UTS UNIVERSITY OF TECHNOLOGY SYDNEY

Disrupting Precarity: An Enquiry into Worker Voice in Nonstandard Employment

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Thesis submitted in fulfilment of the requirements for the degree of

Doctor of Philosophy

under the supervision of Professor Peter Fleming and Dr Marco Berti

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I, Michael Brian Walker, declare that this thesis, is submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the School of Business at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

This research is supported by the Australian Government Research Training Program.

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This thesis is in the form of a **thesis by compilation**: it includes four distinct papers that are all, at time of submission, completed and either published or under consideration at various journals.

The papers included in the thesis and their current status is as follows:

- **Successful social media resistance: implications for employee voice**

  Published in *Labour and Industry* in May 2020.

- **Peer-to-peer online employee voice: Collective action without coordination**

  Under Review with the *Journal of Industrial Relations*.

  - An earlier version was presented as a peer-reviewed paper at the 6th Regulating for Decent Work Conference at the ILO in July 2019.

- **"You can't pick up a phone and talk to someone": How algorithms function as biopower in the gig economy**

  Accepted for publication in *Organization* in July 2020.

- **Uber and the problem of regulatory arbitrage**

  Published as a chapter of the edited book *Case Studies in Work, Employment and Human Resource Management* in February 2020.

Some formatting changes have been made to make the four manuscripts consistent in appearance without altering their substance.

The thesis also includes four shorter published outputs which arose from the research and which explicate an unfolding understanding of the research. These are inserted as reflections before each of the four major papers:

- **Three things unions can learn from Uber drivers**
- **The Google walkout is a watershed moment in 21st century labour activism**
- **Victoria's Secret backlash over trans and plus sized models is a 21st Century labour dispute**
- **Deliveroo strike win shows gig workers can subvert the rules too**

STATEMENT OF CONTRIBUTIONS TO THE PAPERS CONTAINED IN THE THESIS

Papers One, Two and Four are Michael Walker's own work.

Paper Three was co-authored with Professor Peter Fleming and Dr Marco Berti.

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Reflections One and Four were co-authored with Associate Professor Sarah Kaine.

Table of Contents

Acknowledgments .... **x**

Abstract .... **xii**

Preface .... **xiii**

Introduction **1**

What is voice? 3

Voice in other disciplines 5

What happens before voice channels are put in place? 6

Where are today's forerunners? 9

The Gig Economy 10

Uber 12

Outline of the thesis 14

Methodology **16**

Abduction as a research method 16

Phases of the research process 22

Phase One: Formulation of research topic 23

Phase Two: Literature review 24

Phase Three: First round of data collection and theorising 28

Phase Four: Second round of data collection and theorising 30

Phase Five: The publication process 32

Reflection One **33**

Three things unions can learn from Uber drivers (The Conversation) 33

Paper One **38**

Successful social media resistance: implications for employee voice 39

Abstract 39

Introduction 39

Voice, resistance and social media 41
What is voice? 41
What is resistance? 42
Social media in the voice/resistance literature 44
1. Instrumentality 45
2. Control 47
3. Moving the frontier of control from a private to public arena 49
4. Identity-based mobilisation 51
Discussion and Conclusion 52

Reflection Two **55**
The Google walkout is a watershed moment in 21st century labour activism (The Conversation) 55

Paper Two **60**
Peer-to-Peer Online Employee Voice: Collective Action without Coordination 61
Abstract 61
Introduction 61
Literature 62
Employee Voice 62
E-Voice 64
Intent and Collectivism 72
Research questions 74
Method 74
Findings 76
Discussion 82
Conclusion 85

Reflection Three **87**
Victoria's Secret backlash over trans and plus sized models is a 21st century labour dispute (ABC Opinion) 88

Paper Three **91**
"You can't pick up a phone and talk to someone": How Algorithms Function as Biopower in the Gig Economy 92
Abstract 92
Introduction 92

Digital On-Demand Working: The Capitalist Colonization of Digital Commons 96
Algorithmic management 98
Enter Biopower 100
Whither Resistance? 102
Method 105
Findings 107
1. Resignation and Hopelessness 108
2. Distance and Isolation 111
3. Gaming the System 113
4. Deriding 'Uber Ambassadors' 114
Discussion: Biopolitical Algorithms at Work 117
Conclusion 122

Reflection Four 125
Deliveroo strike win shows gig workers can subvert the rules too (The Conversation) 125

Paper Four 130
Uber and the Problem of Regulatory Arbitrage 131
Background and context 131
Two successful regulatory rein-ins 134
Are the drivers employees? 136
Summary 138
Notes on Paper Four 139

Thesis Conclusion 141
Contribution to Theory 144
Contribution to Practice 146
Limitations 150
Areas for future research 151
Final comments 154

Appendix 156
The interview dataset 156

Bibliography 157

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Abstract

Employee voice implies unions or employer-controlled channels. Many workers do not have access to either. Moreover, the status of employment is itself under pressure with increasing presence of intermediaries between actual power-holders and workers (Weil, 2014; Peetz, 2019), the most extreme of which is the new phenomenon of 'gig employment'. Employers are less likely to see a reason to engage with workers with whom they do not have an ongoing relationship (Colvin, 2013).

The thesis interrogates this presumed situation of voicelessness in today's workplaces, specifically in the gig economy. The internet has broken down barriers to employee voice. I observed, through interviews and netnographic analysis, instances of online voice where workers acted collectively and achieved material improvements to their working conditions by so doing.

I also found that algorithmic management acts as a barrier to the effective carrying out of voice. It fragments and isolates workers and, by dehumanising management, displaces worker grievances away from the true source of disgruntlement.

The major contributions to theory are that employee voice can occur, and achieve material results, without any coordinator, and that algorithmic management is an exercise of Foucauldian biopower that deflects many gig workers' grievances.

Preface

We are in an era today where old models of worker voice are struggling to keep up with new realities. More and more people find themselves working in gig employment where they are engaged one shift at a time, nominally as independent contractors, usually though not always through an app. Gig employment is a legal construction intended to deprive workers of many benefits and protections of employment won in the nineteenth and twentieth centuries. In 2016, 8% of US workers and 11% of UK workers earned some income from a gig employment platform (Woodcock and Graham, 2019: n.p.). The capital-owners backing gig employment platforms appear to hold all the cards: not only does this give them a monetary premium over their competitors who pay full entitlements, the nature of platforms is to enter a market with minimal set-up costs, extract value out of industries, ruin their competitors and constantly expand their reach in a self-reinforcing cycle. The corrosive influence of gig employment extends well beyond the relatively small number of workers directly engaged in it; it causes the dismantling and reorganization of other forms of work (Cant, 2019: 14-15). Furthermore, gig employment platforms have consistently shown they have the means to out-gun anyone who would try to re-impose norms of employment onto their business model, whether it be through the courts, through legislation or through public ballots. For workers, the situation appears grim indeed.

However the reconfiguring of work through technology has long been used as a means of extending managerial control, whether it be the deskilling observed by Braverman (1974) or the Taylorist practices put into place in the factories of the early twentieth

century. Neither could be said to be the death knell of employment entitlements; in fact the concentration of individual workers into factories arguably enabled the formation of unions. Technological transformations of work have happened before, and workers mobilised themselves in response.

My own story, and why I have come to have an interest in the gig economy, is bound up in the story of those past transformations of work and of the organised response. Near where I have been working and studying throughout this thesis are two buildings, coincidentally both completed in 1891: The Sydney Working Men's College and the Sydney Trades Hall. They symbolise the perennial themes of technology and voice and also, in a very direct sense, became the soil out of which this study has grown. Darling Harbour was a working area of the city that was a busy mix of wharves, warehouses and railway lines. At its southern end, the State Government set up the Sydney Working Men's College which became a college for the training of working class men and women. In the same year, over on the other side of the harbour, the Sydney Trades Hall was completed: a permanent home for the many fledgling trade unions that were being established around that time. Trade unionism rose and fell though and 1891 also saw the formation of the Australian Labor Party to represent the interests of working people in Parliament after many setbacks faced by organised labour starting in 1890.

The Working Men's College and the Trades Hall are both still there today.

The Sydney Working Men's College actually began life before 1891; it was an offshoot

of the Sydney Mechanics Institute and School of the Arts (which also still exists, as does its original premises on Pitt Street). The school of the arts movement was one of the many means by which working class people furthered themselves intellectually (Thompson, 1963). The nineteenth century saw a virtuous upward spiral of reduced working hours through the Eight Hour Day movement, increased interest and study in the arts, and increased political voice and representation. The Working Men's College was taken over by the New South Wales Government and moved to its new premises. Alongside it they also built a technical museum with a collection that started with the left-over exhibits of the Sydney International Exposition held in 1879. The College is still there today, and still plays the same role, providing technical higher education. It is now called TAFE Ultimo. In 1988 its enlarged precinct was split and the University of Technology Sydney was created, with the older buildings remaining part of the TAFE. The museum meanwhile was relocated a short distance down Harris Street into the decommissioned Ultimo Power Station where it remains today. It was to the University of Technology Sydney that young Michael lined up to enroll as an undergraduate in 1997, 23 years ago, and it is the institution through which the research in this thesis was undertaken. The new UTS Business School today overlooks the old Technical College, its picturesque forebear.

Organised labour bounced back after the 1890s depression and, from 1902, an office in the Trades Hall was occupied by the new Shop Assistants Union. After a number of office moves around Central Sydney and a rebrand as the Shop, Distributive & Allied Employees' Association (SDA) it eventually took up residence on Quay Street in Haymarket, less than two hundred metres from the UTS Business School, and it was

there that I began my first permanent position in 2003.

So I am rather sentimentally attached to the Sydney Technical College and to the Sydney Trades Hall as I have worked and studied in their successor organisations for over two decades now.

Figure 1: Southern Darling Harbour (Source: Google Earth)

The union movement in Australia, as elsewhere in the British Empire, did well during the World Wars and during the Great Depression, when governments could not afford to interrupt supply and were much less sympathetic to capital-owners during strikes (Piketty and Goldhammer, 2017), governments agreed to establish the International Labour Organisation out of the ashes of World War I – also, in no small part, to avoid Communist revolution of the kind that had just taken place in Russia. Unions made great strides in securing international labour standards especially in the periods just after each of the world wars. In the United States, Roosevelt's New Deal also enabled

unions to organise more easily particularly in the great automobile factories. Unions were riding high and the period from 1945 to 1975 were the all-time high water mark for conditions of employment. Then in the late seventies the tide began to ebb and it has never stopped since. Many factors drove the changed paradigm that began around this time, including competition from Japan that forced Anglo-American companies to reorganise themselves and the way people worked, Chicago School economics that promoted deregulation and laissez-faire free market ideology and governments siding with employers against unions as happened in the air traffic controllers and miners disputes in the United States and United Kingdom respectively. However, it must also be said that a constant driver in all of this is technological change. New technologies displace jobs and, in an environment where jobs are unionised, it replaces unionised jobs with non-union jobs. That dynamic is constantly at work and was a reason union membership crested and had started to decline *before* the coming of neoliberalism in the 1970s.

As a union official, I was concerned at the ever-growing number of non-members and their apparent subjugation to the whims of their employers. In 2012 I set out what I saw as the three ways that technological change posed a challenge to unions in an article published in the Asian Labour Review (Walker, 2013). The three challenges I saw were:

1. At a macro level, technology changes industries. Unionised companies that don't adapt will flounder and fail. That is outside of unions' control. Unions have to find and recruit members outside of their strongholds, in new

companies where they have not had any historical presence. That also means holding their nose and dealing with gig employment platforms even though they would prefer to see them run out of town (Woodcock and Graham, 2019: 416).

