, and its ‘break’ (if one could call it that) with hegemonic global capitalism today. I then turn to evaluating in more detail the quantification of ‘good’ through FEED Project as well as TOMS Shoes and their correlating material and theoretical (im)measurabilities.

## **The logic of ethical capitalism: Beyond capital**

Don’t get me wrong. We’re all dyed-in-the wool capitalists. But we also believe that companies should be managed for the simultaneous benefit of all stakeholders – including employees, vendors, customers, the environment, and our communities – and should have a positive net impact on the world. And guess what? The success of The Container Store and these remarkable companies reveals a surprising irony: Not making profit your number one priority actually makes you a lot more profitable.

– Kip Tindell, Chairman and CEO of The Container Store (Tindell, 2014: 8)

Crucial to the framing of the ethical capitalism is that it encapsulates a new vision for privatized industries that moves *beyond* profit maximization as the paramount goal, instead stating that profit merely enables the achievement of the goal par excellence – that of an ethical mission. The transcendence of a profit maximization model occurs most readily through a shifting rhetoric that frames business terms such as ‘wealth’, ‘value’, and ‘success’ in moral terms while also appealing to the rationality of ‘dyed-in-the wool capitalists’ and new modes of value creation. For instance, founder of TOMS Shoes and author of *Start something that matters*, Blake Mycoskie (2012: 19), writes about the changing definition of success: ‘Increasingly, the quest for success is not the same as the quest for status and money. The definition has broadened to include contributing something to the world and living and working on one’s own terms’. This new articulation of success within the private sector is echoed throughout other discourses of and about ethical capitalism. For instance, John Mackey, founder of Whole Foods Market, situates this new capitalism against the more short-sighted capitalism of the contemporary moment, which lacks ‘higher purpose’ and ‘consciousness’ (Mackey and Sisodia, 2013). Along with Raj Sisodia, Mackey started the Conscious Capitalism™ movement, to which many companies and business leaders have joined.

Ultimately, private sector businesses must turn a profit, regardless of size, and a precarious teetering between morality and the accumulation of capital ensues. To weigh public benefit or higher purpose *too* heavily means that a company may be unable to turn a profit or reinvest that profit in the expansion of the business. To weigh profit maximization too strongly means that a company may sacrifice its higher purpose or, worse, be ousted as unethical by concerned consumers. In this way, the focus on ‘good’ proffers a seeming authenticity that fails to be found in the standard multinational corporation. Corporate espousals of social responsibility or ethical capitalist ‘do goodism’ now appear throughout the business landscape with magazines such as *Time*, *Forbes*, and *The Wall Street Journal* forewarning companies that they ‘can’t afford’ to *not* be socially responsible (Knowledge@Wharton,

2012). Even the World Economic Forum held a panel in 2014 entitled, 'Ethical Capitalism – Worth a Try?'

Situated as a corrective for the seemingly reckless damage done by unchecked capitalism, ethical capitalism and its various iterations market themselves as the next evolution in capitalism, instilling a commitment to social need, environmental sustainability, and humanitarian welfare alongside the desire for profits and liberalizing markets. Each business articulates its ethics differently – there is no unified understanding of 'good' – but each primarily believes in the power of markets to solve these societal problems. In the case of ethical capitalism, it encourages a new regime of good governance guided by the moral authority of the private sector, which reproduces 'obedient citizens' as individual ethical-economic agents – entrepreneurs and consumers whose moral autonomy is measured by their capacity for 'self-care' as well as their concern for the well-being of others (Brown, 2015: 17). The oversight of this system of ethics is no longer the welfare state or even necessarily longstanding philanthropic foundations, but rather businesses themselves as well as their self-regulatory agencies.

Despite its discourses of consciousness and making the world a better place, ethical capitalism is primarily driven by market liberalization, neoliberal rationality, and the economization of social needs and public benefit. In *The new prophets of capital*, Nicole Aschoff discusses the ongoing crises of capitalism, from massive income inequality, the persistence of poverty, financial meltdowns, and ecological ruin. In this moment of crisis,

a new generation of storytellers has emerged to tell us what's wrong with society and how to fix it. The most powerful of these storytellers aren't poor or working people, they are the super-elite. The loudest critics of capitalism these days are people like Bill Gates, who decries poverty and inequality, and Sheryl Sandberg, who laments persistent gender divides, but they are not calling for an end to capitalism. Instead, they are part of a chorus of new elite voices calling for a different kind of capitalism. (2015: 9)

These new 'prophets' of capitalism give off the appearance of authentic leadership and many have developed celebrity and cult-like status, effectively becoming the gatekeepers for how societies define and enact

‘good’ through the private sector. In the case of Lauren Bush Lauren, she is the niece of George W. Bush, granddaughter of George H.W. Bush, and married to the son of fashion-icon and billionaire Ralph Lauren. Prior to starting FEED Project, Bush Lauren was a model, appearing on the cover of numerous fashion magazines. Her platform for sharing a cause was already well-established and she became a student spokeswoman for the UN World Food Programme at the age of 19, which eventually lead her to start FEED Project. Other celebrities, too, often become honorary ambassadors through legitimate inter-governmental organizations, such as UN World Food Programme, UNHCR, and/or UNICEF. Not all celebrities, however, go on to establish *for-profit* companies with the purpose of then continuing such work.

Regarding philanthrocapitalism – a sister cause to ethical capitalism – Carol Thompson (2018) asserts that philanthrocapitalist rule centers around a belief that financial wealth somehow equates to expertise. Furthermore, this expertise often becomes confused with collective interests, and therefore allows the expertise of the philanthropic organization to be prioritized over collective and democratic input. Many ethical companies appear more like a non-profit organization or an educational institution wherein they state ‘facts’ that support their formula for giving. For instance, FEED Project organizes its ‘Our Giving’ web-page into ‘The Challenge’, ‘The Facts’, and ‘The Solution’. The facts account for the very real existence of hunger: ‘795 million people in the world are affected by hunger’ (FEED Project, ‘Our giving’). The solution, then, includes giving school meals because it ‘empowers [children] to break out of the cycle of poverty they were born into, and allows them to grow, learn, and thrive’ (*ibid.*). TOMS Shoes abides by a similar logic to its poverty alleviation efforts: with shoes, children will go to school and an education will allow them to ‘lift’ themselves out of poverty. This language of self-help (with the support of social entrepreneurs and ethical consumers) is pervasive and fails to recognize the complexity of poverty. Or, when one is then unable to lift him/herself out of poverty, the failure is easily derided as a *personal* failure of a meritocratic regime rather than an institutional failure.

Corporations, however, do not follow-up on their giving (or very rarely); these measurements – meals or shoes given – stand in for a quantitative chipping-away at systemic issues without taking into account the quality of the efforts. TOMS Shoes has, in fact, received wide criticism for its 'One for One' model of giving, being questioned as a 'doomed vanity project' (Poulos, 2012). Investigations especially concentrate on the company's 'shoe drops', which risk detrimentally impacting local economies through massive amounts of commodified aid. For example, a 2014 study emerging from economists at the University of San Francisco tested 970 households in El Salvador with the conclusion that with modest evidence donated shoes may have 'negative impacts on local shoe markets' (Wydick et al., 2014: 249). Further, shoe drops appear to take place in isolated communities without access to wider community or regional needs. Amy Costello (2013), a journalist and former Africa correspondent for PRI's *The World*, criticizes TOMS and other 'do gooders' for their simplified and profit-seeking 'good', but also commends the company as it responds to criticism – particularly about labor practices. Despite attempts to also impact communities through job creation with TOMS Shoes factories, an important question remains about the TOMS model: '[Are] consumer products what an impoverished community needs?' (*ibid.*). With both Costello and the USF study, the underlying assumption is that donations – commodified aid – is not advantageous to developing communities and instead these places need longer term economic development and infrastructure.

While ethical capitalism articulates the need for a capitalist evolution towards 'higher purpose', this purpose focuses on the mission of the company and its leaders. Whatever that mission is – whether to eradicate poverty, hunger, or AIDS for example – ultimately is subjected to the power of the market and the whims of capital. Those causes which receive the most attention are easily branded. As this section's opening quote from The Container Store's Kip Tindell emphasizes, by shifting a company's mission away from a strict adherence to profit maximization, a company may actually become 'a lot more profitable' (Tindell, 2014: 8). What is done with that extra profit? Does it become reinvested in the expansion of capital, or does it benefit the appendage of giving to those in need? For many

companies, the maximization of their profits ensures their value to competitors, investment firms, and multinational corporations. Rather than radically transforming the inequities of the capitalist system, what we see instead is the ways in which ethical brands contribute to a diverse corporate portfolio – indeed creating new value – with these ethical brands cashing in on a company that is not only ethically sound, but fiscally sound as well. These niche companies and brands add ethical legitimacy and diversity to the multinational corporation portfolio. In 2011, Coca-Cola purchased the remaining 55% of the mission-driven company Honest Tea, which prides itself on honest and fairly-traded ingredients, turning Bethesda-based founder Seth Goldman, who retains a 5% share, into a ‘deca-millionaire’ (Geller, 2011). Coca-Cola purchased the first 40% of the company in February 2008 for \$43 million. In September 2013, Method, a popular environmentally-friendly soap company, was sold to Belgian company Ecover for an ‘undisclosed price’, and created ‘what they claim is now the largest green cleaning company in the world, with revenue “north of \$200 million”’ (Kurtz, 2013). Other acquisitions include Ben & Jerry’s, now part of Unilever, Tom’s of Maine, acquired by Colgate-Palmolive, and Burt’s Bees, bought by Clorox in 2007 (Einstein, 2012). Most recently, in the summer of 2017, Amazon bought Whole Foods Market for \$13.7 billion. TOMS Shoes, it should be noted, sold half of the company to Bain Capital in 2014 with founder Blake Mycoskie retaining the other half of the company. Although these examples solidify claims about the ubiquity of ethical capitalism, they also reinforce the tenuous relationship between consciousness and capitalism. As made clear with corporate buy-outs and consolidation, ethical brands ‘mark yet one more step of the real subsumption of values and passions under the logic of capital’ (Arvidsson, 2014: 119).

### **The (im)measurability of good**

While the quantification of ‘good’ most directly measures the *giving* of commodities to communities in need, it further substantiates a company’s fiscal success in that giving is explicitly linked to the sales of commodities. Near its 10-year anniversary in 2017, FEED Project finally reached 100 million meals given, but it sees these numbers as more than just meals: ‘100

million opportunities for kids to be kids – to learn, play, grow and thrive. 100 million reasons for those kids to go to school every day and get the education they deserve. 100 million times over the last 10 years that a FEED purchase has changed a life' (FEED Project, '100 million meals'). But what is lost in these attempts at measurability and quantification? The answer, in short, is contextualization, and a subjective understanding of the complex and historically-situated crises that continue to result in massive epidemics of hunger, poverty, disease, and access to resources. Even when companies appear to go beyond the numbers, they do this in ways that ultimately reinforce the legitimacy and objectivity of numbers – what Theodore Porter (1995) deems 'trust in numbers'.

To celebrate 100 million meals served, FEED Project features 'real stories by the numbers', meaning stories of individual children receiving meals as told primarily through numerical information:

Meet Stephen – Nairobi, Kenya

1,080 / 100,000,000

*'I want to be a lawyer. To do that, I know I need to concentrate hard in class and finish school with good grades.'*

1,080: Number of free school meals Stephen has received

12: Stephen's age

8: Number of family members Stephen lives with, including his 6 siblings

6: Number of years Stephen has been receiving WFP school meals

*'If I wasn't getting school meals, I don't think I would eat during the day – just whatever there was at home at night. I like the school meals because they help me do better in class'.* (FEED Project, '100 million meals')

A correlating photograph shows that Stephen is more than his numbers, as he makes eye-contact with the camera, smiling, while he sits at a desk in his school uniform surrounded by his peers and holding a pencil (*ibid.*). Other stories follow a similar formula: Mathilde from Mozambique, who has received 900 meals and walks 2 hours to school every day; Patrick, a 5-year

old from Kenskoff, Haiti, who has received 180 free school meals and walks 5 ‘steep and mountainous kilometers’ with his siblings to arrive to school (*ibid.*). Trusting in the numbers provides consumer-spectators with what seems like objective information about the children receiving meals thanks to the sale of FEED Project products, but these ‘stories’ are also highly affective, detailing snippets of information about the child meant to tug at the heartstrings of spectators through quotes, a single photograph per child, and numbers. Alongside these stories, consumer-spectators are able to ‘Shop the Highest Giving Bags’, such as the \$278 Beaded Kenya Bag that provides 185 school meals to one child in Kenya over the course of one year or the ‘soft brown leather’ Harriet Tote, which for \$198 provides 100 school meals (FEED Project, ‘Harriet tote’). As for the Kenya Bag, further details do not describe the 1 year/ 185 meals rationale, nor how the child is chosen, his/her location, or if the child comes from the same community where the bag is crafted (it is one of few FEED Project bags that accounts for labor, which I address in the conclusion). The number of meals given is not only incorporated into the product description, but also is printed *on* the bag so that the consumer may quantify and render visible his/her ethics for others to see. In addition to asking what is lost in ethical capitalist measurability, it is also worth asking what is gained, and for whom? Certainly, a hungry child cares less about the number of ‘meals’ he or she is guaranteed, but rather about the *quality* of care and its impacts on everyday life. Measuring social impact matters a great deal, however, to companies that must answer to investors, stakeholders, and boards of directors with necessary metrics that demonstrate clear performance measures and accountability. Similarly, these measurements illustrate a company’s social and financial efficacy for consumers – meals given simultaneously showcase the company’s ethics while also denoting its brand popularity (and sales). But measuring social impact in the case of both FEED Project and TOMS Shoes is not holistic. A simple metric of giving obscures considerations for labor, environmental impact, quality of life for those given products, and so forth.

To date, TOMS Shoes has given more than 75 million pairs of shoes to children in need. But, like any capitalist enterprise, TOMS has expanded its line of commodities as well as its giving. Through its eyewear, TOMS has

contributed to restoring sight to more than 500 thousand people. Through TOMS Roasting Company coffee, it has helped provide over 450,000 weeks of safe drinking water to people in need with each bag of coffee sold equating to 140 liters of safe water. Through the sale of its bags, TOMS has supported safe-birthing facilities to 175,000 mothers. Finally, through the sale of the TOMS High Road Backpack, each purchase provides 'the training of school staff and crisis counselors to help prevent and respond to instances of bullying' (TOMS Shoes, 'Preventing bullying'). Oddly enough, this is the only moment where the company does *not* quantify its good. There is no ticker counting the number of items given on the company website as with shoes, sight, water, and safe births. While the company is willing to quantify the number of shoes given – which assumes a number of shoes needed (perhaps faultily) – the company is unwilling to quantify instances of bullying, or even the training of staff and counselors. Instead, a statistic reads: 'Nearly 1 out of every 3 students, ages 12-18 in the United States, reports being bullied' (*ibid.*). While the giving of shoes, sight, water, and safe births most often occurs in exotic far away locales such as developing countries, the bullying of youth for TOMS is a distinctly American problem. It is possibly close to home for its consumers, whereas the need for shoes, sight, water, and safe birthing facilities most likely is not for the consumer of TOMS Shoes, with the average shoe costing approximately \$46. While both FEED Project and TOMS Shoes give in the United States, it is not a focus of either company. Similarly, neither company engages in *the politics* of need, which would require addressing the root causes of need.

## Conclusions

What is lost within the quantification of 'good' is not only the contextualization of need as located in particular geographies, ideologies, and configurations of power, but also we lose politics and civic engagement when it is rendered most simplistically as an exchange-value. Economization abstracts these complexities, morphing them into purchasable commodities and reinforces the myth that the solution to ongoing crises is best found *within* capitalism and *through* entrepreneurialism and consumption. These neoliberal utopian desires are perhaps authentic in their concern for distant

others, but fail to imagine – or choose to ignore – the ways in which politics and justice-oriented solutions could better remedy these inequalities.

In conclusion, I find it helpful to return to Marx and the significance of social relations as a marker of power between those with access to capital and those ‘in need’. Ethical capitalism relies upon discourses of solidarity and a shared universal humanity, but fails to recognize its own positionality as agent of capitalist expansion and alienation. It humanizes those ‘in need’ (numerically, at least), while continuing to veil its own impacts that do not fit within its narrative of giving – environments that are destroyed due to deforestation, communities that are at risk because of pollution stemming from unsustainable factory practices, the risks to specific people at the sites of production and, importantly, waste. With regards to labor, efforts exist to ‘de-fetishize’ these relationships, reliant upon subverting the Marxian commodity fetish by making visible the social relations of production that Marx argues is veiled through the commodity’s exchangeability (Binkley and Littler, 2008). While these practices are especially prevalent with fair-trade, emerging companies such as Everlane (2017) also attempt to be transparent with production (‘ethical factories’ and ‘radical transparency’). Thus, while labor *should* feature more prominently in the disclosed ‘good’ of an ethical company, it often remains hidden, with consumer’s attention instead being directed to the dazzling array of good through ‘giving’. For instance, TOMS Shoes says very little about the conditions of production; it has previously said it attempts at ‘fair-trade’ but does not disclose labor in any substantial or transparent way. FEED Project states that its products are produced using fair-labor and when possible, use environmentally-friendly materials. It has worked with various cooperatives in ‘Colombia, Guatemala, Haiti, India, Kenya, El Salvador, and Peru’ (FEED Project, ‘About’). *If* consumers care about labor, they can then shop accordingly: ‘explore our work with artisans’, which, when clicked on the website, takes the potential consumer to the \$278 ‘Beaded Kenya Bag’, which ‘provides 185 school meals in Kenya’ (FEED Project, ‘Beaded Kenya bag’). Perhaps worth noting, the bag has increased in price from \$250 to \$278 in the several months between my initial submission of this note and its revisions (with no additional meals given).

So where does this leave the measurability of 'good?' In conclusion, I suggest that the measuring of 'good' is just as problematic as the measuring of capitalist organization in that it only accounts for part of the story. Instead, it seemingly absolves capitalism and market liberalization by way of easily economized 'good'. This formation of measurability strives to make objective and simple that which is subjective and complex. It fails to account for the complex, structural, and historical reasons for the persistence of inequality, poverty, disease, and ecological decay, giving consumers easily digestible consumptive action to make the world a better place. But I also want to conclude more optimistically, looking towards the future of the measurability of 'good'. If corporations continue to quantify their giving, then it requires that consumers, scholars, journalists, and humanitarian-activists demythologize the seemingly objectivity – they must go beyond the numbers. Furthermore, consumers who *really* care about hunger or poverty, should think about the *value* of their money: is it better to donate to a well-researched and effective organization rather than buy a new pair of shoes? Is it more effective to engage politically rather than economically with some of the issues that can be connected to inequality, poverty, and hunger? I say this not to diminish the material benefit of a meal, for instance, but to insist that consumers, entrepreneurs, and citizens need to do more; we cannot leave the needs of this world to the subjective whims of markets and for-profit companies.

## references

- Arvidsson, A. (2014) 'Public brands and entrepreneurial ethics', *ephemera*, 14(1): 119-124.
- Aschoff, N. (2015) *The new prophets of capital*. London: Verso Books.
- Binkley, S, and J. Littler (2008) 'Introduction', *Cultural Studies*, 22(5): 519-530.
- Brown, W. (2015) *Undoing the demos: Neoliberalism's stealth revolution*. Brooklyn, NY: Zone Books.
- Costello, A. (2013) 'TOMS Shoes: A closer look', *Tiny Spark Podcast*, 15 March. [<http://www.tinyspark.org/podcasts/toms-shoes/>]

Drewry, E. (2018) 'Seat of power episode 11: Lauren Bush Lauren will never stop fighting world hunger – Until it ends', *Forbes*, 28 February. [https://www.forbes.com/sites/emilydrewry/2018/02/28/seat-of-power-episode-11-lauren-bush-lauren-will-never-stop-fighting-world-hunger-until-it-ends/#722d384850ae]

Einstein, M. (2012) *Compassion, Inc.: How corporate America blurs the line between what we buy, who we are, and those we help*. Berkeley, CA: University of California Press.

Everlane (2017) 'About'. [https://www.everlane.com/about]

FEED Project (2017) 'About'. [https://www.feedprojects.com/about-feed]

FEED Project (2017) 'Our giving'. [https://www.feedprojects.com/our-giving]

FEED Project (2017) '100 million meals'. [https://www.feedprojects.com/blog/celebrating-100-million-meals]

FEED Project (2017) 'Beaded Kenya bag'. [https://www.feedprojects.com/artisan-beaded-kenya-bag-leather-handles]

FEED Project (2018) 'Harriet tote'. [https://www.feedprojects.com/brown-leather-harriet-tote-bag]

Geller, M. (2011) 'Coke buys remaining stake in Honest Tea', *Reuters*, 1 March. [http://www.reuters.com/article/2011/03/01/us-cocacola-honesttea-idUSTRE72055U20110301]

Half United (2017) 'Giving back is the new black'. [https://www.halfunited.com/collections/apparel/products/ethical-fashion-giving-back-is-the-new-black-tee-black?variant=5681349061]

Jameson, F. (1984). 'Postmodernism, or the cultural logic of late capitalism', *New Left Review*, 1/146: 53-92.

Knowledge@Wharton (2012) 'Why companies can no longer afford to ignore their social responsibilities', *Time: Business & Money*. 28 May. [http://business.time.com/2012/05/28/why-companies-can-no-longer-afford-to-ignore-their-social-responsibilities/]

Kurtz, R. (2013) 'A soap partner sought compatibility in a merger partner', *The New York Times*, 16 January.

[<http://www.nytimes.com/2013/01/17/business/smallbusiness/a-founder-of-the-soap-maker-method-discusses-its-sale.html?pagewanted=all&r=0>]

Mackey, J. and R. Sisodia (2013) *Conscious capitalism: Liberating the heroic spirit of business*. Boston, MA: Harvard Business School Publishing Corporation.

Marx, K. (1990) *Capital: Volume one*, trans. B. Fowkes. London: Penguin Books.

Mycoskie, B. (2012) *Start something that matters*. New York: Spiegel & Grau Trade.

Porter, T.M. (1995) *Trust in numbers: The pursuit of objectivity in science and public life*. Princeton: Princeton University Press.

Poulos, J. (2012) 'TOMS Shoes: A doomed vanity project?', *Forbes*, 11 April. [<http://www.forbes.com/sites/jamespoulos/2012/04/11/toms-shoes-a-doomed-vanity-project/#1e0ea2324c6d>]

*The Journal* (2016) 'Interview with Lauren Bush Lauren', 20 June. [<https://www.shinola.com/thejournal/news/products/interview-lauren-bush-lauren-founder-feed>]

Thompson, C. (2018) 'Philanthrocapitalism: Rendering the public domain obsolete?', *Third World Quarterly*, 39(1): 51-67.

Tindell, K. (2014) *Uncontainable: How passion, commitment, and conscious capitalism build a business where everyone thrives*. New York: Grand Central Publisher, A Division of Hachette Book Group.

TOMS Shoes (2017) 'What we give'.

[<http://www.toms.com/what-we-give-shoes>]

[<http://www.toms.com/what-we-give-sight>]

[<http://www.toms.com/what-we-give-water>]

[<http://www.toms.com/what-we-give-safe-births>]

[<http://www.toms.com/what-we-give-preventing-bullying>]

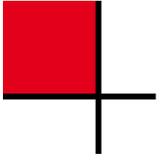
Walgreens (2017) 'Get a shot. Give a shot'.  
[[https://www.walgreens.com/pharmacy/immunization/shot\\_at\\_life.jsp](https://www.walgreens.com/pharmacy/immunization/shot_at_life.jsp)]

Warby Parker (2017) 'Buy a pair, give a pair'.  
[<https://www.warbyparker.com/buy-a-pair-give-a-pair>]

Wydick, B, E. Katz and J. Brendan (2014) 'Do in-kind transfers damage local markets? The case of TOMS Shoe donations in El Salvador', *Journal of Development Effectiveness*, 6(3): 249–267.