2. At a micro level, technology changes job roles. Unionised roles in a business might become redundant through adoption of new technology (a straightforward example being the introduction of automatic teller machines which caused a lot of bank clerk redundancies). Yet, despite two centuries of predictions of automation reducing employment, work is always evolving and there are always new roles to be filled. Unions have to find ways of making themselves appealing to people doing these kinds of roles.

3. Finally, technology changes the way unions themselves can do their job. Decades ago, union officials had to visit stores face to face to discuss issues with workers or shop stewards. Then mobile telephones came along. Then smartphones, meaning they could now use email on the go as well. Social media platforms now make it possible for unions to engage workers directly online, without ever having to meet in person.

So while a great deal is said (with justification) about neoliberal government policies and the difficult position they place unions in, there is not nearly as much said about unions' internal challenge of reaching workers in new occupations. The demography of work is evolving faster than unions can keep up. Jobs have long moved from primary

and secondary production, the traditional strongholds of unions in Australia, to tertiary production. While unions continue to grapple with organising tertiary industries, the next evolution of work is already upon us: the platform economy, which I'll return to in a moment.

Unions also have an understandable tendency to resist technological innovations that would lead to lower headcounts, but you can't force business owners to maintain costly headcounts when they are competing with leaner enterprises. There needs to be a lot more focus on transition into new kinds of work rather than vainly trying, like King Canute, to hold back the tide of technological change.

These have been my driving concerns, working in a union movement that seems to be in inexorable decline.

To put these trends into context, Figure 2 shows the numbers of union members and non-members in the Australian retail industry according to the Australian Bureau of Statistics (ABS) (1996; 2013). In the time I have worked at the relevant union our industry density has shrunk by about one-third.

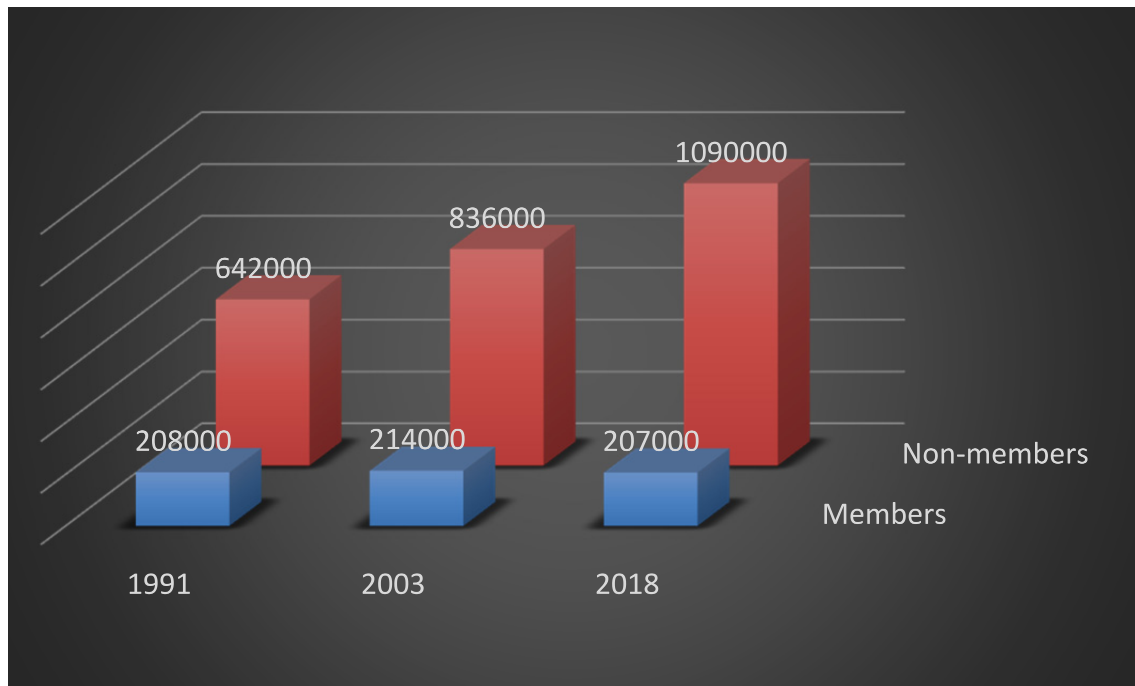

Figure 2: Union members in the Australian retail industry. Sources: ABS, SDA annual financial reports

So what are the other people actually *doing?* The genesis of this thesis is my suspicion that workers who have no formal means of voice at work are nonetheless finding some other means of having their grievances resolved. That is the primary question that has driven me as a researcher to see this process through, over a period of seven years. Granted, not all employment relationships are antagonistic and in many cases worker voice is met through informal means with managers (Townsend et al., 2013).

A phenomenon related to voicelessness is the tendency to be employed in so-called nonstandard employment arrangements (Dundon and Gollan, 2007) in which risk is transferred from firms to workers who are employed precariously with no leave entitlements and irregular hours. The most recent and extreme iteration of this phenomenon is the so-called gig economy in which the firm disavows any employment relationship whatsoever with its workforce. Once again, the driver in this change has

been technology and the use of apps to parcel out work.

We are now in an era when technology seems to increase at an exponential rate, fueled by capital looking for opportunities for the high returns that can be earned through disruption and capture of industries. There are predictions that the so-called Fourth Industrial Revolution really will destroy jobs more rapidly than people can find alternative employment, a disturbing prospect (Frey and Osborne, 2017). There are also futurists such as Yuval Noah Harari who predict that technology will run away on us and that we are heading for a post-human future (Harari, 2017). What is certain is that good jobs with favourable conditions and high pay are disproportionally likely to be lost and that new jobs are more likely to be bad jobs (Berg, 2019). What the workers in such bad jobs do to better their situations will shape the workplaces and even the politics of the century ahead.

In the original research proposal submitted at the beginning of this study, I suggested looking closely at a group of workers who were not union members and not in standard employment, to discover whether these individuals had any kind of voice. This is how I put it in my original statement of research interest:

> The benefits of employee voice and workplace democracy have been covered in the literature , however many of its established forms were devised prior to the 1970s including arbitration, works councils, labour unions and collective bargaining (the latter enshrined in ILO core protocols 87 and 98).
>
> In recent decades the relevance of these mechanisms has been tested by

> flexible working arrangements such as contract and casual employment, labour hire and outsourcing, all of which make the employer-employee relationship more tenuous.
>
> …
>
> 40% of the workforce is now engaged in non-ongoing employment. With labour union membership seemingly in an irreversible decline, how can workers regain their voice?

The interest in nonstandard employment was because it is negatively associated with unionism and also because it is growing. Once the project got underway this was narrowed to gig employment specifically. At the time my hunch was that there would be nascent unions forming in places where actual unions were not present. This has proven to be a rather naïve and even deterministic expectation. For the same reason that most of these workers are not googling the name of their relevant union in order to join it, they are also not setting up new unions. They are however finding other means of voice which do not look like unions at all. In the United States there are a plethora of new kinds of organising sprouting up (Milkman and Ott, 2014). But as the research unfolded I became more interested in what was below the radar; what were workers doing that was not institutional?

For this reason, the thesis focuses on peer-to-peer communication that seemed to me to be an important piece of the puzzle. Whether these kinds of communication will develop into more durable forms of worker organising is beyond scope and actually not really necessary for me to find out; what matters is that these workers are not

‘voiceless’ after all.

As I briefly allude in the Thesis Conclusion, technology is a two-edged sword and it is creating new opportunities for worker voice even as it is giving employers opportunities for increased control. It would be tragic if advocates for worker justice limited themselves to fighting against the latter and failed to grasp the new opportunities that are presented to them.

As the time comes to submit this thesis, I feel quite satisfied with it on many levels. I was very lucky to have been in the union movement at this moment in history, facing these challenges in my daily work. As ideas sprang from my research I was allowed to put them into action at the Union. These practical interventions in my capacity as a union official include:

- An initiative to recruit fashion models into the Union. Models are freelance workers with no fixed employer and no fixed workplace and therefore inherently problematic for the union to engage with. The recruitment side was not a roaring success (partly due to the union fee structure having no tier suitable for a person working sporadic shifts) but we did establish the Australian Model Alliance with others in the industry and went on to win private changing rooms for models at Fashion Week Australia. Furthermore the Model Alliance served as a prototype for additional forms of online organising and for other multi-stakeholder partnerships which the Union has since engaged in.

- Various other initiatives through which the Union reached out to potential members through online means rather than in person at the workplace. This has proven to be more successful and has a measurable bottom-line impact. As I write these words there are thousands more members of my union branch, with several dozen more joining every week, than there would have been if we had simply ignored the potential to put these technologies to use.

This reinvigoration of the union was informed by the discoveries made during this research project about how workers communicate online. Unions everywhere are now taking the potential of digital organising seriously, including with workers in gig employment. Whether the adaption will be enough to turn around their decline, or whether we are entering a whole new era in which peer-to-peer organising comes to the fore, only time will tell (Visser, 2019). Either way, workers will continue to seek out ways to resist domination.

Introduction

The concept of employee voice in industrial relations is usually traced to Freeman and Medoff (1984), whose book on the topic was written just after the 1981 air traffic controllers strike that, in hindsight, heralded the end of the congenial mid-twentieth century labour relations milieu that the book describes. Employee voice has since then had to account for the relative decline of union voice and the emergence of non-union employee representation (Hyman, 1997; Gollan et al., 2014). It has been further strained by the increasing prevalence of nonstandard employment in which the relationship between employers and employees is more tenuous (Marchington et al., 2005). There are many workplaces in which invited dialogue between employers and workers does not happen. Does that mean that such workers are voiceless? Or have we simply become too accustomed to unions and human resources management as the agreed channels of voice? Furthermore, the relationship between firms and workers has lately become even more tenuous with the emergence of the so-called gig economy in which, by definition, regular workers are not treated as employees at all but as contractors (De Stefano, 2015). The uncomfortable implication is that gig workers (among others) do not have any say over their work unless they organise themselves into unions which, for the most part, they are not doing. It seems unlikely that people rendered voiceless at work would not be acting to counterbalance power at work in some other way, which might not fit into existing schemas. As Woodcock and Graham comment, “many attempts by workers to organise activities start out

neither as legally allowed nor institutionally accepted” (Woodcock and Graham, 2019: n.p.). This thesis seeks to investigate what those ways are.

Across a series of four papers I begin by drilling into the conceptual understanding of employee voice and the relative scarcity of commentary on internet-based tools outside of employers’ control. I surmise from research in other disciplines that social media resistance can potentially act as an effective counter to managerial power. I then set about collecting data from gig workers about what they do when aggrieved at work, since no recognised channels of voice are available to them. I found that peer-to-peer communications have the effect of being a form of voice by enabling workers to act together, even without the intention of taking collective action. Such communications enabled workers to increase their share of pay relative to the platform. I then discuss the implication of this new ‘uncoordinated’ form of collective action made possible by the internet. I conclude that old models of worker voice don’t translate to the new phenomenon of peer-to-peer online voice and this merits attention because, in its most common form, this new type of voice is extremely widespread. The caveat is that this form of voice is, however, quite weak and easily prone to deflection. Theorists, regulators and advocates thus need to approach voice in the gig economy with a different mindset to the institutional twentieth-century model.