### **the author**

Lisa Daily holds a PhD in Cultural Studies from George Mason University. Her research and teaching interests focus on visual culture, commodity and consumer cultures, labor, business ethics, global capitalism, and inequality. She is currently working on turning her dissertation, *Ethical capitalism, commodities, and the consumerist gaze*, into a book and is researching a new project that intervenes in representations of humanitarian crises, especially as related to virtual reality. She works and teaches at New York University, Gallatin School of Individualized Study. Email: [lisa.daily@nyu.edu](mailto:lisa.daily@nyu.edu)



## After measurement

Tom O’Dea

### abstract

This paper looks at the relationship between computational forms of knowledge, optimisation and politics. The paper develops an expanded definition of computation beyond that with which the term is most generally associated (i.e. with electronic computing machines). In particular, the paper examines the link between measurement and computational logic, proposing that computation creates *hybrid-objects* composed of both physical entities and their abstractions. The paper goes on to identify how computational ways of knowing give rise to particular forms of optimisation. Finally, the paper proposes that in the case of increasingly technologically mediated societies an understanding of the ways which we measure, and the way in which this knowledge is deployed, becomes a central function of contemporary political critique.

### Introduction

Computation, it can be argued, has become one of the dominant structuring forces of contemporary human society. In making this claim, however, it is necessary to go beyond the definition of computation that is generally understood as something occurring upon the semiconductor substrates of modern computing machines. Instead, the contemporary logic of computation can be expanded to include activities that permeate those spheres of existence situated upon the biological substrates (bodies, flesh, organisms) from which we are formed, and the material and immaterial

substrates of culture (hearts, minds, souls) in which we are formed, and which we constantly form and reform. Central to this expanded logic of computation is the concept of measurement, i.e. the formalisation of systems of abstraction through which the world can be described. Whilst this paper will, by way of introduction, briefly discuss this expanded notion of computation that permeates contemporary society, its focus is on that which follows computation and measurement – namely, optimisation and its place in contemporary politics.

Optimisation is a term or concept that is most familiar to those in the fields of mathematics, engineering and management and is the process of making the best or most effective use of a resource. This paper will discuss how the act of measurement within the contemporary logic of computation exposes individuals to the possibility, or perhaps inevitability, of optimisation in many areas of their existence. However, what this paper shows is that the concept of *best* or *most effective* is an expression of politics and can act as an expressor of control. In particular, this paper will discuss the existence of two processes of optimisation; the first, *optimisation through performativity*, will be described within the context of Lyotard's notions of knowledge performativity, whereas the second, *optimisation through normativity*, will be described within the context of Foucault's notions of norms. Finally, the paper will explore the power dynamics contained within these processes of optimisation in order to suggest the importance of this understanding of computation in the critique of contemporary power.

## **A logic of computation**

There is little consensus as to what defines computation in the machine, human or in nature. In functionalist accounts, initially stemming from Putnam, systems are variously considered as computational when there exists a mapping that describes their changes between states (Copeland, 1996; Putnam, 1960; Tegmark, 2008). This position, however, creates the possibility that any process can be considered computational. As has been noted by others, the possibility that any system can be considered computational renders the discussion trivial (Godfrey-Smith, 2009; Horsman

et al., 2014). As such it is necessary to develop a definition that can be more useful in understanding the role of computation in contemporary society. The general term *computation* is widely understood and predominantly associated with those electronic devices that we call *computers* – be they smartphones, keyfobs, cloud servers or fighter drones. To focus on computation as bound only to these and similar machines, however, fails to fully account for the range of historical and contemporary processes of computation in which humans have engaged. There also exists an understanding of computation that can be considered beyond the realms of computing machines but which does not become trivial in doing so. Semantic accounts of computation which were developed by Fodor (1981) describe computation through its relationship to abstraction. Computation can be considered as the processing of information, which represents in some abstract formal structure some other process. This understanding is developed and generalised more clearly in the Abstraction Representation (AR) theory developed in the paper ‘When does a physical system compute?’ (Horsman et al., 2014) in which the relationship between the abstract and physical domains is defined. For clarity, this paper will use the term physical to refer to the subject of abstraction whilst acknowledging that these subjects can be both material and immaterial such as individuals, their emotions, or the relationships between them.

This abstracting relationship is common to all of the computing machines mentioned above, and Fodor proposes that ‘there is no computation without representation’ (Fodor 1981: 120). AR theory describes just such a representational relationship between the physical and the abstract, describing computation as being built on the *good enough* equivalence of the result of a transformation in the abstract domain of an abstract entity with the result of an abstracted transformation of an entity in the physical domain. In other words, computation in these accounts is based on the assumption that the abstraction has a relation to the physical entity it represents that allows for decisions to be made about the abstract that can be considered as equivalent to decisions in the physical domain. The relationship between the physical and the abstract domain is the process of measurement. Measurement is the way of getting the physical *in* to the

abstract domain, representing a physical phenomenon in an abstract formal system (Krantz et al., 1971: 1). Thus it can be suggested that any process that acts on the results of a measurement process can be considered as computation. However, this understanding of computation is still limited inasmuch as the representational relationships described in these semantic accounts are unidirectional. What is to be explored below is that in a contemporary logic of computation abstractions are increasingly inseparable from that which they represent.

It is possible to think of this understanding of computation and its limitations through some practical examples. At one end of this scale are simple analogue measuring devices – rulers, weighing-scales and thermometers – converting physical phenomena into numerical representations. Then there are sensors for encoding physical properties such as heat, light or vibration through the production or manipulation of voltage signals into digital bits and bytes, undergoing multiple steps of abstraction. At the other end of this spectrum, highly abstracted relationships are created; Facebook profiles encode relationships, images (themselves abstractions) and sentiments via friendship circles, facial recognition and through the use of emoji symbols for liking, disliking or surprise. Meanwhile, Fitbit and other bodily trackers measure exercise in terms of pulse rate, distance travelled, or a range of other metrics. In each case, these abstract representations, resulting from the measurement process, become the subjects about which decisions are made in place of the physical phenomena they represent.

It is thus possible to think of computational logic as having existed in various forms for almost as long as historical records allow or at least for as long as we have records of measurement. In its earliest forms, computation can be recorded as having taken place with systems of time recording and in the first forms of money – in each case, some abstract system was used to measure some physical phenomenon. In contemporary society, however, these abstract entities increasingly become the primary site for engagement between individuals and others; commercial entities, institutions and the state, and in many cases engagement with the self. No longer solely correlates for physical entities, the abstract entities become intrinsic parts of

the subjects in themselves. Thus the relationship is no longer a unidirectional abstraction of an unchanged physical entity. Instead, the act of measurement creates what Rouvroy (2015) describes (in the case of individuals) as 'Supra-Individual' subjects composed of an individual and infra-individual abstractions. We can think of these supra-individuals more generally as hybrid-objects, composed of their physical and abstract components. In this understanding, the abstraction and the real can no longer be held as separate. The importance of the abstraction in the relationships between individuals and institutions is easy to see across many areas of society. Credit ratings, user reviews, purchases (Clover, 2016), Facebook comments (Ruddick, 2016) and prison sentencing algorithms (Angwin et al., 2016) are used to determine trustworthiness or risk; DNA records are used to determine predisposition towards certain illnesses or to determine life assurance premiums (Joly, Feze and Simard, 2013); self-tracking and employer tracking practices seek to extract value from abstracted physical (Brown, 2016) and affective activities (Moore and Robinson, 2016), more examples of which can easily be found. While the phrase 'If it's not on Facebook it didn't happen' is generally used in a throwaway fashion, research has shown that online autobiographical recording practices influence the mental recording of our activities (Wang, Lee and Hou, 2017). Lupton has highlighted that amongst users habituated to self-tracking practices using fitness trackers, activities that have not been tracked become mentally discounted (Austen, 2015). Meanwhile, amongst users of sexual tracking technologies, users report pressure to perform for the datafied recording of the sexual act rather than for themselves and their partners (En and Pöll, 2016). In each case, complex social, cultural and psychological factors and activities become bound up in their representation as measured data points upon which decisions and understandings are based. These abstractions act on and as part of a hybrid-object within which the abstract and physical can no longer be separated.

These practices of abstraction raise many questions in and of themselves about the ethics, effectiveness or viability of abstract representations as surrogates for complex physical phenomena. At the same time, the generation of hybrid-objects as subjects of contemporary computation

challenges the notion that computation can accurately be described as a relationship between two domains, the physical and the abstract. The focus of this paper, however, is not on the viability of abstraction or computation but rather what happens after measurement – in particular, how these hybrid-object assemblages of physical and abstract entities become exposed to the process of optimisation.

### **Optimisation through performativity**

Optimisation, as discussed briefly in the introduction, is the process of making the best or most efficient use of a resource. *Best*, or *most efficient*, however, is, of course, a subjective determination. All optimising processes are subject to what is known as an objective function, i.e. the selection of a feature with respect to which the optimisation must take place. For example, in the case of a car's engine, the designer may optimise for power, efficiency, carbon monoxide emission or any number of other variables of interest, which may require competing design decisions (the choice of which is an expression of politics operating on a different scale or register). Optimisation is a selection of preferences, a choice of values and an expression of selective biases. Importantly, it is possible to say that nothing can be optimised of itself, instead an entity is *subject* to optimisation relative to some external criterion. Some criteria, however, present themselves for optimisation in ways that others do not. Returning to the car engine example, a designer may find it difficult to optimise the engine for *beauty* or *goodness* in the absence of some measurement system with which to determine one design's level of such a property from another's. This problem is further compounded when the designer finds their colleagues' ideas of beauty at complete odds with their own.

To optimise for something one needs to have a way to measure the results of our actions. If we consider the hybrid-objects of contemporary computation we can suggest that only that part which is measurable can be optimised. This selection of optimisation variables is therefore related to the way in which knowledge can be held and shared about a particular phenomenon. Knowledge that is subjective, contingent and embodied cannot easily be held

in the abstract representations of computing technologies, whereas forms of knowledge that are easily encoded within measurement systems and about which broad agreement exists become easily encoded within the measurement systems of computation. This property of knowledge, or knowledges, is related to what Lyotard (1984) calls the 'performativity criterion' – the ability of knowledge to be shared, transferred and verified independently of its holder or creator; that is, the ability of the knowledge to perform independently. Computational knowledge forms, the abstract part of hybrid-objects, have high levels of performativity. On the other hand, embodied, affective, communal or implicit knowledge forms have low levels. Thus it would be possible to suggest that only those elements that can be represented computationally are subject to optimisation.

It is possible, however, to suggest that the creation of hybrid-objects is itself a form of optimisation. The selection of what is measured is based on the performativity of the knowledge about the phenomenon itself. The hybrid-objects that occupy the logic of computation are governed by this performativity criterion; their abstract components are composed of forms of knowledge with high coefficients of performativity. As such these hybrid-objects are composed of the physical entity and abstractions of parts of that entity based on the performativity of knowledge about those parts. Thus the creation of hybrid-objects is subject to the objective function of performativity – the selection of only those features that can be abstracted. This performativity criterion is central to the ideas of measurement that underpinned the techno-scientific revolution during the Enlightenment. Knowledge forms that could be transferred and verified between the knowledge institutions of Europe gained their legitimation through their repeatability, and in turn, the power to legitimate was inferred upon those who could produce knowledge in this way. This reciprocation between knowledge and the power to legitimate it was, and remains, a political decision. This choice, which Lyotard explicitly describes as the link between scientific truth, ethics and politics in the notion of rational authority of 'the Occident' is that in which

knowledge and power are simply two sides of the same question: who decides what knowledge is and who knows what needs to be decided? (Lyotard, 1984: 8)

As argued by Poovey, numerical and highly performative forms of knowledge were central to the *making meaningful* of the world in the liberal and neo-liberal orders that gave rise to the contemporary conditions of computation. Optimisation by performativity can thus be thought of as a choice over the types of knowledge that are considered legitimate and thus give authority in the abstraction of the physical world.

It is possible to see the increased prevalence of this form of optimisation across society. For example: social media commentary is measured in likes and shares, rather than in the thoughts/emotions/responses engendered in the reader; health is measured in heartbeats, steps and calories rather than in terms of its physiological, social or psychological effects; and intimate relationships are measured in terms of the completion of particular acts, the amount of time spent or even the number of strokes in the (presumably male) sexual act rather than as a complex social, emotional and physical process. In each case, a physical phenomenon is conceptualised within the metrics of a computational framework. However, of interest here is not whether some part of reality is encoded within computational forms, but rather how the existence of these computational forms tends towards the reconception of these activities within the terms of the computational forms. In other words, the existence of these metrics influences our participation in these activities in such a way as to optimise them for the types of metrics that are highly performative within a logic of computation.

Many examples of this sort of optimisation can be easily seen in daily life. Users of social media regularly engage in narcissistic practices of self-curation and self-censorship intended to increase the number of likes, shares and retweets for the content they produce (Bergman et al., 2011; Buffardi et al., 2010; Kleek et al., 2015), or to improve their position within the metricised ordering systems of the various platforms they occupy (Gerlitz and Lury, 2017). In a different sphere, academic researchers increasingly mould their research outputs and directions to meet the measurable criteria of citation indices (Rijcke et al., 2015). In each case, the

reconceptualisation of the activity through specific metrics has an optimising effect wherein the activities are thought of in terms of measured aspects only rather than in terms that include aspects that are not easily measured. In other words, the hybrid-object is reconceived of primarily in terms of measured aspects that have high levels of performativity. This reshaping of the world in terms of those computational features is what can be called optimisation through performativity.

### **Optimisation through normativity**

The second process of optimisation that occurs in the logic of computational hybrid-objects is that which is related to the existence or generation of norms. In this case, the optimisation occurs after the act of measurement and as such is already subject to the first form of optimisation discussed above. Thus this form of optimisation already follows from the selection of that which is considered valid knowledge. In particular, this second form of optimisation relates to the proposal for the existence of normal values for the metrics of abstract entities and by extension for those real entities contained within computational hybrid-objects. This concept of normative values, or normative behaviours, is that which Foucault develops in *Discipline and punish*, in which he elucidates the existence of the *normal* subject as s/he who is a rational subject with and in whom the good of society is embodied (Burchell, 1991: 142). Critically, however, Foucault's normal 'man' has as his complement the existence of the abnormal subject who sits outside of the realm of established norms. Whilst in *Discipline and punish*, Foucault highlights the necessity of this denormalisation in a judicial/psychiatric system of control; it is in 'governmentality' (Foucault, 1991) that he develops the idea of *good* governance. Good governance, the production of a harmonious social order by various forms of power, is, he proposes, related to the presence of *good* existence in both upward and downward directions. A position that proposes the adherence to and encouragement towards the norms of *good* living (be it in health, economics or social interaction) is the necessary practice of governance. This he notes is achieved through the practices of governmentality in which tactics exist to encourage the adherence to such norms of behaviour. He says,

With government it is a question not of imposing law on men, but of disposing things: that is to say, of employing tactics rather than laws, and even of using laws themselves as tactics – to arrange things in such a way that, through a certain number of means, such and such ends may be achieved. (Foucault, 1991: 95)

It is, as Ian Hacking notes in his contribution to *The Foucault effect* (1991: 83), no surprise that the idea of norms and governmentality are associated with the history of statistical measurement, abstract entities with which to relate to a population, from which the *normal* can be separated from that those who are not.

Optimisation through normativity then is that which proceeds through the idea of normative values to which the computational part of a hybrid-object can be compared. Furthermore, certain values are implied as being within a normal range or around which certain normative directions exist (an increase or decrease in a particular numerical value for example). Following from optimisation through performativity, optimisation through normativity is the manipulation of hybrid-objects through the frame of those features that have been made computable through measurement.

In other words, hybrid-objects live in a world in which not only can their construction be compared on equal terms with others, but where normative values for those constructions exist. So, there is a right number of steps, a right number of friends, a right amount of time spent having sex, a right pattern of genetic markers – or even a right postcode, race, gender that is considered preferable. Thus, in the creation of hybrid-objects, the physical subject is exposed to the process of optimisation. As we have seen, nothing can be optimised of itself; optimisation requires an *objective function*. In Foucault's terms, the creation of abstract versions of real-world bodies subjugates them such that their control or manipulation is made possible. In the case of the hybrid-objects of computation, those things that can be or are measured become subjects with respect to these objective functions.

## The politics of optimised entities

Hybrid-objects exist as both normative and normalising structures – i.e. they are generated through the idea of normative modes of existence but also help to generate the norms that legitimate the use of measurable and optimisable computational structures. As such optimisation through normativity expresses Foucault's power dynamics in the sense that norms act to separate that which is *normal* from that which is not. However, at the same time, the reconceptualisation of phenomena in computable forms acts to produce hybrid-objects that can be subjected to control through the measured parts of their existence. Thus the act of measurement that gives way to optimisation can be related to the modern urge to annihilate ambivalence that Bauman (1991) highlights as central to the logic of modernity. Ambivalence represents that those parts of existence that remain outside of classified or computable understanding, but also out of generally conceived norms. This can be seen, as in the examples above, in the increasing preponderance towards bringing ever-new areas of life into schemes of computation.

In the case of the abstract entities created as part of hybrid-objects in contemporary society, these normative values do not always appear to be generated monolithically, for example by the state (as in Foucault's ideas of governmentality). Instead, norms are generated from disparate sources, be they governmental, institutional, commercial or social. The contention that 'if you can't measure it you can't improve it' is a tenet of neo-liberal technics and management science. However, given that norms appear generated from a multitude of sources, including by individuals themselves, what is proposed here is that the very act of measurement creates the possibility of optimisation, by the reconceiving of that which is measured as a computable and controllable subject. What can also be seen, however, is that abstract entities are composed of the types of highly performative knowledges that can easily be shared, transferred, encoded and decoded independently of that to which the knowledge pertains. As computation encodes phenomena in such a way that they can be decoded at another point upon the network (be it a physical network or networked understanding of a concept), certain types of non-performative knowledge cannot be

transferred. For example, the subjective and embodied forms of knowledge that cannot be encoded externally to their holder cannot be encoded computationally. Thus in understanding the contemporary logic of computation, it is necessary to recognise that the subjects of computation reflect political choices about the legitimacy of different forms of knowledge. Furthermore, the types of knowledge that are considered legitimate are those that allow hybrid-objects to be compared and computed such that they can be understood in terms of normative values. Thus that which is not measured, or not measurable, is considered as primitive, ambivalent or abnormal (as demonstrated in the works of Lyotard, Bauman or Foucault discussed above), but more importantly, cannot exist within a society built around a logic of computation.

The combination of these effects is that the hybrid-objects of contemporary society become increasingly conceptualised as functional units through their abstracted measurable elements. Thus their existence is conceived of not only as subjected to those parts that are capable of being measured but as subjects that can be altered in order so that these measured aspects are brought within the bounds of given norms. Taking as a parallel, for example, the British land enclosures in the 17th and 18th centuries, the act of enclosure reconceived of the land as an improvable subject within a fixed set of metrics, and as such as a productive entity within a capitalist system of production. By enclosing land, it became possible to measure its economic productivity and to compare this to other pieces of land that could be measured as having similar traits. Enclosure, however, also meant the division of previously common space into one privately owned space in which use became strictly defined (in the general case for the production of food). A similar action takes place in the logic of computation. Measurements, such as physical tracking, social profiles or credit scoring, are forms of enclosure that create abstract subjects of those elements of physical existence. In so doing they conceive of them as functional which exposes them to control as optimisable units of a particular political, economic or other regimes. This *being functional* strips individuals of those elements of humanity that unmeasured remain without function, their *being without function*. Measurement thus exists as the first and necessary step in

reframing the lived world in terms only of its measurable functions - thinking of the world through what it *does* rather than what it *is*. This choice, as we have seen, is not determined by the nature of phenomena themselves but is a political choice of what is valued, and how we value it.

The question of objective functions normative values and performative knowledge bring to the fore the question of legitimation. As described by both Foucault and Lyotard the question of what knowledge is allowed to be described as legitimate is linked with the ethico-judicial questions of who is allowed to describe knowledge as legitimate or to promulgate such knowledge as law or norm. However, as the tendency towards optimisation does not appear to be monolithically generated (through state or institutional power), it can be suggested as stemming from the process and result of measurement itself. This contemporary condition that knowledge legitimacy has been decided towards the primacy of the measurable and thus is therefore inseparable from the tendency towards optimisation. This suggests that the way in which knowledge is conceived of in computational societies is a necessary precursor to understanding the way in which computational power is expressed.

In short, the measurement processes that are at the centre of the logic of computation that pervades contemporary society act to reconceptualise human life as a collection of functional subjects such that they can be manipulated and controlled. Once conceived of in this way, the question of how and to what end this control operates, these questions of objective function and the tools we use to describe it, become fundamental questions of politics in contemporary computational society. Preceding this, however, how we create the hybrid-objects of computation and the way in which we understand that which can and cannot be measured, must also become a central part of contemporary critique, if we are to generate meaningful understandings of an increasingly computational world.

## references

- Angwin, J., J. Larson, S. Mattu and L. Kirchner (2016) 'Machine Bias, ProPublica'. [<https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>]
- Austen, K.F. (2015) 'Wearables data challenges beyond security and privacy'. [<https://katausten.wordpress.com/2015/09/02/wearables-data-challenges-beyond-security-and-privacy/>]
- Bauman, Z. (1991) *Modernity and ambivalence*. Cambridge: Polity Press.
- Bergman, S.M., M.E. Fearington, S.W. Davenport and J.Z. Bergman (2011) 'Millennials , narcissism, and social networking: What narcissists do on social networking sites and why', *Personality and Individual Differences*, 50(5): 706-711.
- Brown, E.A. (2016) 'The fitbit fault line: Two proposals to protect health and fitness data at work', *Yale Journal of Health Policy, Law, and Ethics*, 16(1): 1-49.
- Buffardi, L.E. and W.K. Campbell (2010) 'Narcissism and social networking web sites', *Personality and Social Psychology Bulletin*, 34(10): 1303-1314.
- Burchell, G. (1991) 'Civil society and "the system of natural liberty"', in G. Burchell, C. Gordon and P. Miller (eds.) *The Foucault effect: Studies in governmentality*. Chicago: University of Chicago Press.
- Clover, C. (2016) 'China: When big data meets big brother', *Financial Times*, 19 January.
- Copeland, B.J. (1996) 'What is computation?', *Synthese*, 108(3): 335-359.
- En, B. and M. Pöll (2016) 'Are you (self-)tracking? Risks, norms and optimisation in self-quantifying practices', *Graduate Journal of Social Science*, 12(2): 37-57.
- Foucault, M. (1991) *The Foucault effect: Studies in governmentality*, eds. G. Burchell, C. Gordon and P. Miller. Chicago: The University of Chicago Press.
- Fodor, J.A. (1981) 'The mind-body problem', *Scientific American*, 244(1): 114-123.