I commenced work on the thesis shortly after passing the milestone of working for ten years at a large Australian trade union. My starting point was my awareness of the rapidly increasing number of workers who appear to have no channel for voice at work. As someone working in one of those channels, a union, the growing voice gap

seemed to me a very puzzling and pressing conundrum. Work hasn't become a utopia in which there is no cause for grievance. Downward pressure on wages, overbearing management, abuses of power; all of these are widely experienced in contemporary workplaces. If anything, gig workers have far more urgent concerns than people who enjoy employment status: lack of health and safety protections or consultation, lack of sick pay and, above all, exclusion from the minimum wage threshold. Union membership has historically served as a means of channelling these concerns. Yet industry density of unions including my own continues to slide and workers are, for the most part, not seeking out their union to hedge themselves against some of the vicissitudes of working life. There are a large and growing number of workers who do not have access to a union or to any other channel of voice (Freeman et al., 2007; Pyman et al., 2009; Kochan et al., 2019; Baird et al., 2018) and union membership in the gig economy is negligible. The question that puzzled me was: What do these workers do when they are in some way aggrieved at work? Are they truly 'voiceless' or are they getting their grievances heard in some other way? That is the primary question I have sought to explore in this thesis and the answers have proven surprising, to say the least. As a researcher, my understanding of the phenomenon evolved over time, as can be seen in the progression of the four papers that make up the thesis. I have also included four shorter public engagement pieces as asides, in which I name examples of non-institutional voice. Over time the examples that I observed became less and less like traditional voice.

What is voice?

The project started within industrial relations (IR) as the main field of scholarly enquiry into workers and unions. Within industrial relations the concept of employee voice is discussed as an inherent human desire grounded in notions of countervailing power at the workplace (Budd, 2004; Wilkinson and Fay, 2011). Employee voice is one part of a triad of exit, voice and loyalty, introduced into industrial relations by Freeman and Medoff (1984) from Hirschman (1970) although the idea of having a say is present in the earliest works of IR such as Goodrich's *Frontier of Control* (1920). The exit, voice, loyalty framework has proven durable as it is still discussed after more than thirty years, although many scholars add silence as a fourth option (Morrison, 2014; Willman et al., 2006). Since Freeman's initial contribution, the availability of union voice has diminished and other, management-instigated forms of voice have increased (Guest, 1999). Together, both union voice and non-union employee representation (NER) might be called 'institutional' voice: the employer acknowledges the voiced concerns and at least engages with them, even if not always to the satisfaction of the employee. The discussion around voice at work has changed to account for the existence of non-union voice. By the 2000s the concept of a plurality of voice channels, union and non-union (Hyman, 1997; Gollan et al., 2001), had become widely accepted and that remains the prevailing view (Wilkinson et al., 2014: 3). Markey et al (2013) reaffirm the underpinning assumption of voice literature: that workers still have a desire for influence at work and that this desire continues to exist regardless of the level of influence granted. There remain a large number of workers who do not have any institutional means of voice (Wanrooy et al., 2013; Hyman, 2018). Moreover even

when institutional channels are available, people may still choose to act outside of them. Some worker concerns are being voiced but not engaged with.

Voice in other disciplines

Voice has also been discussed within HRM literature since Farrell (1983). It has received increased attention in recent years with more papers coming from HRM or related disciplines than from industrial relations. Wilkinson and Marchington proposed a model of a ladder of participation, the lowest rung of which was one-way communication (Marchington and Wilkinson, 2000). In this conceptualisation, the only kind of one-way communication imagined was top-down; the idea that uninvited bottom-up communication could in fact constitute voice was not something they imagined. A little later Wilkinson and Fay (2011) identified four competing paradigms in the voice literature: HRM, focused on performance; political science, which regards industrial democracy and political democracy as related; industrial relations, which sees voice as representative; and organisational behaviour which focuses on a micro level at groups and quality of work life. They summarise the divergent disciplinary threads while also clarifying the difference between the related terms voice, participation, involvement and engagement: “voice is a weaker term than some of the others [involvement, participation] as it does not denote influence and may be no more than spitting in the wind” (66), a phrase borrowed from Strauss (2006). They define voice as a concept that includes all calls for change in an organisation, even those that go unheeded. There is ongoing debate in IR as to whether voice needs to be ‘heard’ to be considered voice and not mere ranting. Budd calls this a debate over instrumentality, noting that it has not been resolved (Budd, 2014: 478). Hyman refers

to “isolated and ineffectual protest or prudent acquiescence” (Hyman, 1989: 31) which he does not regard as constituting voice yet Holland et al. (2016) do. I propose that Hyman’s view represents the more common understanding of voice in industrial relations and that mere rants are generally outside of the definition.

What happens before voice channels are put in place?

The dominant, pluralist strand of industrial relations emphasises processes and institutions (Heery, 2016; Kaufman, 2004). This naturally tends to overlook grievance airing that is not systematised in the workplace either by union-management relations or some alternative form of non-union employee representation. Public campaigns that take place outside of organisational boundaries are discussed but these are a form of political action directed at government; they do not unfold in a workplace context and are therefore not usually considered to be a form of employee voice. Whether they ought to be is a pressing question that I won’t address here. Because the pluralist paradigm limits itself to employee-employer communication, only half of all workplaces are considered to have a voice channel, with the remainder deemed to be voiceless (Wanrooy et al., 2013). The study by Willman et al., using a broader definition, still put the number of workplaces lacking two-way communication at 17% (Willman et al., 2006).

Managerial non-engagement is not something new to the recent era of dwindling unionisation. It was something radical IR paid attention to even before voice entered the lexicon. Dubin (1973) argued that non-engagement or indifference from managers (as opposed to disliking) was the very thing that galvanised workers into collective action. In Dubin’s view, such workers have nothing to lose through militancy and

management bring this upon themselves by ignoring workers' demands. Conversely, union activity and wins have the effect of reducing militancy. Ramsay (1977) argued that ignoring union demands is a self-defeating strategy for managers as ignored demands will only intensify. Given that he wrote in an era when union membership rates were at historic highs it's not surprising that he equated worker voice with unionisation. The same logic surely still holds today if it can be shown that worker demands are persistently voiced outside of a union context: that they will still intensify, not necessarily into union formation but into some outlet.

As long ago as the 1980s Hyman imagined the possibility of non-institutional voice but did not believe it could achieve change:

> The rare dissident who explicitly denies the authority of the employer to command is confronted not only by the coercive power of the latter but also by the routinized obedience of the mass of his/her fellows; in the normal situation the only choice for such a worker is between isolated and ineffectual protest or prudent acquiescence (Hyman, 1989: 31)

He goes on to add that trade unionism "formalises and generalises the processes of worker resistance" (36). At the time he wrote trade unionism was a readily available means of expressing voice and the most obvious channel for it, but that is no longer the case. Today the question is again left open: Do the great number of workers who have neither a union nor any other form of representation therefore opt for acquiescence, or silence, as he seems to suggest? And what of the steadily rising number of non-standard employees and gig workers who've never had access to such channels, are they really forced to remain silent?

In comments made before the global financial crisis Freeman seemed to believe there was no alternative, opining that "Ideology will not lead many to organize … The days of relying on dissatisfaction and protection from lousy employers has reached its end" (Freeman et al., 2007: 204). This might be called the 'disengagement thesis'; it is the contrary prediction to Ramsay's militancy thesis. Recent events seem to support Ramsay. Contributions to Hodder and Kretsos' volume on young workers (Hodder and Kretsos, 2015) indicate that workers who are not brought into legacy union structures do tend to become politically radicalised when faced with unsatisfactory working arrangements particularly low wages and uncertain terms of employment (see also Frangi et al. (2018)). Recent research on non-union workers in the so-called gig economy also shows that these workers are resisting what they see as exploitative working conditions (Wood et al., 2018).

Some recent discussion within the pluralist industrial relations literature on voice broadens the definition of voice to include non-traditional actors, but never to the degree of recognising spontaneous micro activism. Heery discusses the impact of external voice actors in the context of the UK living wage campaign (Heery et al., 2017), wondering aloud whether this can still be called voice since the advocates were not necessarily acting as workers' mouthpieces but were motivated primarily by their own sense of social justice. Kaine (2014) argues along similar lines that France's unions are now spread so thin and speaking on behalf of so many that it is questionable whether they are still meaningfully representing the views of individual workers. Neither of these situations quite describes unsanctioned voice because they still focus on the role of institutional actors. This interpretation is consistent with Ramsay's

militancy thesis set out above: voice demands that are not heard at the workplace level can spill outside of the organisation to external stakeholders. Maybe not unions, which are now less common, but to others with an interest in worker justice. The question remains: what happened before that? Do workers go immediately for recourse to civil and political channels or did they first try to achieve change in their workplace, without success? That, then is my research question: What do nominally voiceless workers in nonstandard employment do when they are aggrieved about an issue at work?

The unfolding of such early, unsanctioned voice is under-theorised in pluralist IR, a lacuna that has been known for years now (van Den Broek and Dundon, 2012). The void where it fits is somewhere just above individual grievances. These have limited capacity to influence management policy, but there is still an unexplored space for actions instigated and pursued by workers before they become collective or start to involve other agents outside the organisation. Notwithstanding Freeman's pessimism, people without access to a union or an effective form of non-union employee representation (Gollan et al., 2001) are still autonomous resourceful individuals who are capable of finding other means of speaking up at work, even collectively, if we know where to look for it.

Where are today's forerunners?

My assumption was that the desire for voice that might have been channelled through union membership must be channelled somewhere else; the mystery was where. I can now say that this intuition appears to have been true but the concept of a channel has proven to be a misleading schema. There is no 'union-like' structure or process and it

took several stages of investigation to get a more accurate understanding of how power is balanced where there is no formalised means of voice.

If we consider the precursors of voice, the informal worker organisation that took place in the nineteenth century before formal organisations were established (Quinlan, 2017), these phenomena do not correspond very well to the situation faced by nominally voiceless workers today. Nineteenth and twentieth century protests were organised by workers who physically came together at a place of work and had a common identity. Today's workers, and particularly freelance and gig workers, are physically dispersed but can now communicate with each other through digital means. These communications and the protest actions they engender might well, in time, prove to be the precursor of more formal kinds of voice although we don't know that yet. Either way, the much greater possibilities of communication amongst geographically separated workers today makes nineteenth century analogies of limited relevance. This possibility of a digital option for today's non-unionists was something I was aware of from the beginning and ultimately informed the choice of platform-based workers for my case study.

So all I knew at the outset was that this mysterious form of voice was not obvious and my investigation begins there.

The Gig Economy

The second axis of the thesis is the so-called gig economy. It exemplifies both the impact of technology on work and the trend towards nonstandard employment. The

2010s have seen a growth in jobs that are parcelled out through digital platforms as single tasks or 'gigs', challenging the notion of employment altogether. Gig employment has always existed, for example in the entertainment industry, but on-demand platforms enabled by new technology have made it very easy to engage workers in all kinds of work for very short periods of time. Extreme examples are Taskrabbit or Amazon Mechanical Turk which pay for tasks that sometimes take only a few minutes to complete. Gig employment is not limited to low-wage occupations and has even been used to source legal and medical advice. Throughout the thesis I use gig employment and platform employment to refer to labour-based employment rather than asset-based employment (e.g. eBay, Airbnb) (Srnicek, 2016). At present only a small proportion of workers are engaged in this kind of work as their full time job. One source put the number of people with app-based jobs as their primary source of income at a tiny 0.04% (Moody, 2016) however a much higher number engage in it as a side hustle: 8% of US workers and 11% of UK workers (Woodcock and Graham, 2019). Gig employment has the potential to become more commonplace as it creates significant employer-side efficiencies (Hill, 2015). The most recent Edelman survey (2020) ranked the gig economy as their number one job anxiety amongst professionals. The only real downside of gig employment, for employers, is that it does not create the workplace culture and focus that most firms want to instil (Peetz, 2019). It is these precarious workers who most pressingly need a voice at work and yet, due to their arms-length engagement, the companies they work for do not see this as a priority (Colvin, 2013).

For this reason I decided on Uber as the case study as, being one of the larger gig employment platforms, it seemed the best place to observe noninstitutional voice to be seen as it happens online.

Uber

Woodcock and Graham describe Uber as “the most recognisable geographically tethered platform” (2019: n.p.). The company itself is not the object of this study per se, but rather a convenient context for forms of voice initiated by its drivers which, at the time of data collection, were not acknowledged by Uber. Having said that, the arms-length nature of gig employment, in which Uber disavows responsibility for its workforce, does make it a particularly salient case study of voice in the twenty-first century.

The broader milieu from which Uber emerged is the Silicon Valley tech boom, fuelled by the abundance of talent, investor dollars and research facilities in this small area which ultimately was a result of US Government defence research in the 1960s and 1970s. Uber is remarkable for being, prior to its public listing in 2019, the most highly valued unicorn, meaning a tech start-up company with a valuation greater than $1 billion. It was valued at $68.5 billion in 2016, which made it the highest-valued US tech company still in private ownership.

Uber was founded in March 2009 and now operates in over 300 cities around the world. Its core product is the Uber smartphone app which allows users to hail a private ride in much the same way as they would a taxi. The company undercuts taxi fares and doesn’t ensure that its drivers are paid the local minimum wage as it does not regard them to be employees (Stanford, 2017). Notwithstanding the often low pay, the

company still runs at a substantial loss. It may be that Uber is no cheaper than taxis, the difference in fares comes from investor dollars being spent down and from drivers earning less than taxi drivers would, especially if overheads are considered (Berg and Johnston, 2018). The ride-hailing public has been supportive of Uber which brings them the convenience of low fares and short wait times (Woodcock and Graham, 2019). As a result, the company has grown rapidly and now has an enormous number of registered drivers: over 4 million worldwide. If these workers were accepted as employees it would make Uber the largest private employer in the world (Rosenblat, 2018).

Because drivers are not regarded as employees, the company also did not regard any mechanism of employee engagement as being necessary (at least not until mid-2017, after data collection had taken place). Nor did it have a system of stakeholder engagement that reaches out to drivers.

However there are a myriad of ways in which drivers interests and concerns are being voiced unofficially, including:

- Legislative action in several states and cities, aimed at recognising drivers as employees or at least as holders of particular employee-like rights, e.g. sick leave in London
- Unionisation drives aimed at allowing collective bargaining, with or without recognition that drivers are employees
- Formation of alt-labor driver associations such as Australia's RSDAA
- Sporadic internet campaigns, e.g. #deleteuber

- Wildcat strikes as seen in February 2016 (see Reflection One, below)
- Ongoing, low-level internet discussion

The last, peer-to-peer internet chatter, forms the main object of this study since much of it is publicly available. Also the other items mentioned come up as part of the internet chatter and their impact can be indirectly seen online.

There are many large Facebook Groups used by Uber drivers but the one I have focused on is the Uber Drivers Forum (UberPeople.Net). At time of writing it had 82,000 members and 2 million posts, over 130,000 from Australian users.

Outline of the thesis

The thesis seeks to interrogate whether gig employees are really as voiceless as they appear. It was necessary to use an abductive, iterative methodology to dive into the problem as there was very little literature on it when I began. In the material that follows, I begin with an explanation of the methodology. I began with the educated guess that nominally voiceless workers are indeed finding other forms of voice. I then examined the literature on voice, determining that the possible impact of social media voice is not adequately explained in industrial relations and drawing on critical management scholarship to inform my hypothesis. That literature discussion is the first paper. I then collected and examined data, which form the second and third paper. Here I conclude that social media voice is quite unlike the formalised channels because it has the potential for vast reach and, notwithstanding official prohibitions, can still influence management. Lastly, having concluded that the old model of employee voice

developed in the twentieth century is not a helpful frame in the context of the platform economy, in the fourth paper I put forward a summary of attempts to regulate Uber, evaluating them by results rather than by their adherence to traditional understandings of labour regulation. In the conclusion I unpack the implications of this new kind of distributed voice for legacy institutions including unions. Social media has the benefit of breadth and immediacy but unions have the benefit of presenting demands in a more coherent fashion. So the two paradigms will have to coexist in some way.

Methodology

This thesis is an exercise of abductive research, as gig employment had received little scholarly attention when the project began and there was no well-established literature on the topic. Abduction's use of an educated guess, followed by refinement, allowed the project to fill out a knowledge void while still remaining tethered to existing scholarship. Accordingly, it makes more sense to set out this account of the methodology in the order in which it unfolded, which moved back and forth between theorising and data collection. The introduction to literature and method is therefore arranged chronologically:

- Theorising
- Collection of data
- Re-theorising
- Re-examination of data
- Re-theorising

Abduction as a research method

How can we know what we know? To know we have answered a question, we need to at some level already know the answer, otherwise how do we know we are correct? This is a philosophical problem first explored by Plato who used the notion of 'reminiscence' to explain the dilemma (Magnani, 2011: 7). Essentially he believed that the answer was already within us. Millennia later, Polanyi used the very similar notion

of tacit knowledge (Polanyi, 1958). To understand we've found an answer, we need to have an idea of the answer already.

This research project followed an abductive approach because there was no concept of what my presumed but unknown form of voice looked like, so it was not possible after an early literature review to accurately hypothesise what I should find. If it had turned out that there was a dynamic that worked in a way analogous to existing forms of employee voice, it would be fairly straightforward to use existing theories of employee voice to apply and understand them. However there wasn't, and there was no concept of what it looked like. It proved to be too different to other kinds of employee voice to explain using the theoretical tools of industrial relations. All theoretical models involve simplifications, that's the nature of knowledge (Rosling, 2019), but when the simplifications break down it is not enough to merely try to expand existing knowledge.

In my case, Plato and Polanyi would say that I already tacitly understood from the beginning what aggrieved workers do in voiceless workplaces do to make themselves heard, and would therefore recognise it when I encountered it. That is certainly how I initially approached the problem. However, it did not prove to be a one-step straightforward process. When I approached the problem seeking to identify this presumed invisible voice, and thereby fill a literature gap, I found a challenge in that I had no real concept of what kind of voice unorganised workers were using (or rather, I did, but my initial hunch was not at all borne out by the data). If the mystery form of voice was akin to union membership or controlled communication with management, I would likely have some awareness of its existence from my own experience and this

study would simply have been a close investigation of something that I knew from the beginning existed. However, I didn't; it turned out that workers are voicing concerns in a way that I had not imagined at all. Moreover my intuition that they would establish alt labour organisations, while true, proved not to be the real answer to this question, as we will see. It therefore became necessary to adopt abduction as an approach to the study; it became an iterative process that moved between literature and data (classical abduction) and also literature-as-data, referred to as top-down abduction (Shepherd and Sutcliffe, 2011).

The simplest way to understand scientific abduction is to begin by revisiting the meaning of inductive and deduction. Scientific deduction is to start with general principles and propose that they will hold in specific instances (a top-down approach). Scientific induction is the slightly less certain process of starting with specific instances and proposing that a general principle lies behind them (a bottom-up approach). In both cases, the boundaries of the observed environment are closed and knowable.

Abduction is an iterative solution that uses elements of both induction and deduction where the boundaries are less clear. It requires an exercise of abstraction (induction) followed by re-examination of data (deduction) to test whether an *imagined* principle holds true, and then to refine it. While the conundrum of knowing that abduction addresses is traceable to Plato, the word comes from the writings of Charles Peirce (1958). Peirce believed abduction to be a way that we form theories and that it follows a logical process:

1. The surprising fact, *C*, is observed.
2. But if *A* were true, *C* would be a matter of course.

3. Hence, there is reason to suspect that *A* is true.

So whereas the scientific discourse of induction and deduction focuses on one thing leading logically to another, abduction focuses on inferences which are, nonetheless, logical, and may turn out to be true.

Peirce's syllogism, applied to my study, would be set out as follows:

1. The surprising fact observed is that a very large number of workers have no channel for voice at work today
2. But if they are voicing their grievances in some other way, that would be a matter of course
3. Hence, there is reason to suspect that they *are* voicing grievances in some other way

Abduction moves through an iterative process whereby the working hypothesis steadily becomes a better explanation of the observable facts. Dunne & Dougherty describe the process as follows:

> The process of abductive reasoning moves from surprising insights to formulate, evaluate, and reframe hypotheses by cycling through three social mechanisms: [1] using clues to imagine a configuration of interactions; [2] elaborating and narrowing around the interactions in the imagined configuration to examine alternatives and build on intermediary models; and [3] iteratively integrating across disciplinary boundaries to reframe the configuration of interactions (Dunne and Dougherty, 2016: 150).

Abduction is actually essential in the imagining of new ideas as it provides the only way to escape the parameters of past knowledge. Weick (2005) considers the absence of abduction to lead to failures of (genuine) imagination because imagination is replaced by what he terms fancy: mere reshuffling of remembered experience. He also adds that the process of organising favours schema-based perceptions that discourage imagination. Theoretical schools of thought can take on this characteristic if they become too rigid and doctrinaire.

Shepherd and Sutcliffe (2011) devised a new understanding of the abductive process when they explained that the choice of literature in this process is not inevitable or immutable in the research process. The choice of literature is *itself* a step in the abductive process. There are many overlapping areas of literature that discuss the same phenomena from their own perspectives. Even within areas of literature, the particular authorities that an author chooses to draw on are subject to capricious decisions of the researcher. Certain authors are preferred over certain other authors; the sheer volume of academic publishing means there are inevitably on-topic authorities that could have steered the process in a different direction but which are missed along the way. It is the same with theory as it is with data: the choice of theory is to some extent messy just as the choice of data is equally subject to certain arbitrary decisions: how wide to cast the net, which rabbit hole to chase down, and so on. Shepherd and Sutcliffe's contribution is to acknowledge that research tensions are 'carved out of the flux of the vast literature' (2011: 361) and to not pretend that the place in which research is situation was cosmically preordained. With respect to my own research project, as I am about to explain below, the phenomenon of e-voice that

I explore (Taras and Gesser, 2003; Balnave et al., 2014) could have been theorised from within a HRM or a social protest framework and, in hindsight, the latter might have been a better fit. It was to some extent arbitrary of me to have chosen industrial relations and critical management studies as the major theoretical anchors of this study but, having chosen them, that shaped the direction of the research and the questions that were being asked and there was no way that could be unravelled once the process was underway.

The research project went through five phases:

Phase one was initial theorising sparked by the 'surprising fact' of apparently voiceless workplaces.

Phase two was an examination of literature-as-data to identify what had and hadn't been said about this issue, resulting in a research agenda for data collection to locate this mysterious 'alt voice'.

Phase three was collection of data followed by a re-examination of literature to craft a working conclusion.

Phase four was a re-examination of data then a re-examination of literature to address a problem in my working hypothesis, that 'e-voice' appeared like it should be far more powerful than I felt it was in reality.