- Gerlitz, C. and C. Lury (2017) 'Social media and self-evaluating assemblages: On numbers, orderings and values', *Distinktion: Scandinavian Journal of Social Theory*, 15(2): 174-188.
- Godfrey-Smith, P. (2009) 'Triviality arguments against functionalism', *Philosophical Studies*, 145(2): 273-295.
- Horsman, C., S. Stepney, R.C. Wagner and V. Kendon (2014) 'When does a physical system compute?', *Proceedings of the Royal Society A*, 470(20140182).
- Joly, Y., I.N. Feze and J. Simard (2013) 'Genetic discrimination and life insurance: A systematic review of the evidence', *BMC Medicine*, 11(25).
- Van Kleek, M., D. Murray-Rust, A. Guy, D.A. Smith and N.R. Shadbolt (2015) 'Self curation, social partitioning, escaping from prejudice and harassment: The many dimensions of lying online', proceedings of the ACM web science conference.
- Krantz, D.H., R.D. Luce, P. Suppes and A. Tversky (1971) *Foundations of measurement vol. I: Additive and polynomial representations*. New York: Academic Press.
- Lyotard, J.-F. (1984) *The postmodern condition: A report on knowledge*, trans. G. Bennington and B. Massumi. Manchester: Manchester University Press.
- Moore, P. and A. Robinson (2016) 'The quantified self: What counts in the neoliberal workplace', *New Media & Society*, 18(11): 1-14.
- Putnam, H. (1960) 'Minds and Machines', in S. Hook (ed.) *Dimensions of mind: A symposium*. New York: New York University Press.
- Rijke, S.D., P.F. Wouters, A.D. Rushforth and T.P. Franssen (2015) 'Evaluation practices and effects of indicator use – a literature review', *Research Evaluation*, 25(2): 1-9.
- Rouvroy, A. (2015) 'Algorithmic governmentality: A passion for the real and the exhaustion of the virtual', paper presented at All watched over by algorithms conference, Berlin, Germany, 29 January.
- Ruddick, G. (2016) 'Admiral to price car insurance based on Facebook posts', *Guardian*, 2 November.

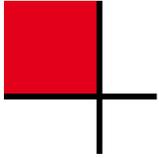
Tegmark, M. (2008) 'The mathematical universe', *Foundations of Physics*, 38(2): 101-150.

Wang, Q., D. Lee and Y. Hou (2017) 'Externalising the autobiographical self: Sharing personal memories online facilitated memory retention facilitated memory retention', *Memory*, 25(6): 772-776.

## **the author**

Tom O'Dea is an artist and researcher in the Orthogonal Methods Group at CONNECT, Ireland's centre for future networks and communication in Trinity College Dublin. He has a background in mechanical engineering and digital media and completed his practice-based PhD in Art and Computer Science in Trinity College Dublin. His artistic and research practice focussed on the political implications of the global computer network on society. In particular, he is interested in the forms of data and representation of life within the structures of computing technologies.

Email: iamtomodea@gmail.com



## Collective chronopolitics

Armin Beverungen

### review of

Gregg, M. (2018) *Counterproductive: Time management in the knowledge economy*. Durham and London: Duke University Press. (PB, pp. 200, \$24.95, ISBN: 97814780000907)

It is always a pleasure to read what Melissa Gregg writes. Her blog *Home cooked theory*, where she often posted her still raw ideas, including many for this book, was a wonderful treat to read for insight on current cultural studies of work until Gregg closed it down a couple of years ago. Readers of *ephemera* will be familiar with Gregg's prior work, in particular her book *Work's intimacy* (Gregg, 2011), and her work on affect theory, such as *The affect theory reader* (Gregg, 2010), which she co-edited with Gregg Seigworth. Both had been important references for work in *ephemera*, for example the issues on free work and affective capitalism. Gregg is exciting to read because she brings queer and feminist perspectives from cultural studies and science and technology studies to the exploration of work and media technologies today. *Work's intimacy* focused on the 'presence bleed' that professionals experience as they take their work home while using media technologies such as laptops. While that is by now a familiar story – although one worth revisiting during a pandemic in which the home office has become normalized (see also Hafermalz, 2020) – the current book is a

prequel. It provides the reader with a history of productivity as time management, and unsettles the histories of management as we know them. Reading feminist and queer histories of management is particularly thrilling considering Gregg no longer writes from Australia but now from the United States. Not directly from Silicon Valley but from Portland, where she is (by now a Senior) Principal Engineer at Intel, involved in designing technologies for managing productivity in the smart home.

The book is extremely personal, on more than one level, which adds to the intensity of the experience of reading it. Not only is the book dedicated to her father, but the postscript (previously a blog post from 2016) recounts what she calls a belated processing of her mother's death, and the ways in which her mother's interest in home economics and spiritual practices have shaped the book. Gregg also recounts the way she herself turned to self-help books, first out of curiosity, and later also to philosophical thinkers, in order to address the challenges of productivity. She openly recounts how she suffered from 'stress accumulation, angst internalization and social avoidance' [18] as she moved from academia to the high tech industry. This is more than just refreshingly honest writing, because these personal stories, scattered throughout the text, show that there is much at stake here, not just for Gregg but for all of us. That is because to be productive is such a forceful imperative today, one which demands both heroism and self-scrutiny in the mastery of one's time. Yet, in dealing with these demands, Gregg found only little support in the self-help books, and only little more in Peter Sloterdijk's work on asceticism. Her book is a gift, drawing on her own experiences and her research in the history of time management, seeking to provide nothing less than a chronopolitics for our time and collective resources for community.

The first chapter unsettles how the history of time management has been told by starting with 'the experience of women in the home prior to industrialization' [22]. Gregg shows how productivity 'was already the principal logic of the household' [33] by recounting the work of home economics and domestic science pioneers such as Ellen Richards and Christine Frederick. These are curious histories as we discover how the domestic economy was 'a matter of creating a resilient structure that

ensures refined calm in service to others' [27], or that there were corporate charts 'showing the housewife at the pinnacle of the domestic enterprise' [29]. There are also fascinating passages on Lilian Gilbreth here, whom Gregg establishes more firmly in the history of time-and-motion studies alongside her husband and Frederick Taylor. The Gilbreth Management Desk [32] is one fabulously timely piece of technology for efficiency and multitasking, and probably has resemblances to some of the hacked home office desks for the pandemic (unfortunately it seems Gregg didn't get copyright to print a picture of the desk for the book, but you can find images online).

The most unsettling section of the chapter though is about 'Mayo's Missing Women' [40], Adeline Bogatowicz and Irene Rybacki. They were excluded from the Hawthorne studies for being uncooperative, resisting orders and talking too much. Gregg shows with their story (extending the work of Gillespie, 1991) that while the Hawthorne studies and the human relations theory that followed further entrenched the productivity imperative and 'successfully married incentive and control' [47], it also infantilized and pathologized (considering their disobedience childish, and their objections to having their conversations recorded paranoid) two women who cared more about friendship and solidarity than productivity measures. Furthermore, as 'the management relation operates on norms of confession and self-appraisal that produce a regulatory effect' [47], its combination with engineering innovation (such as time-and-motion studies) 'helped to remove collective thinking from our understanding of work and its organization' [48]. There is more to be reckoned with here in the way human relations is taught and practiced today, and these feminist histories are important both in the context of a more careful historical account of Mayo, which doesn't put him on a pedestal as a saviour from Taylorism (cf. Bruce and Nyland, 2011) and with regards to his position in histories of management (e.g. Hanlon, 2016) and of psychology and therapy (e.g. Illouz, 2008).

The second chapter focuses on self-help literature and time-management manuals, which Gregg sees as 'crucial in the dissemination of productivity ideals and their commonsense principles to a wider public' [53]. Particularly

those parts of the literature addressed to executives encouraging their self-enhancement 'is another front in the broader neoliberal project to erase the vocabulary of collectivity from work' [54], as Gregg puts it. She understands time management through Sloterdijk's notion of asceticism, which makes it appear as 'a form of training through which workers become capable of ever more daring acts of solitude and ruthlessness necessary to produce career competence'; that is how this literature 'ensures the myopia necessary for professional commitment while simultaneously diminishing awareness of the work of others' [54]. If this sounds pretty sceptical of time management literature: it is – the critique of how this literature individualizes and forecloses horizons of collective action is very clear. In the chapter, though, Gregg also proceeds with a more nuanced analysis of how self-help books operate culturally.

One noteworthy aspect of Gregg's analysis is how she highlights the way techniques and technics are entangled, for example in the way a desk can serve as an 'auxiliary brain' [57-59]. Part of the point of the story here is that the media technologies we use to manage productivity today, such as apps and smart watches, have a longer history. Gregg shows how the productivity literature addresses the challenge of prioritizing tasks. So, while part of what is meant to be learnt here (in the case of Peter Drucker's advice to executives) is 'to justify inattention to unworthy tasks and to provide motivation on important items when an immediate payoff or incentive may be lacking' [63], we also get a valorization of the inane when 'clearing an inbox or organizing a calendar is a momentary pleasure that often reflects an inability to influence the broader agenda governing one's work' [62]. There is a lot on lists here as a key cultural technique for managing priorities and workflows, a technique involving constant repetition and training. There are also odd techniques for fighting procrastination, such as 'eat-the-frog', which means getting the most difficult task for the day done first. The challenge? 'Identifying what constitutes the day's frog is the crucial step to ensuring high returns and satisfaction' [64]. What is your frog for today?

The chapter also shows how 'the art of time management evolves from a system of classification benefiting discrete units of time and information to a mode of self-care aspiring to meet the transformed conditions of

immaterial labor' [73]. The self-help literature 'grants readers time to think about time', an in enforcing this reflection the productivity regime 'aspires to cognitive programming' [74]. More so, technics also increasingly impinge upon 'the intimate realm of individual psychological self-surveillance' [76]. This makes for quite embarrassing reading: the reader has to acknowledge that despite all the poking fun and critique, she has probably tried out many of these techniques, though perhaps not to the extreme or with as much humour as Carl Cederström and André Spicer (2017) in their book on self-optimization. With reading also comes the realisation of the way productivity management is self-care only at the best of times, and otherwise it largely individualizes the temporal pressures and performance demands so common to work today, as Gregg's framing in terms of athleticism (as a kind of post-secular version of the work ethic) makes clear.

The third chapter is about productivity apps, and it focuses on how personal productivity has become a matter of asking tech for help. Much of this is about aesthetics, in that apps with minimalist design 'communicate a "clutter-free" feeling' [82], simplifying messy lives. It doesn't matter what needs to get done, it is all about the process of organizing the doing: 'An aesthetically appealing app serves to displace questions about the volume or character of work that requires action. Instead, developers celebrate technology's sublime abilities to remember, predict, anticipate, and deliver' [86]. It is this tech solutionism that makes these apps so attractive and such failures at the same time. But of course, the failure is ours: we are the ones overwhelmed with work. Gregg suggests here 'digital productivity tools offer the foundational elements of a religion' [90] in that they demand that we confess our fallibility, we subsequently practice abstinence of things (like social relations) that distract us from productivity, and finally achieve omniscience, with pure creativity and optimized activity [90-91]. Again, we find ourselves athletes competing with each other in the quest to become productive.

Apart from the analysis of this quasi-religious logic of time management, with no redemption or ascension in sight, there are two further aspects of Gregg's analysis in this chapter that stand out. One is the way we get to relate to others and to ourselves. As 'productivity orthodoxy involves a

vision of mastery and control that entails freedom from obligation but not from work' [91], it requires this work to be done. On the one hand this is a question of re-establishing social hierarchies and getting others to do work for us: 'In the network era, productivity apps are the *interface* for a new kind of delegated labor' [92], where liberating oneself means burdening others. Even if these others are often imagined to be machines, such as the Google Assistant, these technologies also often serve as surrogates for human workers, reproducing racism and patriarchy, as Neda Atanasoski and Kalindi Vora (2019) have also shown. On the other hand the 'freedom to work' [93] means that we become our own managers, in and outside of work, and this requires control, responsibility, and increasing amounts of work:

... through the adoption of productivity practices, responsible individuals create regimes of anticipation, protection, and recovery to meet the temporality of computationally inflicted schedules. This labor is preparatory and reparative as much as it is obligatory. [94]

It is these new dimensions of the labour of time management – this is the second further aspect that stands out in this chapter – which makes Gregg suggest that we have seen a 'move from personal productivity to personal logistics' [94]. The table on page 95 is perhaps the most provocative bit of analysis Gregg offers in the book (I had seen this on her blog earlier and could not wait to see her write more about it). The point is that where personal productivity was largely tied to the corporation, personal logistics is not, bringing with it a new chronopolitics and a self-management, which also operates when we don't have a job. We coordinate activities rather than complete tasks, we anticipate time rather than measure it (we could talk about the crisis of time as a measure of value here...), we bill rather than clock hours (maybe not such a big crisis...), our loyalty is with our networks not a firm, and so on. All of this reads as a very acute analysis of labour in cognitive capitalism, and it also chimes in with analyses of the way in which logistics as knowledge and practice has become much more important for organization today. If activity is all about circulation, and it becomes difficult to see the beginning and the end of it, leading to opacity and to a crisis of representation, then it is fitting that we are left with 'a repetitive set of gestures meant to console us when faced with the knowledge that there

are always too many things to do, but there may never be a sense of meaning behind the disorder' [99].