Phase five was the submission and rewriting of the publication chapters as they went through the peer review process.

This back-and-forth process is set out in the diagram below.

Phases of the research process

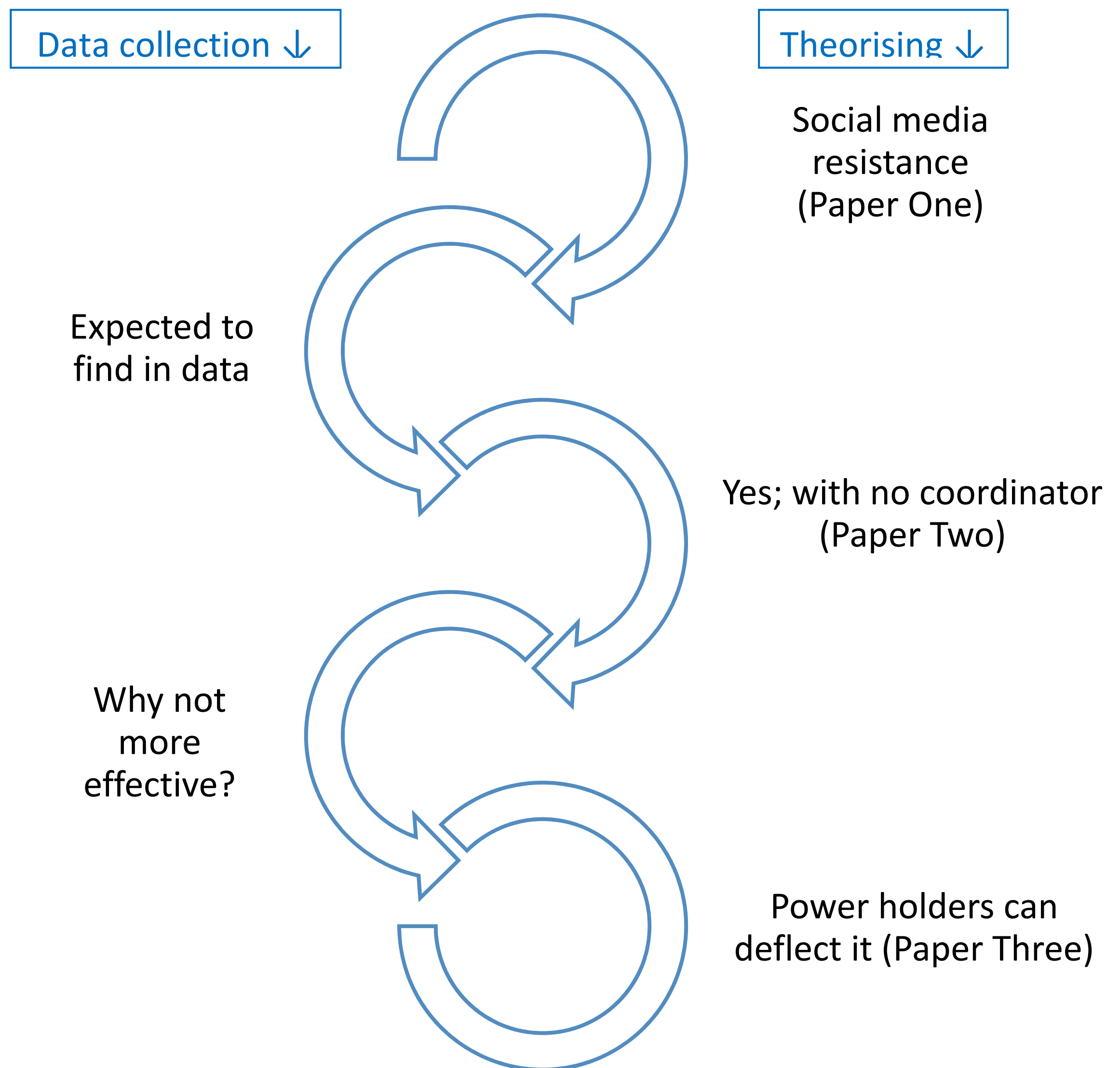

Figure 3 Abductive process followed in the thesis

The two areas of scholarship that were the most consulted are firstly employee voice within industrial relations (now perhaps better referred to as worker voice due to the large numbers of non-employee workers, including those in this study) and secondly resistance within critical management studies. It became obvious even in the first round of literature review that I should consult with what has been written about studies of resistance, and in each iterative round of the abductive process I found that

material on power helped explain what I was observing; in the end, more than material on industrial relations. So the project took on more and more of a flavour of critical management as it progressed and this shows both in the progression of the papers and in the journals that I eventually sent them to.

I'll now describe how the research unfolded and how each abductive phases led to the next.

Phase one: Formulation of research topic

July 2013 – June 2015

The beginning of the research process was intuition drawn from my experience. The starting point of my research is curiosity as to what forms of voice are being exercised by non-union workers who are surely experiencing workplace injustices and, for the most part, are not seeking out the assistance of a union.

Other researchers have found that de-unionisation and voicelessness are associated with the increase of so-called nonstandard employment (NSE) (Doellgast, 2012; Vosko et al., 2014). Therefore it became apparent early on that workers in nonstandard employment would be ideal as the object of this study as they were especially unlikely to have a recognised channel of voice at work. Additionally, we know that nonstandard employment has become more common due to the larger trend of 'fissured' employment relations (Weil, 2014) as organisations become less likely to engage their workforce as direct employees. This trend is accelerating as disruption caused by technology causes more companies to reorganise themselves (Berg, 2019; Cant, 2019),

although the standard employment relationship does remain fairly robust and has benefits to employers by providing a stable workforce (Peetz, 2019).

This phase ended with the formulation of my research topic: What do nominally voiceless workers in nonstandard employment do when they are aggrieved about an issue at work?

Phase two: Literature review

June 2015 – October 2016

Having decided that I wanted to speak to a group of nominally voiceless workers whether they are aggrieved and what they do about it, I discovered that the conceptualisation of voice itself, in the literature, was part of the problem.

For reasons partly of practicality I chose social media as the area I would examine closely however this became a fateful choice because social media is *discursive*. That meant that the literature outside industrial relations that I drew on was, unsurprisingly, critical management studies, deriving from Alvesson and Willmott (1992) which itself builds on Habermas's theory of communicative action (Habermas, 1981) and Foucault's notion of power-knowledge (2012). Foucauldian literature initially only seemed interesting as informing the study, a potential synergy that other people in industrial relations have noted (Marchington et al., 2005; Heery, 2018), however by the end of the project I was using it as the primary frame of reference.

I conducted an initial literature consultation in expectation of discovering a 'gap'. As an industrial relations practitioner I naturally started with the relevant literature within

industrial relations: employee voice (Freeman and Medoff, 1984; Budd, 2004; Wilkinson et al., 2014).

Confusingly, employee voice is discussed in multiple areas of literature (Wilkinson and Fay, 2011): industrial relations, human resources management (HRM), organisational behaviour (OB) and industrial democracy. Of these, I decided to pursue industrial relations only. HRM or OB take a company-centric approach that seemed unlikely to investigate uninvited forms of worker voice. In hindsight this view was not entirely justified and there is HRM literature about employee social media activism (Martin, 2015; Cervellon and Lirio, 2017; Miles and Mangold, 2014) which would have taken this study in a different direction. Lastly, I passed over industrial democracy because the kind of collaborative arrangements it examines tend to exist in the context of high union membership and are a very far cry from the situation experienced by nonstandard workers in common law jurisdictions like Australia, let alone gig workers. Significantly, though, 'resistance' is missing from Wilkinson and Fay's integrative literature review, perhaps because it is not called voice and what it refers to is not in any sense 'channelled'. Yet, on a close inspection, resistance, as it is understood in critical management studies, does appear to be an instance of unchannelled or unsanctioned voice around issues at work (Courpasson et al., 2012; Courpasson, 2017). I was interested in the possibility that this existing research could plug the gap to some extent.

The output of this phase of my research is Paper One. It is a theoretical article that was finalised in October 2018. The version included here is the final version that was published in the journal *Labour & Industry* in May 2020. In it, I explain that industrial

relations ought to draw more on research in critical management studies with respect to resistance conducted via social media. While there is some discussion of social media as a kind of employee voice within industrial relations, critical management scholarship has gone much further and explored instances where it has led to change in the workplace. My provisional hypothesis by the end of this paper is that social media is filling the voice gap to some extent, however more remains to be investigated. Far from answering all of the outstanding questions about unsanctioned voice, examination of the resistance literature generated six possible directions for additional research, one of which I found of particular interest: how and how often social media voice leads to real workplace change that benefits workers. There had been no research on that.

The six directions are:

1. Even when it is banned or unprotected, can social media voice move management?
2. Are nominally controlled social media channels being subverted by employees?
3. How does social media germinate larger public change campaigns?
4. How often does social media disgruntlement lead to real workplace change?
5. Social media as a form of 'sideways voice' needs to be differentiated from spoken conversations
6. There is an unresolved tension between literature that optimistically discusses identity-based worker mobilisation and other research indicating that the lessening of occupation-based identity makes people *less* inclined to agitate for change at work

In this paper I approached the social media lacuna as a straightforward literature gap and set out an agenda for industrial relations academics to pursue it further. At the beginning of my studies this seemed like an appropriate way of proceeding. This was an exercise of top-down abduction. The fact that I started in industrial relations and moved to critical management studies was partly driven by the choice of social media as an area of investigation but it was also partly a chance of circumstance. I started with industrial relations because it was the most familiar field of scholarly enquiry to me as a union official. As for critical management studies, I was exposed to it because the academic institution where I have been enrolled has a lot of scholars who write in this area (it was a co-author of the Courpasson et al. 2012 paper who taught me about theorising in organisations). These were not inevitable choices. HRM is a much larger field and someone without a union background might well have started there (Farrell, 1983). There is also extensive literature about social protest (Gamson, 1975) that I largely ignored because I was keeping the focus on workplaces. However, as organising is something that happens not just within but also 'around' organisations (something I note in Paper One), it could have gone in this direction and, with the benefit of hindsight, this may have been a better framing for two reasons: firstly because my eventual findings proved difficult to integrate into an industrial relations framework; secondly because workers are increasingly protesting about issues that are not limited to the workplace, such as sexual harassment (Walker, 2018) [Reflection Three, below] or diversity in hiring (see Reflection Four, below), or in some cases not related to their workplace at all, such as climate change (Kaori Gurley, 2020). These matters are also the subject of broader protest. However, I knew none of that in 2016 and the project moved ahead as an industrial relations study.

It was at the end of this phase that I proposed that my data collection would be Uber drivers. I originally intended to also study Amazon Mechanical Turk workers, who face similar problems of gig employment and spatial disaggregation (Irani and Silberman, 2013; Irani, 2015), but was advised that this would over-complicate the study. Uber drivers seemed an excellent focus for my research topic as they were nominally voiceless nonstandard workers who were not union members and whose company did not, at the time, provide a channel for them to raise issues or grievances. Additionally, the drivers' spatial separation made it more likely that they would engage in digital conversations which made it a good exemplar in two respects: firstly that meant I was likely to be able to explore the questions around digital or e-voice that I hypothesised in Paper One, and secondly, for me as a researcher, it simply made it more easy to see what was going on. Unsanctioned voice that happens entirely within the walls of a workplace would be more difficult to observe.

Phase three: First round of data collection and theorising

October 2016 – January 2019

This phase involved data collection followed by inductive theorising. I found that the voice solutions that were *like* unions and HR were not as important as the uncoordinated kind that is scarcely mentioned in the literature I had examined thus far. It became clear that the peer-to-peer communication I observed was not explicable as voice and could not be bounded by the literature on employee voice and that I needed to draw on organisation studies. The data collection was a collaborative exercise with several other researchers based at UTS. Their research, drawn from the

same dataset, has since been published (Josserand and Kaine, 2019). The first element of this research project was a survey advertised online in social media groups that included an invitation to participate in interviews. The semi-structured interviews were mostly conducted by me with some assistance from the other researchers. I also began exploring the online groups themselves, particularly UberPeople.net, and was introduced to several CAQDAS programs – Webscraper, Leximancer and VOSviewer – as a way to visualise themes in large forum discussions (Kozinets, 2010; Sotiriadou et al., 2014). This way I gained an idea as to how representative my interviewees' comments were of the broader chatter going on amongst Uber drivers.

This output of this phase is Paper Two. This paper is an empirical article that was substantially completed by January 2019. A very early form was presented at a conference in February 2018 and a version much more like the final paper was presented at a conference in July 2019. It was then further revised to form the version included here, which is under review with the *Journal of Industrial Relations*. The paper begins as a direct continuation of Paper One, picking up the fourth research direction proposed in the literature paper, viz., whether online voice can have instrumentality. It also touches on the fifth research direction, that online voice can be a form of sideways or peer-to-peer voice (Budd, 2014; Kochan et al., 2019). While the data did allow me to answer the question around instrumentality in the affirmative, it also, unexpectedly, showed collective action taking place without the deliberate intent of the actors involved (Wilhoit and Kisselburgh, 2015). This, to me, seems to be the most important finding of this whole thesis. It was very surprising and very unsettling as it went against the grain of the understanding of collective action in industrial relations. I

was expecting to find nascent forms of organisation that could, in due course, flower into some form of organised labour. I did find evidence of such entities but they were quite marginal to the story and it is this uncoordinated form of action that is more prevalent. To explain what I had found I introduce a distinction between coordinated collective actions – the more familiar varieties such as strikes – and uncoordinated but still collective actions. My provisional hypothesis was now that this is a new kind of worker voice and that it may be quite widespread.

Phase four: Second round of data review and theorising

January 2019 – June 2019

In this phase, I found that my working model was still not satisfactory. If e-voice is so accessible and prevalent, as a means of escaping domination, it seems that many people would be taking advantage of it, but that doesn't appear to be the case. I certainly didn't see it in Uber, or in my wider experience. To understand this better I embarked on a further round of data collection, induction and theorising. I consulted new areas of literature, particularly on power and control (Fleming and Spicer, 2007; Foucault, 2012) and also on the effect of new technologies, particularly artificial intelligence, on resistance (Srnicek, 2016). There have been studies that have found online resistance to have actually reinforced organisational control (Kärreman and Alvesson, 2009).

The output of this phase is Paper Three. This paper is an empirical article that was co-written with my doctoral supervisors. It was completed in June 2019 and submitted to the interdisciplinary journal *Organization*. The version included here is the final

revision that was accepted for publication in July 2020. This paper is an attempt to nuance the implications of Paper Two which could appear overly optimistic. If the digital hive mind has made a new kind of collective action possible, one has to wonder why it isn't taking the world by storm. Why is the power balance still shifting in capital's favour? (Hill, 2015)

In this Paper I and my co-authors revisited my dataset and explore the question, what power dynamics are preventing the spread of resistance actions? We conclude that algorithmic management has a dehumanising effect on workplace interactions and that workers rehumanise their grievances by directing them at the closest target which happens to be their fellow workers and not the distant power-holders who are responsible for odious company policies and practices. The power-holders who are the true object of these workers' grievances thus escape largely unscathed. This paper does not attempt to explain uncoordinated collective action with reference to industrial relations literature at all. It is grounded entirely in organisation theory.

Since it only involved a re-examination of my existing data, this phase was fairly brief and lasted only from January to June 2019. By the end of this paper my hypothesis is that uncoordinated online collective actions are quite weak and therefore limited as a form of voice.

Phase five: The publication process

July 2019 – June 2020

In July 2019 I travelled to Geneva to present the draft version of Paper Two at the Sixth Regulating for Decent Work Conference at the ILO. The final twelve months of the project have been spent preparing Paper Two for journal submission, revising Papers One and Three after peer review and combining all the papers into a single body of work with its own introduction, methodology and conclusion.

The last paper included in the thesis is a short chapter that I contributed to the casebook *Case Studies in Work, Employment and Human Resource Management* (Dundon and Wilkinson, 2020). In this paper I have tried to put aside the expectation that a company like Uber ought to engage its drivers as employees and have a twentieth century style institutionalised voice structure. Instead I look at ways the company has been compelled to address its drivers' grievances even while they remain nonstandard employees. With this paper, I end on the hopeful note that companies such as Uber are not invincible. Finally, in the conclusion I discuss the implications of peer-to-peer voice for unions who can now choose whether to adopt or co-opt it.

Reflection One

How are workers finding life in the gig economy? Public protests by un-unionised Uber drivers suggest that many of these workers are not happy with their working lives and are not keeping quiet about it, either. The following is an early sketch of the dynamics of protest at work in the gig economy that I and a UTS colleague wrote for *The Conversation*.

Three things unions can learn from Uber drivers, *The Conversation,* 3 March 2016

Unions are in a self-described crisis. The well-known tale of union decline in Australia continues with the latest figures revealing less than 15% of workers are members of unions, with that dropping to 11% in the private sector.

But that's not to say workers are not interested in protecting their rights, with even those "gigging" in the new economy showing signs they are prepared to organise themselves to do so. Non-union workers in the "new economy" are campaigning for better working conditions despite not being formally represented, as recent protests demonstrate. So why are unions missing the boat and what can they learn from these emerging informal labour movements?

In his address to a union leadership summit last month, Australian Council of Trade Unions (ACTU) Secretary Dave Oliver acknowledged that unions have struggled to organise workers in the "new economy". Online forums were identified by Oliver as a possible union growth strategy.

But unions struggle to convert online activism into paying members. One barrier is skepticism within the movement itself about cyber-activism or “clicktivism”, seen as being an ineffective substitute for “feet in the street”. The sceptics want to see that it can work and it’s hard to point to a clear success story.

Yet it is being done successfully, by amateur activists. Workers in non-union companies are already using the internet to self-organise. Even more significantly this online worker organisation has taken place in exactly the context that unions are finding so challenging – among a geographically dispersed workforce with no direct employment relationship and indeed no recognised “employer”.

Just in the last fortnight Uber has provided some particularly visible examples. Despite the legal status that Uber has now attained in NSW and the ACT and a smattering of jurisdictions across the globe, resistance to Uber’s business model of “driver-partners” who are independent contractors, continues across the globe.

After seeing their commission rate lowered by the company, Uber drivers have spontaneously organised protests in multiple cities around the world. About 200 disgruntled Uber drivers noisily descended on San Francisco Town Hall and 50 drivers went on strike at New York’s La Guardia airport, logging out of the Uber app and staging a noisy protest. Hundreds more demonstrated at the company’s New York offices. These protests were not organised by established unions but by drivers themselves using online platforms and social media as a means to co-ordinate, publicise and amplify acts of protest against the company.

Working with unions

This is not to say that unions aren't trying or indeed that they are not supporting the activities of "new economy" workers to organise. The protest by 300 Uber drivers in London last December was coordinated by the GMB union, and over the past few years the Teamsters in the US have been trying to get traction in the "gig" economy through establishing the App Based Drivers Association. Uber drivers are not averse to the idea of joining an organisation to represent their rights. In one online poll 90% of Uber drivers indicated they would join a collective or organisation that advanced their rights. So clearly there is an unmet need unions could fill.

However, some major hurdles for unions remain. First, few unions have recent experience in effectively organising and representing contingent workers – those who are independent or quasi-independent contractors, casual or "gigging". Second, unions have generally inflexible membership structures that have been slow to adjust to the changing composition of the labour market. Third, as noted in a discussion paper released this week by Professionals Australia (the union representing Engineers, Scientists, Pharmacists and other professional workers), unions do not currently possess the skills required to harness the potential of technology, not just through the use of social media but also through better "database management, data analytics and web analytics".

So what do the actions of Uber drivers teach unions about addressing these issues?

1 Re-tool for a post-employment workplace.

Unions have built up an elaborate system to protect the interests of employees. Uber is just one of many companies that have side-stepped these protections by engaging workers in ways other than traditional employment. To represent these workers, unions need deeper expertise in other areas of law such as contract-of-supply, franchising and migration.

2 Tune into scale.

A factor that has worked in favour of Uber drivers is their vast number. There are 400,000 registered Uber drivers in the United States. Only a percentage will join an online forum and give it life; of that number only a percentage will join and/or promote a protest action. A small percentage of 400,000 is still a large number. Several Uber chat forums and Facebook groups have more than 15,000 members each.

3 Coexistence not competition.

Unions are not the presumptive option in this space. They will need to develop relationships and work with the online groups and advocates who are also working for the same goal.

Unions have preferred to conduct business face to face for a century and a half, so a radical change of approach will be required. They too are being "disrupted" in the new economy and, like old economy businesses, will have to adapt to survive.

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Paper One

This first paper is a much refined presentation of the initial literature review phase of the thesis. It is focused on employee voice and doesn't deal directly with nonstandard employment.

The basic argument was present in the form of the literature review that I presented at my Stage 2 assessment in November 2016, however I then turned my attention to data collection and didn't return to it until early 2018. It was written up as a journal article during 2018 and sent to a journal in October 2018.

After two rounds of peer-review, the argument of the paper was narrowed to be that employee voice scholarship ought to heed the insights of critical management studies scholarship with respect to social media resistance, since it has been shown that this kind of employee voice can force change upon management.

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Successful social media resistance: implications for employee voice

Abstract

Industrial relations (IR) authors tend not to draw on critical management studies (CMS) literature. IR's radical wing believe it overstates the possibility of managerial control and IR's pluralist wing are disinterested because of their emphasis on institutions and processes. There is a need for pluralist industrial relations to make use of the research on resistance in CMS which has found social media to be capable of bringing about workplace change, meaning that it needs to be explained in pluralist IR as a form of voice. Informed by insights into successful social media resistance, a research agenda for IR is set out to extend our understanding of worker voice in the digital era.

Introduction

Social media has become very prevalent, with estimates that people spend up to several hours a day on social networking platforms, blogs and other web 2.0 sites. A large proportion of that online discourse is work-related (van Zoonen et al., 2016) and it has already been proposed that this discourse be considered a form of employee voice (Conway et al., 2019; Balnave et al., 2014). The concept of employee voice was invented in the 1980s, long before the advent of social media. As originally framed by Freeman and Medoff (1984), it referred to recognised mechanisms whereby workers could have a say over their working conditions, principally union representation. There are also non-union channels, which always existed but became more widespread as

union membership waned (Hyman, 1997; Gollan et al., 2001; Dundon and Gollan, 2007). While there were other channels for voice before unions (Quinlan, 2017), the proliferation, reach and immediacy of peer-to-peer digital communication including social media has brought about a paradigm shift in human communication, including expressions of worker voice.