It is in the next chapter on mindful labour that Gregg tries to turn this bleak picture around. For her the 'evident need for mindfulness practices reveals the inadequacy of productivity as a way to think about work at a time that finite material labor outputs...no longer capture the quality or extent of labor being performed' [105]. If some time management techniques might help us cope despite their entanglement with the productivity imperative, then mindfulness can be considered 'a temporary fix for the challenges of contemporary work life' [105]. Gregg offers her understanding of mindfulness as her 'contribution to the vocabulary for labor politics' in cognitive capitalism [105]: while she acknowledges that mindful labor 'is admittedly limited as a form of organized resistance', she also sees how it 'offers a form of self-help for harried workers that may be useful in the short-term' and might also offer some elements for collective politics [106]. In her discussion of Kabat-Zinn and other approaches to mindfulness Gregg is careful to point to the contradictions of emphasising 'non-doing' while fixing productivity regimes; nonetheless, mindfulness and the 'chronic self-analysis' it involves can offer repair and solace and potentially 'flips the default rationale of productivity' [110].

The ambivalences of mindfulness become more pronounced as Gregg discusses mindful technologies such as the intelligent headbands Muse and Thync (see Przegalinska, 2019). These are meant to provide 'training and recovery techniques to ensure peak professional performance' [114], but can achieve the opposite: 'in failing to provide a calm state, mindfulness technology can actually generate anxiety' [115]. What is more, in comparison to more traditional forms of meditation, these technologies displace the human actor: 'they relocate the intentionality of self-reflection from the person to a device' [116], and in scanning bodies they 'expose a self that is otherwise hidden and oblivious', their 'automated empiricism registers effects without cause' [116]. While this is potentially radical for Gregg, since it involves 'the momentary suspension of a command and control view' [116], it also reifies 'the gap between mind and body' [117] contrary to what mindfulness teaches. So, while currently mindful

technology is ‘another means by which today’s workers risk being alienated from the character and value of their labor’ [120] and mindfulness ‘does not escape the broader logic of productivity governing the workplace’ [122], at least it ‘decenters, albeit slightly, the egocentric command-control dynamic that the pact between temporal sovereignty and professional competence has long upheld’ [122]. In that way, by ‘forfeiting participation in the constant drive to perform’, for Gregg, mindfulness ‘has the potential to occupy a place alongside other kinds of work refusal that acknowledge the biopolitical constitution of labor.’ [124].

It is this reading of mindfulness as a crack in the productivity regime that Gregg wants to turn into a bigger projective reflection on anthropotechnics with the help of Sloterdijk. In the conclusion, in seeking to escape the ‘hierarchy of privilege between those who choose who are scheduled... and those who are scheduled’ [130], Gregg turns to coworking spaces and morning dance parties (and curiously, the collaboration platform Slack) as two examples of ‘building atmospheres for social connection outside the temporal dictates of the organization’ [132]. First reading of these examples I could not help but think that Gregg was desperately grasping at straws – has not Slack turned into yet another annoying platform for the ‘presence bleed’ of work and the nuisance of constant messaging? Coworking spaces don’t strike me as heavens for self-directed work, either, considering the pressures start-ups or entrepreneurs, not to mention precarious artists and other groups we find in these spaces, are subject to. And Daybreaker also struck me as comparable to what in Berlin are the Berghain morning dance sessions bereft of all the excesses Berghain and other electronic music venues are otherwise known for. We also know how compatible Burning Man [136] is with Silicon Valley culture (Turner, 2009).

But then Gregg also says she holds ‘no illusion that these two subcultures [coworking and morning dance parties] are untouched by varieties of class and racial exclusivity or substantial networks of financial capital that bankroll their efforts’ [137]. Yet Gregg rightly insists that both ‘play with the constraints of the workweek paradigm’ [137] and that ‘each provides simple gestures of self-care, even luxury, that today’s generic workplaces find it increasingly difficult to provide’ [137-138]. Gregg may have a point when she

says that ‘both micro-movements... operate in the interests of the worker rather than the manager’ [138]. I just wonder if there are no better examples for alternative chronopolitics that more radically break with productivity? I am thinking for example of the magazine *Idler* and everything it stands for (a copy of which my PhD supervisor Martin Parker gave me once at the beginning of my PhD – a bad idea?), the 19<sup>th</sup> century Luddites that smashed the machines, which imposed capital’s temporal order on a new working class, or other current examples of practices of disconnection (e.g. Karppi 2018). But maybe Gregg is right not to include these: she starts from where she is and maybe where we are, too, offering us a way through the predicament of productivity and extracting a chronopolitics from time management techniques and mindfulness – tools we already have in hand, perhaps ready to be collectivized.

The book finishes with ‘Principles for post-work productivity’ [139-140], which oppose metrics, record keeping and the career, encourage co-location and supportive networks, promote collective immunology and reward collaboration. At this point, I would very much have liked the book to turn into a self-help guide, with more flesh on the bare bones of these principles. But then maybe we already know how to operationalize some of these principles. The last one in particular reminds me of conversations about the university and the undercommons (Moten and Harney, 2004) and the kinds of spaces that *ephemera* arguably already operates through: ‘The technical, financial, and temporal privileges embedded in the organization can be collectively raided to build productive atmospheres of our own’ [140]. Go for it!

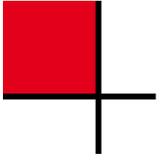
## references

- Atanasoski, N. and K. Vora (2019) *Surrogate humanity: Race, robots, and the politics of technological futures*. Durham: Duke University Press.
- Bruce, K. and C. Nyland (2011) ‘Elton Mayo and the deification of human relations’, *Organization Studies*, 32(3): 383-405.
- Gillespie, R. (1993) *Manufacturing knowledge: A history of the Hawthorne experiments*. Cambridge: Cambridge University Press.

- Gregg, M. (2011) *Work's intimacy*. Cambridge: Polity Press.
- Gregg, M. and G. Seigworth (eds.) (2010) *The affect theory reader*. Durham: Duke University Press.
- Hafermalz, E. (2020) 'Out of the panopticon and into exile: Visibility and control in distributed new culture organizations', *Organization Studies*, online first.
- Hanlon, G. (2016) *The dark side of management: A secret history of management theory*. London: Routledge.
- Illouz, E. (2008) *Saving the modern soul: Therapy, emotions, and the culture of self-help*. Berkeley: University of California Press.
- Karppi, T. (2018) *Disconnect: Facebook's affective bonds*. Minneapolis: University of Minnesota Press.
- Przegalinska, A. (2019) 'Mind tracker', in T. Beyes, R. Holt and C. Pias (eds.) *The Oxford handbook of media, technology and organization*. Oxford: Oxford University Press.
- Spicer, A. and C. Cederström (2017) *Desperately seeking self-improvement: A year inside the optimization movement*. New York: OR Books.
- Turner, F. (2009) 'Burning Man at Google: A cultural infrastructure for new media production', *New Media & Society*, 11(1-2): 73-94.

## **the author**

Armin Beverungen is junior professor for organization in digital cultures at Leuphana University in Lüneburg, Germany. For around ten years he was a member of the editorial collective of *ephemera*. He researches algorithms and organization. Email: armin.beverungen@leuphana.de



# Digital powers: Surveillance and economic logics in a datafied world

Mikkel Flyverbom

## review of

Zuboff, S. (2019) *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. London: Profile Books. (HB, pp. 691, \$ 24, ISBN: 9781781256848)

Some scholars churn out paper after paper with small arguments and thinly sliced contributions, and may compile them into books that connect the dots and offer broader perspectives. Others leave fewer, but much bigger footprints. Shoshana Zuboff, professor emerita at Harvard Business School, certainly falls in the second category. Her first book, *In the age of the smart machine: The future of work and power* (Zuboff, 1985), remains a pillar in fields of research focusing on digital technologies, information systems, organization and management, and knowledge production. Fast forward to today, and her second monograph *The age of surveillance capitalism: The fight for a human future at the new frontier of power* has landed smack in the middle of heated discussions about the role of technology in society, the dominance of tech companies, contemporary mutations of capitalism, and how to protect fundamental human values in the face of these forces. It is a big and bold book, and its impact is already visible. It was listed as number one in former president Barack Obama's 2019 list of favorite books, in the *New York*

*Times*, *Time Magazine*, *The Guardian*, and a wealth of other lists of top books. Zuboff's thoughts about our dark digital future have also been picked up in more popular contexts, such as Jeff Orlowski's new documentary *The social dilemma* and DJ Shadow's new album *Our pathetic age*.

## The diagnosis

Zuboff's main argument is that we have grossly underestimated the consequences of the business models and commercial desires of Silicon Valley companies such as Google, Facebook and Amazon. For a long time, these companies successfully cast themselves as drivers of freedom, innovation, democracy and community, and as noble providers of smart and free services. While this image of the tech industry has lost its gloss in recent years, our responses and forms of critique remain fuzzy, scattered and feeble. We may be concerned that social media platforms spread fake news and misinformation, or take little responsibility for harmful contents. Some may also be pushing for approaches to data extraction that are more ethical, and asking for our privacy to be better protected. And others are asking critical questions about what the size and monopoly-like positions of these large tech companies will mean for existing industries and institutions. But according to Zuboff, such concerns and conversations simply distract our attention from a much bigger phenomenon – a looming threat to our human future. She calls it 'surveillance capitalism' and uses the first page of the book to define this term as a 'new economic order that claims human experience as free raw material for hidden commercial practices of extraction, production, and sales', and a 'parasitic economic logic' that seeks to control human behavior, undermine democracy, provide total certainty about human lives and social order, and otherwise dominate society. Human experience – our emotions, voices, fears and personalities – is what surveillance capitalism harvests and uses for its commercial exploitation.

It is important to stress that in Zuboff's account, the root of the problem is not technology, digital transformations, or even individual companies, although her account largely focuses on the role of Google in the making of surveillance capitalism. At the core of surveillance capitalism lies a business

model and a corporate project that seeks to turn human lives into commercial profit, just like earlier forms of capitalism sought to turn nature into the raw material for purposes of economic gain. This mutation of capitalism is an overlooked phenomenon that we lack proper vocabularies to understand and the necessary political mobilization to counter. *The age of surveillance capitalism* is oriented to both academic and political goals, and has also been picked up by key actors in the regulatory space, such as the European Commission's executive vice-president Margrethe Vestager.

Zuboff's diagnosis suggests that the growth of the internet and the spread of digital technologies and data-driven approaches have paved the way for surveillance capitalism. However, the problem is not technology itself, but the commercial and ideological forces that have propelled surveillance capitalism into its present and dominant form. The book is an important contribution to research focusing on the political economy of digital transformations. In her detailed account, Zuboff traces the historical events, political choices and corporate strategies that turned the digital space into a commercial surveillance machine. In her account, events like the terrorist attacks on 9/11 and the ensuing 'war on terror' cancelled regulatory efforts and solidified the lack of governmental demands for privacy protection by internet companies. Also, Zuboff highlights how the pressure from shareholders made Google's founders drop their ideals about not mixing search results and advertisements, and develop very aggressive approaches to data-mining and targeting for purposes of advertising. As a result, technological developments that could have been used for noble purposes became instruments of dark powers that let commercial logics dominate. This also implies that Zuboff sets out to remind us that we could – and still can – use digital technologies in less damaging ways, and with a focus on human, organizational and societal progress. But for now, we are stuck with a few dominant companies that control approximately 70% of all internet traffic and largely set the conditions for developments in the digital domain. This situation has more profound and extensive ramifications than we may realize at the moment, and Zuboff offers a number of disturbing scenarios and lines of argument.