While IR research into social media voice has focused on problems of legality (Thornthwaite, 2016; Barnes et al., 2018), researchers in critical management studies are already publishing findings that social media use –legal or not– has renegotiated workplace power (Courpasson, 2017; Gossett and Kilker, 2006; Courpasson, 2016). These findings are disregarded in IR papers on the very same topic, e.g. Frangi et al. (2018), Barnes et al. (2018). The reason for this is the well-known, and unfortunate, schism between IR's radical wing and post-structuralist analysis (Heery, 2018). The former believe the latter to be insufficiently concerned with results and also to attribute more power to managers than is warranted. Notwithstanding this division, critical management scholarship has devoted more attention to social media resistance and the findings of this research can inform industrial relations scholarship on the realities of this new form of worker voice in today's workplaces. In this research note, I identify areas of discussion about social media within industrial relations that can be enriched by dialogue with critical management scholarship: (1) the debate around instrumentality of voice, (2) the issue of social media being hard to control, (3) the shift of the frontier of control into private space and (4) better understanding identity-based mobilisation. I end by setting out a number of research directions that emerge from the interplay of the fields in these four areas.

Voice, resistance and social media

What is voice?

The term employee voice was first introduced by Freeman and Medoff (1984) although the notion was implied from the very origins of industrial relations (Goodrich, 1920). Wilkinson and Fay (2011) set out to summarise the divergent disciplinary threads while also clarifying the difference between the related terms voice, participation, involvement and engagement: "voice is a weaker term than some of the others [involvement, participation] as it does not denote influence and may be no more than spitting in the wind" (66), a phrase borrowed from Strauss (2006). In other words, they define voice as a concept that includes all calls for change in an organisation, even those that go unheeded.

In the 1980s Hyman imagined the possibility of non-institutional voice but did not believe it could achieve change:

> The rare dissident who explicitly denies the authority of the employer to command is confronted not only by the coercive power of the latter but also by the routinized obedience of the mass of his/her fellows; in the normal situation the only choice for such a worker is between isolated and ineffectual protest or prudent acquiescence (Hyman, 1989: 31)

He goes on to add that trade unionism "formalises and generalises the processes of worker resistance" (36). At the time he wrote trade unionism was a readily available

means of expressing voice and the most obvious channel for it, although this is no longer the case today.

What is resistance?

Meanwhile, the kind of resistance that Hyman dismisses has been studied in labour process theory and in more radical industrial relations theory, and from there interest has been taken up in organization studies. These two disciplines part ways on the question of instrumentality, which in labour process theory and in radical industrial relations is considered to be the whole purpose of dissent (Ackroyd and Thompson, 1999) while critical theorists consider such discourse to be of interest in its own right (Fleming and Spicer, 2003), something that greatly irritates the former group (Contu, 2008; Thompson, 2016). However within the resistance literature we are now seeing studies into resistance that leads to externally visible change (Courpasson and Dany, 2009; Courpasson, 2016) and that is a close analogue to what pluralist industrial relations calls employee voice.

Despite their close similarity in subject matter, the voice and resistance paradigms differ significantly in how they frame the phenomenon. Pluralist IR has tended to focus on sanctioned voice channels such as unions and management-instigated voice mechanisms (Dundon and Gollan, 2007). Resistance in the CMS sense refers to non-organised, workplace-level power struggles of workers against management, such as subversion of high-performance work systems (Courpasson et al., 2012) or maintaining a subversive blog (Courpasson, 2017). Workers who engage in this form of resistance either have no sanctioned voice channel available to them or choose not to use one. This kind of resistance does not readily lend itself to study from the perspective of

pluralist IR, which is concerned with systemic resolution to workplace tensions. Radical IR does study resistance but theorists in this tradition object to the extent of control that CMS ascribes to management so they too tend not to engage with it.

Resistance appears to happen in situations where systematic voice channels are ineffective. Meardi observed in a study of Eastern European organisations that “[i]n all case studies where no real institutional voice was introduced, informal resistance took place” (Meardi, 2012: 131). The radical strand in IR has been more willing to engage with the issue of noninstitutional resistance, mainly wildcat strikes but also shopfloor conflict between workers and managers (Edwards, 1986). Once the strand of critical theory influenced by Foucault and Habermas came to the fore in the early 1990s, many scholars in the radical IR tradition found it unconvincing. Thompson and Ackroyd argued that it overstated the extent and effectiveness of new management practices and marginalised the potential for resistance (Thompson and Ackroyd, 1995). In a later more expansive treatment of the topic they considered the perspectives of critical management and organizational behavior (OB) to be equally unrealistic in their claims about employee conformity (Ackroyd and Thompson, 1999). Their disdain is echoed by Bain and Taylor (2000):

> While other followers of Foucault do admit to the possibilities of resistance, it is always conceived of as individualistic and fragmentary, never collective, where workers can only seek ‘spaces for escape’ (5).

The unfolding of unsanctioned voice is under-theorised in pluralist IR, a lacuna that has been known for years (van Den Broek and Dundon, 2012) but the problem is more

acute today. This aversion to critical management in radical IR similarly results in a blind spot when it comes to the topic of social media. Where pluralist IR is not interested in social media because it is not part of a recognised voice pathway, radical IR is not interested because it considers it to be mere discursive venting that does not impact workers' material conditions on the ground. However we now know that social media can have a material impact, which undermines those assumptions. Hyman's "isolated and ineffectual" protesters (1989: 31) can, today, find themselves a very large audience online.

Social media in the voice/resistance literature

The literature review that informs this research note began with a keyword search in Scopus, limited to A or A* management journals (those assigned Field of Research code 1503 by the Australian Business Deans Council) over a ten year period. This search produced a list of 108 employee voice articles and 186 resistance articles. Only one of the employee voice articles was about social media and situated within an industrial relations framework: Holland et al. (2016). This paper in turn cites two other papers that specifically relate to social media and take an industrial relations perspective: Richards (2008) and Balnave et al. (2014). The list of resistance articles included a number of articles by Courpasson including several about bloggers defeating a large company (Courpasson, 2017; Courpasson, 2016) and a study of employer counter-strategy to social media resistance (Kärreman and Alvesson, 2009). All three cite an earlier study of bloggers reconfiguring workplace power relations (Gossett and Kilker, 2006). This small group of seven articles was expanded through

bibliographic coupling and co-citation analysis, resulting in a modest-sized group of authorities on social media voice/resistance. Within this group, I recognised four areas of debate within industrial relations that some of the CMS papers also touched upon. In each case the critical management scholars presented arguments that are applicable to these debates and open up new directions when inserted into them:

1. Instrumentality

The first and most obvious area of intersection is over the question of instrumentality of voice. Radical literature splits into materialist and post-structuralist camps over the question of whether resistance is discursive (venting or one-way communication) (Fleming and Spicer, 2007; Upchurch and Grassman, 2016) or whether it can obtain a material objective (Thompson, 2016). This roughly aligns with the cleavage between radical IR and CMS.

The corresponding debate in IR over instrumentality of voice is also not settled (Budd, 2014). Further research may however prove this dilemma to be illusory. Considering Courpasson's bloggers, their blogging activity was purely discursive and an avenue for venting, as opposed to a support act for other forms of resistance, however it did indeed lead to workplace change. Social media dissent therefore might be officially ignored by management but on closer examination may be influencing organisational decisions. Further research is needed to establish how often this is the case.

There may also be voice that is not being considered voice in industrial relations because it is not even intended to influence however it might still be having such an effect. For example, Kochan et al. (2019: 24) found asking for assistance from

coworkers to be the second-most prevalent form of voice in today's US workplaces. This and asking for assistance from a supervisor were the most popular channels of voice by a very wide margin, far more common than seeking the assistance of the union and far more common than participating in external protests. Such sideways communication has not traditionally been counted as a form of voice. 'Asking for assistance from coworkers' could be taken more broadly, to include not just verbal conversation inside the workplace but also online chatter between coworkers –maybe even from different locations of the same company. This seems to have happened in a recent study of online organising by gig employees (Wood et al., 2018). The authors regard this social media activity not as an individual outlet but as facilitative of collective action (although not, of itself, constituting such action). In their view the abundance of online forums fragments the possibility of collective action that occurs in a union. In an earlier work, Wood argued that online worker organising did not replace union organising but each had different strengths and weaknesses and there was the possibility of complementarity, albeit not achieved in that particular case (Wood, 2015). This differs from Holland et al.'s discussion of social media voice which was specifically about complaint and thus we have limited research into the prevalence of online sideways voice, yet it is clear that such forums abound. One anonymous employee app, Blind (https://www.teamblind.com), has over two million users.

Wood et al. also found that "networks have been used to explicitly challenge the exploitation of freelancers through coordinating pay demands, expressing grievances and engaging in campaigning activity" (Wood et al., 2018: 99), with 58 percent of their survey participants communicating by social media, SMS or email with peers at least

weekly. Here social media use was not directed towards the employer but nonetheless sought instrumentality when it was designed to maintain informal price norms. Another study found that freelance photographers resist downward price pressure on their wages as they knew market rates through sideways online communication with colleagues (McDonald et al., 2018). This can also be a problem when there is widespread noncompliance and market rates are less than legal minimum rates of pay, or there is a widespread expectation of wage noncompliance –see Berg and Farbenblum (2017: 35). Sideways communication might therefore be a two-edged sword as there is no 'quality control' over information. However, notwithstanding the fact that debate continues over what constitutes voice, it does appear that social media communication between coworkers can be an efficacious form of voice whether intended as such or not. That is not known from industrial relations research though, but rather through Courpasson and Gossett and Kilker.

2. Control

Balnave et al. (2014), along with Budd (2014: 485), introduced discussion of social media into industrial relations scholarship in separate contributions to the same edited book. Both contributions are process-focused. Balnave et al. focus on the legality of social media communication that is not welcomed by employers. The authors take the view that employee social media use will frequently be contrary to the agenda of management and are concerned to know what recourse an employee has about management retaliation. In the Australian context in which they write, the answer is 'very little' (unlike the United States where it is regarded as a form of protected speech). They put forward a model of social media that contests control.

Holland at al. (2016) begin to view social media as an alternative to union membership, noting that social media use and union membership are negatively correlated (based on age cohort) and for that reason suspected that it was more likely to be used as a voice channel by non-union members. The authors propose that social media communications "provide a potential paradigm shift" (Holland et al., 2016: 2623) because they can be set up without management control, something also noted by Balnave et al. (2014). Their quantitative research found that 16% of all workers had "voiced concerns relating to work" using social media. The more recent study by Thompson et al. (2020) gives a very similar number: 18%. Holland et al. propose that social media is a phenomenon that cannot be eradicated and that management should not resist it and instead engage with it. In contrast, Upchurch and Grassman (2016) present an example of social media use by employees as part of an offline industrial conflict. While their starting point is that the employees' actions were not within management's direct control it did emerge that management had ways of retaliating against employees who very publicly opposed the company. They conclude that the potential of social media to influence such events on the ground, while significant, is limited due to the reserve powers of management to discipline employees for social media criticism. These powers are only called upon in a high-stakes conflict such as their case study.

In all of these sources managerial hegemony is assumed as a given. However Courpasson and Dany, in an early study have shown that managerial efforts at control can be hijacked by motivated employees (Courpasson and Dany, 2009). Awareness of this changes the understanding of all of these conflicts. In this light, the social media

using employees described by Balnave et al. may be acting outside of the benefit of legal protection but perhaps in the employees' minds the more salient question is whether or not their haranguing had any success in shifting management. We don't know. The paper by Holland et al. recommends that management institute their own discussion boards and intranets to engage with online employee voice. What effect does it have on this recommendation if we know that such online spaces are themselves susceptible to subversion by disgruntled employees? A more nuanced proposal would better account for the risk to management and the challenge of building trust in such a process.