## **Key ideas**

To this reviewer the most dramatic of these insights revolves around the ability of tech companies to both pursue strategies that focus on intensified information control and hidden behavioral modification. Let me unpack these two issues and their linkages.

Tech companies now have ambitions that go beyond dominating the market for advertising or controlling digital infrastructures. They are increasingly engaged in what Zuboff terms the 'reality business' [194], and have ambitions to extract, control and modify human realities. The book highlights how Google and Facebook early on realized that digital technologies and data can be used to affect human emotions and behavior in hidden and extensive ways. Their business model is no longer limited to selling products or enabling advertising, and the next step is to anticipate and control behavior in more extensive ways. Whereas digital technologies in the past constituted a separate domain, a 'cyberspace' that we could log onto and off again, they now infiltrate most parts of our lives. This means that it becomes easier for tech companies to control what information we encounter, measure how we react and modify our behavior for commercial and political purposes. As Zuboff puts it: 'There was a time when you searched Google, but now Google searches you' [248].

Surveillance capitalists have created a totalitarian utopia that revolves around perfect information, total visibility and absolute certainty when it comes to knowing what individuals do and want. And opacity and secrecy when it comes to the operations of their own companies and practices. This information asymmetry is central to Zuboff's argument, and she offers a range of examples of its problematic consequences, also in other contexts. Insurance companies are now able to track driving behavior in real time and adjust premiums immediately if a driver does not use seatbelts or takes chances in traffic. The book also highlights the (now abandoned) Google Sidewalk project in Toronto that was intended as an extensive experiment engaging data-driven approaches to understand and shape human lives and communities. To Zuboff, such 'smart solutions' are nothing but euphemisms

that hide the real motive: to remove uncertainty, control behavior and turn human lives into ‘behavioral surplus’ [318] for surveillance capitalism.

But the information asymmetry also has more fundamental consequences, and one of the key arguments in the book is that surveillance capitalism creates new forms of inequality and divisions that are not only economic, but also about knowledge. She terms this ‘the ultimate institutionalization of a pathological division of learning. *Who knows? Who decides? Who decides who decides?*’ [415] and suggests that this is how power and control work in a digital, datafied world. The more tech companies know about us, the more they are able to control ‘the production of meaning’ (Zuboff, 2020), which is yet another way in which Zuboff draws parallels to earlier forms of capitalism that sought to control the ‘means of production’. In her account, the dominance over knowledge and insight, and the commercialization of our experience and lives have become the battleground where our ‘fight for a human future’ will have to be fought out in years to come. The book asks why we should allow human experiences and futures to be harvested as free, raw material and instrumentalized for strictly commercial purposes that work against freedom, democracy and human progress. And should we even allow this ‘trade in human futures’ when we do not for instance allow the trade in human organs, as Zuboff (2019) put it forcefully at a recent talk? These questions about the limits of digitalization and datafication are increasingly central in public discourse and regulatory efforts in Europe and beyond. As Zuboff reminds us, the issue is not digital technology itself, but the conditions and driving forces that technology come with at the moment. Her book both unifies such long-standing concerns and supercharges the debate about the possibility of creating a digital future that benefits humans and societies, and not a handful of companies in Silicon Valley and the powers they serve. And what is at stake is not technology or market shares, but our social order.

The book is both a deep analysis of an emergent, important phenomenon and a call to arms when it comes to countering the forces that have turned digital transformations into ‘an overthrow of the people’s sovereignty’ [8]. But it is not a nuanced book when it comes to acknowledging that most people willingly and eagerly use digital technologies and share their data.

Digital technologies have become the backbone of so many parts of social life because people embrace them, seek information and are excited about the services and solutions tech companies offer. The so-called ‘privacy paradox’ (Gerber et al., 2018) – that many people may voice concerns about their personal data and privacy, but also share data carelessly and rarely spend time protecting them – is absent from Zuboff’s account. Rather than discussing this gap between attitudes and behavior, the book depicts tech companies as villains that deceive people and undermine free will. Scholarly work seeking to emancipate people from hidden, dominant forces has a long history, and Zuboff’s book also speaks from a privileged, critical position with little attention to the human desires for technology that have also made digital platforms and tech companies thrive. Not many other theorists of digital transformations would get away with leaving out this important dimension, but Zuboff offers a forceful account that places corporate strategies and the economic and political forces they have enrolled at its core.

This focus on the political economy of digital transformations and datafication makes Zuboff’s book a valuable contribution to earlier and emergent research that connects questions about technology to economy, politics and societal transformations. Such work has explored how the emergence of digital platforms raises questions about politics and economics (Gillespie, 2010; Srnicek, 2017; Langley and Leyshon, 2017), or focused on processes of datafication as the foundation of ‘data capitalism’ (West, 2017). Other research has explored the intersection of datafication and knowledge production (Beer, 2019), exposure (Harcourt, 2015) and visibilities (Flyverbom, 2019) with a focus on questions about power. Furthermore, Zuboff’s book ties in with work on the problems and dangers of algorithmic operations for democracy and society (Pasquale, 2015; O’Neil, 2016). I believe we will see a surge in scholarly work that connects and extends these important issues into new empirical and theoretical domains.

## Avenues for future research

In years to come, the ideas in this book will shape scholarly work in multiple fields. The kind of mapping offered in this book should be a source of inspiration for a wealth of future avenues of research for scholars in sociology, communication, and organization and management studies. One research stream that I hope Zuboff's work will energize further revolves around questions about information, visibility and power. Digital technologies and data-driven, algorithmic approaches make the exposure of social life easier and more invasive than ever before, and offer new ways of seeing, knowing and governing organizational affairs. Such research will both take us back to fundamental conversations about knowledge and epistemology, and into new terrains marked by automation and technological alternatives to human perception and insight.

An important research avenue is how digital transformations shape our democratic institutions when logics of surveillance capitalism travel from the private sector into the public sector. Policing, health care and the provision of public services increasingly rely on algorithmic, automated decision-making, and this raise questions about fairness, bias and the intersection of humans and machines. Zuboff's book can inform such research through its articulation of the political and commercial forces that have defined the terms and conditions for the digital domain, and its focus on how to facilitate and strengthen alternative futures. Through more empirical investigations of the workings of digital systems in the public sector, we may also create awareness about the institutional and political choices that we face if we want to enable digital transformations on other terms. Such work could also offer more elaborate empirical accounts of algorithmic operations (O'Neil, 2016) and situated studies of how logics of surveillance capitalism seep into organizational settings.

Future research could also explore how digital and datafied possibilities for observation create new dynamics related to both recognition and control, and lead to new forms of individual and collective behavior. When everything can be exposed, people need to develop new competencies and ways of navigating in social settings, and Zuboff's work may provide a

valuable backdrop to such studies of the character and conditions of digital communication environments. Such work may be particularly powerful if focusing on how digitalization and datafication paves the way for new organizational phenomena, places new demands on professions and employees, and leads to new forms of management. This would open up research avenues combining insights from Zuboff's first book, *In the age of the smart machine*, with newer ones about surveillance and data capitalism. Additional research may focus on how digital transformations condition particular forms of knowledge production, epistemologies and ontologies. As Zuboff suggests, surveillance capitalism (re)introduces claims about truth, objectivity and certainty that require us to return to fundamental questions about knowledge claims and representations. Such research will offer more situated accounts of how contemporary digital and datafied infrastructures support and constrain particular forms and regimes of knowledge, with a focus on the issue of divisions and inequality articulated by Zuboff.

Engaging with this excellent book will help organization and management scholars pursue research that connects long-standing concerns about knowledge and power with novel insights about digital ubiquity and the political economy of technology. Pursuing such research will not only translate Zuboff's broader diagnosis into situated and nuanced investigations of the workings and dynamics of technological transformations, but also help us envision and craft our own digital future and develop organizations that take responsibility for technological transformations on other terms than those we are offered at the moment.

## references

- Beer, D. (2019) *The data gaze: Capitalism, power and perception*. London: Sage.
- Flyverbom, M. (2019) *The digital prism: Transparency and managed visibilities in a datafied world*. Cambridge: Cambridge University Press.
- Gerber, N., P. Gerber and M. Volkamer (2018) 'Explaining the privacy paradox: A systematic review of literature investigating privacy attitude and behavior', *Computers & Security*, 77: 226-261.

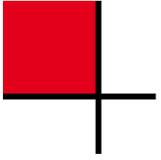
- Gillespie, T. (2010) 'The politics of "platforms"', *New Media & Society*, 12(3): 347-64.
- Harcourt, B. E. (2015) *Exposed: Desire and disobedience in the digital age*. Cambridge, MA: Harvard University Press.
- Langley, P. and A. Leyshon (2017) 'Platform capitalism: The intermediation and capitalisation of digital economic circulation', *Finance and Society*, 3(1): 11-31.
- O'Neil, C. (2016) *Weapons of math destruction: How big data increases inequality and threatens democracy*. New York: Crown.
- Pasquale, F. (2015) *The black box society: The secret algorithms that control money and information*. Cambridge, MA: Harvard University Press.
- Srnicek, N. (2017) *Platform capitalism*. Cambridge: Polity.
- West, S. M. (2017) 'Data capitalism: Redefining the logics of surveillance and privacy', *Business & Society*, 58(1): 20-41.
- Zuboff, S. (1985) *In the age of the smart machine: The future of work and power*. New York, NY: Basic Books.
- Zuboff, S. (2019) *A conversation with Shoshana Zuboff on surveillance capitalism in the age of digital transformations*. Copenhagen Business School, September 30.
- Zuboff, S. (2020) 'You are now remotely controlled', *New York Times*, 24 January.

## the author

Mikkel Flyverbom is Professor with special responsibilities in Communication and Digital Transformations at the Department of Management, Society and Communication, Copenhagen Business School. His research addresses questions about transparency, visibilities and anticipation in organizational settings, and his research on these topics has appeared in journals such as *Organization Studies*, *Business & Society*, *Organization and Management Communication Quarterly*. He is also the author of *The digital prism: Transparency and managed visibilities in a datafied world* (Cambridge University Press, 2019).

Email: mf.msc@cbs.dk





# Against transparency: Surveillant assemblages, partition and the limits of digital democracy

Chris Land

## review of

Birchall, C. (2017) *Shareveillance: The dangers of openly sharing and covertly collecting data*. Minneapolis, MN: University of Minnesota Press. (PB, pp. xii + 86, \$7.95, ISBN 978-1-5179-0425-8)

In this short book, just 64 pages, Clare Birchall addresses the shifting relationships between data and citizens to unpack what big data, transparency and openness, mean for democracy and the government of subjects. It stands as an interesting read alongside Zuboff's (2019) voluminous *The age of surveillance capitalism*, not only for the contrast in page count, but also for the distinct theoretical take and the greater focus on the role of the State. Where Zuboff's concern is primarily on the private sector and the surveillance-based business models of companies like Google, where the primary commodity is user data, Birchall is more concerned with the seemingly utopian ideas of transparency and 'open government', as developed in the Obama era USA in particular. Throughout the book, she is at pains to focus on how sharing plays out in practice – who shares what data with whom – and draws upon the etymological roots of sharing in 'the

Old English *scearu* – “a cutting, shearing, tonsure; a part of division” [39] to examine both the dominant, neo-liberal sharing/cutting up of data, and new, potentially radical, ‘cuts’ into data, which might challenge that hegemony. As such the text, offers both a critique of the dominant model of dataveillance and neo-liberal subjectivity, and some potential paths to an alternative use of data.

Theoretically this project is anchored in the political writings of Jacques Rancière on democracy and the partitioning of the sensible, though in dialogue with ideas from Wendy Brown, Geert Loivink, Gary Hall, Alexander Galloway, Sarah Kember and others, including the almost obligatory reference to Gilles Deleuze’s (1992) prophetic ‘Postscript on the societies of control’. From this list, Rancière (2004) takes central place through his development of the idea of a distribution of the sensible, analysing democracy in terms of what can be seen and what can be said, or perhaps more accurately, of who can be seen, who can be heard, and what can be said of them. For Rancière, like Derrida, democracy is more of an event or ideal than a concrete organizational form. Where Derrida understands democracy in terms of a promise – democracy *to come* – for Rancière democracy is the moment when those who are excluded from participation – the part with no part – make demands in such a way that the political status quo must be reconfigured to accommodate them, rendering their exclusion visible, and demanding a reconfiguration of the sensible. Any definition of the *demos* that constitutes a democracy will exclude as much as it includes. Rancière (2004: 12) gives the example of the artisans excluded from the Athenian agora because they do not have the time to participate in politics: they are too busy working at their occupations. As such, they had no part in democracy, alongside the more obviously excluded slaves, women and children, on whose work political participation was dependent. For Rancière it is when this ‘part with no part’ makes a political demand that democracy appears, not because this specific demand can ever complete democracy, creating a perfectly democratic institution by adding in the part that was excluded, but because in the moment of demanding participation – demanding to be seen and to be heard – they call for a ‘redistribution of the sensible’ and a shift in politics and participation that stands for all the

excluded, or, perhaps better, draws into political debate the constitutive processes of exclusion that constitute the *demos*.

This notion of division, partition and shearing – the distribution of political parts – runs throughout Birchall’s text. It allows her to unpack the ways in which open data and transparency – data surveillance – render specific subjects visible but also makes demands upon them, interpellating them as a particular kind of subject. Political participation requires subjects to take ‘a part’ (a share) and to play that part (a role). Birchall approaches this question of political participation through the two main questions dominating debates over big data and government: ‘How much and what kind of data should citizens have to *share* with surveillant states? and How much data from government departments should states *share* with citizens?’ [1]. By emphasising the idea of sharing, in the political-theoretical context outlined above, Birchall develops a concept of *shareveillance* as process of antipoliticization that ‘forecloses politics even while seeming to foster forms of democratic engagement with government through open data’ [1]. The reason this is anti-political is that the *part* distributed to citizens through open data is pre-delineated, articulating specific modes of engagement with data, and responsibilities to both share their own data (involuntarily in most cases) and to monitor the state through specific uses of officially shared data, often mediated through dashboards and apps created by a new political layer of *datapreneurs* who render government visible in particular ways (for a profit). Following Rancière, Birchall’s suggestion is that this foreclosure of participation is anti-political because it is precisely the contestation over participation and the sensible that constitutes politics proper.

In chapter 1 Birchall makes short shrift of the liberal-utopian ideologies of a sharing economy, juxtaposing the likes of Benkler and Shirky with Dave Eggers’ (2014) *The Circle* to unpack the ‘imperative towards sharing’ as a ‘form of distribution’ in which ‘[h]uman and nonhuman actors are involved in the dissemination of data, documents, photos, Web links, feelings, opinions, and news across space and time’ [9], drawing out the broader point that ‘sharing’ allocates shares, roles and responsibilities and is an immediately political, and organizational, process, rather than some kind of frictionless exchange ushering in a world of everything for everyone.

Chapter 2 brings Rancière in to play, juxtaposing this network utopianism with an idea of politics that ‘revolves around what is seen and what can be said about it’ [11, quoting Rancière, 2004]. At just two pages long, this chapter also introduces Rancière’s commitment to *equality*, seen throughout his oeuvre but perhaps most famously in *The ignorant schoolmaster* (Rancière, 1991). For Birchall, like Rancière, politics and democracy are inseparable and grounded in a foundational supposition of equality as the right to political participation. This provides the book with a distinctive analytical, but also normative, perspective when evaluating seemingly democratizing initiatives like open government.

Chapter 3 moves the text on to more technical considerations, drawing on Alexander Galloway’s (2004) concept of *protocological* control, and considering innovations like *cookies*, to examine how the internet has been partitioned and closed off in order to enable privacy and private ownership, in contrast with its foundational infrastructure. These technologies are what enable, but also control and condition, the ‘open’ sharing of data, and the assemblage they constitute, is the subject of chapter 4.

It is chapter four that most clearly lays out Birchall’s idea of shareveillance, so it is worth quoting her at some length here. Taking issue with the etymological root of *data* in *dare* – the Latin *to give* – Birchall suggests that sharing is more complex than simply giving or taking: the metaphors that have predominated in discussions of an electronic gift-economy, or the one-sided discussions of surveillance that focus only on what is taken from subjects. This is because data is produced within an assemblage, and does not pre-exist that production:

It is not clear that data belongs to us in the first place in order for it then to be given or taken. Rather, we are in a dynamic sharing assemblage: always already sharing, relinquishing data with human or nonhuman agents... “Shareveillance” is intended to capture the condition of consuming shared data and producing data to be shared in ways that shape a subject who is at once surveillant and surveilled...one who simultaneously works with data and on whom the data works. [18]

This positioning of the subject as part of an assemblage that confers rights and responsibilities, rather than attempting to defend a pre-extant subject

who owns their data, is one of the key contributions that Birchall makes in the book. Using Rancière's conception of politics enables her to maintain a normative democratic position when evaluating the production of data subjects within this assemblage. In this she moves quickly on from discussions of data ownership and exploitation, which has been the focus for much critical work on the political economy of the internet (for example Fuchs, 2014; Zuboff, 2019), to focus on the processes of opening and closing that characterise *government* data: the main focus for chapter 5 which, at 16 pages, is the longest in the book.

Birchall's distinction between open and closed data is important to her argument. Open data is that which governments (often through the mediation of private businesses, or *datapreneurs*) choose to share with subjects. Closed data is that which is collected by central intelligence agencies (or private businesses) but not shared with those whose activities produce the data. These are not 'good' and 'bad' versions of sharing, however. 'All shared data mobilize a politics of visibility, a demand to align with a political and ethical distribution of the digital sensible' [23]. In focusing on this, Birchall carves out a space for thinking about collective politics and democracy in 'an era of ubiquitous dataveillance' that is not based on privacy *against* a surveillant, big-brother government, precisely because 'privacy claims are particularly weak when it comes to collective politics' [25]. Instead, she turns her attention to how open data places particularly responsibilities on citizens to become *active* citizens, monitoring their government in quite specific ways. Birchall suggests that the 'shareveillant subject is hailed with an added imperative- "Hey, you there! Come closer and watch."' [29], even though this interpellation to audit, analyse and witness government is impossible to fulfil because of the sheer volume and complexity of data, creating a role for reintermediation by private *datapreneurs*. This political activity then becomes a kind of work: 'Watching and seeing through (and acquiring and refreshing the technological competence required to do so) become forms of immaterial labour. In the process, a characteristic of neoliberal logic is performed: the subject is bequeathed responsibility without power' [30]. At the individual level then, the interpellation calls upon citizens to work on themselves to

become effective auditors, responsible for monitoring a government they can hardly influence. At the level of the economy, this citizenship-becoming-labour is echoed through the idea that transparency of government will generate efficiency and prosperity, for example by making markets more efficient and calling on citizens to make judgements about public service provision through transparent data on education and health. In all cases the shareveillant subject 'is one whose relationship to government is shaped by the market' [32] and who, citing Wendy Brown (2005: 43), 'strategizes for her- or himself among various social, political and economic options, not one who strives with others to alter or organize these options' [36].

This observation segues nicely to chapter 6, which examines 'new cuts' that might interrupt surveillance and offer alternative, collective projects of organizing data. Much of the attention in this chapter is given over to examining technologies for blocking the specific visibilities imposed on citizens of shareveillant government: forms of cryptography or even hardware like the *Blackphone* [42] that allows a degree of invisibility for users. Following Galloway and Thacker (2007), Birchall refers to these technologies as 'affording nonexistence – a change to be "unaccounted for," not because the subject is hiding, but because she is invisible to a particular screen' [44]. This alternative to an ideology of visibility and openness is unpacked through Derrida's idea of the secret, Byung Chul-Han's critique of transparency, and Glissant's 'right to opacity', to suggest that 'we need to meet the pervasive protocols of inequitable dataveillance employed by the securitized state and the logic of shareveillance with forms of illegibility: a reimagined opacity' rather than 'acts of publicity' like petitions and marches [8]. This is not simply to reject sharing, however, or to insist on an inviolable space of privacy. Instead Birchall turns to the idea of 'commons' as an alternative practice of sharing, drawing on de Angelis and Federici to suggest a version of sharing that is based not on transparency and quantification, but on a 'quality of relations' enacted within a specific assemblage [50].

The final substantive chapter of the book, 'working with opacity', turns to radical, open-access academic publishing as an example of commoning and

‘non-shareveillant’ sharing [51]. Using the example of the liquid books that she developed with Gary Hall, Birchall suggest that there is a radical potential to open access publishing that cuts much deeper than the productivity enhancing model of open-science that dominates economic, quantified and seemingly progressive commitments to open access in practices like the UK’s Research Excellence Framework (which stipulates open access as a requirement for outputs to be submitted for evaluation). What Birchall has in mind here is a potential for radical openness to transform that which is shared, as well as the network of relationships through which it is shared. As she puts it:

What is radical about digital open access texts is that they have the potential to intervene in politico-institutional pressures placed on cultural production and alter ideological assumptions about what a text and an author can and should do and mean. [52]

With the *Liquid Books* and *Living Books about Life* projects, the books ‘were made available on both a *gratis* (free) and a *libre* (reuse) basis’ [53], transforming the very idea of authorial property by radicalising the idea of re-using others’ ideas: the very heart of academic writing and citing. She also considers practices of collective authorship in this chapter, briefly reviewing *Acéphale*, *Tiqquin* and the *Invisible Committee* as examples of radical, collective, shared authorship that both resists the quantifying, individualising practices of authorship that dog neoliberal higher education, research and writing, and offers a collective, alternative practice of commoning that might replace it.

Whilst this is a short book, it is extremely dense, and I had to read it three times when preparing this review. For a short book, it is a long review but I still have not done justice to it and would need twice the length to really work through the ideas it lays out. In a sense, however, this is the problem of the book. It is too short. The book tends to gesture at ideas, referencing a range of important concepts and sources, but does not work through them in the level of detail, and with the rigour, we usually expect from academic publications. This could easily have become a full-sized book. That would have allowed Birchall to really develop her ideas on commoning and radical open-access publishing, working through the examples she gives in more

detail and returning more explicitly to the normative framework she develops in the early chapters of the book. For the reader who is not already familiar with the sources and examples she used, this could be hard going, as Birchall does not do the work for you. Indeed, it feels a bit like a good conversation in the pub after a conference dinner, where a small group gathers, in convivial surroundings, and sharing the same short-hand and theoretical reference points. If you are not already a part of the conversation, however, it isn't too easy to take-part. But perhaps that is entirely appropriate in a text that offers a defence of opacity and relational networks?

## references

Brown, W. (2005) *Edgework: critical essays on knowledge and politics*. Princeton, NJ: University of Princeton Press.

Eggers, D. (2014) *The Circle*. London: Penguin.

Fuchs, C. (2014) *Digital labour and Karl Marx*. London: Routledge.

Galloway, A. (2004) *Protocol: How control exists after decentralization*. Cambridge, MA: MIT Press.

Galloway, A. and E. Thacker (2007) *The exploit: A theory of networks*. Minneapolis, MN: University of Minnesota Press.

Rancière, J. (1991) *The ignorant schoolmaster: Five lessons in intellectual emancipation*. Trans. K. Ross. Redwood City, CA: Stanford University Press.

Rancière, J. (2004) *The politics of aesthetics*. Trans. G. Rockhill. London: Continuum.

Zuboff, S. (2019) *The age of surveillance capitalism*. London: Profile Books.

## the author

Chris Land is Professor of Work and Organization at Anglia Ruskin University. His research examines the role of substantive values in organization, with recent publications on the impossibility of socially responsible management, anarchist

value theory, and democracy at work. He has a long-term interest in how radical ideas can be translated into 'alternative' organizational practices and was involved in setting up *ephemera* as one such experiment, designed to test what was possible with radical open-access publishing and as a challenge to the dominant model of commercial academic publishing. As far as such experiments go, it was a pretty good one.

Email [chris.land@anglia.ac.uk](mailto:chris.land@anglia.ac.uk)