3. Moving the frontier of control from a private to public arena

Another area of parallel discussion is the nature of social media to take worker discussion outside of the boundaries of an organisation. Balnave et al. (2014) and McDonald and Thompson (2016) all discuss the problem that social media comments which would have been private had they been made in a non-technologically enabled context, such as the office water cooler, now happen outside the workplace and are treated at law as a form of publishing. Balnave et al. call this a shift from private to public space while McDonald and Thompson instead construe it as a colonisation of private space, adapting a typology from Weber. Either way, the implication is the same: the employer has a greater reach in today's context and can exert a chilling effect on discussion of grievances. There have always been public forms of grievance raising but there is no equivalent right for an employer to shut down grievance discussion held in face-to-face meetings outside the workplace.

Critical management scholarship escapes this problem by regarding organisational boundaries as permeable. Mumby et al. refer to resistance as something that happens in and around organisations (Mumby et al., 2017). Courpasson (2017) explores the theme in the context of a critical blog that catalysed widespread dissent at a banking company. Because the bloggers hid behind pseudonyms and because the blog was intended for confidential communication between employees it was in some respect a private space however it became known about and thus became very public. Moreover, once the blog became publicised the bloggers became radicalised and the stand-off was only ended through the real-world process of juridical mediation. Now that employee-to-employee communication has such vast reach, it is very difficult to draw a sharp line between private and public. Building on Scott (1985), Courpasson calls for the division between the private (infra) and the public (political) to be dissolved in theory: "Public forms of resistance can actually grow out of quieter expressions" (2017: 1278). This dyamic should be re-examined in pluralist industrial relations. Rather than just commenting on the injustice of employers having undue rights over employees' communication in their own time and away from the workplace (Barnes et al., 2018) industrial relations scholarship could also accept that the organisational boundary is not as clear as it once was and propose a new regime of voice in which the frontier of control may indeed be somewhere well away from the workplace. As Heery and others have noted, worker power is now frequently exercised in the political arena (Heery et al., 2017; Heery, 2018; Frangi et al., 2018; Hodder and Kretsos, 2015); indeed that is where it was primarily exercised a hundred or more years ago, before unions gained significant organisational strength. In the United

States today the industrial relations environment is now one in which workplace organising is highly constrained while political organising is not. The role of social media both as a form of voice exercised away from the workplace and also as a catalyst for other forms of voice outside the workplace needs further research.

4. Identity-based mobilisation

Social media has fuelled identity-driven activism (Sayers and Jones, 2014), perhaps due to its ability to unite geographically disparate communities of interest into virtual spaces. Heery et al. argue that identity-based mobilisation has now become a major driver of change in industrial relations in an environment of declining unionisation (Heery et al., 2017), a view supported by contributors to Hodder and Kretsos's volume on young workers (Hodder and Kretsos, 2015). However, critical management scholarship has explored at length how managerial control has been expanded through self-regulation (Sewell, 1998) which paints a bleaker picture for worker mobilisation. Fleming argues that this switch away from occupational-based identity disinclines people to agitate for workplace change (Fleming, 2016). A dialogue between these two positions would be very fruitful. Interestingly, Heery notes the antipathy within IR towards the postmodern understanding of social movements (Heery, 2018) which he describes as 'regrettable' because it has hindered the development of labour- and identity-based mobilisation at the present time. A potential avenue for future research would be to explore how occupational identities forged online influence the likelihood of resistance. Fleming's research supports Heery's position that workers are less likely to identify as 'workers' and are therefore more likely to mobilise around non-occupational identities such as race, yet recent IR studies of self-employed freelancers

who connect through social media (Wood et al., 2018; McDonald et al., 2018) found that pay still remained both a significant area of concern and the object of mobilisation.

Discussion and Conclusion

Industrial relations theory needs to better account for the impact of social media on employee voice in contemporary workplaces. Social media use is nearly universal and very large numbers of workers are using it to engage in work-related discussions. If IR is to paint a realistic picture of workplace power relations, it needs to account for the widespread incidence of unofficial online discussions that are capable of reconfiguring these relations and making employers more constrained than is otherwise assumed. Pluralists have been dismissive of the potential of 'isolated individuals' to have an impact on management but we now know from critical management theory that social media use can garner the attention and response of management, meaning that discourse that may have appeared trifling and irrelevant may be influencing employers much more than previously thought. That possibility also makes it of interest to radicals, who have previously framed research on social media as about discourse only and not about real results at the workplace.

To summarise, in this note six areas are identified in which IR research on social media could be moved forward:

1. Social media may be able to move management, and thus be a form of employee voice, even in situations where it is legally unprotected;

2. Company controlled social media channels may not really be as ‘controlled’ as they seem on paper, as workers have the capacity to subvert such platforms and use them to amplify grievances;

3. Social media could be the catalyst for larger, more traditional public change campaigns – there is no research in industrial relations into how this happens and what are the enabling factors;

4. It would be very helpful to have a better idea of how often ‘purely’ expressive social media leads to so-called hard industrial outcomes. It might be quite common or it might almost never happen, there is no data on this;

5. Social media is a very relevant example of the nascent idea of sideways voice, which has recently been identified as being very widespread. Moreover social media should be differentiated from sideways voice in the form of spoken conversation between colleagues within the same workplace since its reach is so much greater;

6. The malleable identity of workers may affect the kind of identity-based worker mobilisation that we have been seeing more of in recent times, perhaps making workers less likely to agitate for workplace change than around identity issues.

Critical management studies of resistance, particularly the work of Courpasson, have demonstrated the possibility of social media resistance overcoming management power. Theory on employee voice within pluralist IR does not account for this possibility and radical IR ignores it by choice. New research is needed in IR to ascertain how much impact these non-institutional online forms of voice are having on workplace relations: how much influence they have on management and for that matter how much influence they have on workers and their unions now that there are other options available for the disgruntled (Mulholland, 2004).

Reflection Two

It didn't take long for public instances the social media voice postulated in this paper to become apparent.

An example of social media voice, the Google Walkout, occurred almost immediately after the paper was first submitted to *Labour and Industry*. I wrote a short piece about this event and its significance for The Conversation. I include it as it helps contextualise the phenomenon just described in the literature paper.

After this piece was published, Google capitulated on the question of mandatory arbitration, giving in to the protesters' key demand. Also arbitration was initially offered to employees only but then extended to contractors (nonstandard employees) as well.

The Google walkout is a watershed moment in 21st century labour activism, *The Conversation,* 8 November 2018

That 20,000 Google employees walked off the job last week is a watershed event, a hugely significant symbolic development for labour relations in the 21st century.

Granted, the action itself was limited. More than seven out of every 10 Google employees did not take part. The walkout was for just a few hours, and the protesters returned to their desks with nothing resolved in their favour. Their only win was Google's chief executive agreeing to meet with organisers to "review a plan that would address" their key demands.

But this is Google, supposedly the best company to work for in a sector renowned for luring the brightest and best with large salaries and excellent conditions. Google's median salary (US$161,409) is the highest of any company. Like most high-tech workers, very few have seen any need to join a trade union.

Their walkout, which surpassed organisers' expectations of 1,500 participants, shows collective organisation is still needed for employees to get a real say in their workplaces.

It also underlines a few important lessons for the labour movement. First, there is a change in the issues that younger workers care deeply about. Second, new technology has huge potential for labour organising.

Cracks in the Google veneer

Google consistenly tops rankings as the best place to work or the most sought after employer. A less attractive truth beneath the veneer has been revealed.

The spark leading to the walkout from 40 Google offices around the world was a New York Times article revealing the kid-glove treatment given to three Google executives accused of sexual misconduct. One case included a US$90 million golden handshake.

What incensed Google employees in particular is the company's use of "mandatory arbitration". This is when employment contracts prevent workers from seeking remedies in a court of law, forcing them to use company procedures instead. The Google case confirms what common sense tells us: internal channels will be more favourable to the company than to employees.

Mandatory arbitration clauses have become a significant issue in US employment relations in the past 20 years. More and more employees are excluded from full access to employment law protections.

Furthermore, even complaining often invites retribution. According to the US Equal Employment Opportunity Commission, retaliation by an employer is by far the most common form of workplace discrimination, accounting for 41,097 of the 84,254 charges the agency received in fiscal year 2017.

At Google, employees say human resources policies have disadvantaged complainants and enabled management to brush sexual harassment issues under the carpet.

“We’ve waited for leadership to fix these problems, "but have come to this conclusion: no one is going to do it for us,” the Google walkout organisers explained. “So we are here, standing together, protecting and supporting each other.”

Millennial values

Many of Google’s employees are in their twenties and thirties. The protest underscores the values younger people are bringing to work. Consider their five key demands:

•an end to forced arbitration

•a commitment to ending pay and opportunity inequity

•a clear, uniform, globally inclusive process for reporting sexual misconduct

•promote the company’s Chief Diversity Officer to answer directly to the CEO

•appoint an employee representative to the company’s board.

These concerns show a generational shift in attitudes. It’s one reason the #MeToo movement has caught on.

A Deloitte survey of 10,000 “Millennials” (born between 1983 and 1994) shows they expect organisations to be ethical, to want to enhance their employees’ lives and careers, and to make a positive impact on society and the environment. They value a diverse and inclusive workplace.

Self-organisation

In echoes of other recent tech protests at Uber and Deliveroo, Google’s un-unionised workforce self-organised the walkout using message boards, messaging apps and social media – ironically the very tools made by Google and the other tech giants.

I’ve written about “digital unionism” before. The scale of what the Google walkout organisers managed in a few days without outside assistance underlines both the opportunity and threat of new technology. Unionism is also being “disrupted” in the new economy. Like other “old economy” businesses, unions have to adapt to survive. If they don’t perfect digital unionism, others will step in and do it themselves.

Collective bargaining ain’t dead

The bottom line is that human resources policies that purport to be there for the benefit of employees must be genuine. No one likes a one-way street, least of all when a unilateral process is purportedly a mechanism for employee voice. People want a genuine say over their working conditions.

Even from a completely self-interested perspective, companies that ignore this risk unpredictable blow-ups. Think Uber, Deliveroo and now Google.

Maybe it's time for Google to follow in the steps of other tech companies that have negotiated collective agreements with their workers.

In Sweden, the services union Unionen has signed a collective agreement covering the most unlikely workers: YouTubers, the people who generate YouTube content, to ensure they receive reasonable compensation. That agreement was not negotiated with YouTube but with the United Screens talent development agency.

If YouTube content generators, who are not even employees, can have a collective say over their working conditions, surely Google's white-collar office workers can too.

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https://theconversation.com/the-google-walkout-is-a-watershed-moment-in-21st-century-labour-activism-106353

Paper Two

After completing the literature review (the thrust of which is set out in Paper One) I proposed my data collection proposal in November 2016 and promptly commenced conducting interviews with Uber drivers. Details of the interview dataset are set out in the Appendix. The questions were a fairly straightforward attempt to ask the drivers if they have grievances and what they do to raise them. Interviews were completed in early 2017 and then supplemented with computer-aided analysis of the online forum UberPeople.net, which a number of interviewees had made reference to.

This paper is really the centrepiece of the thesis. It is here that I uncover that the drivers, for the greater part, are not participating in voice activities understood as such, and yet their online communications were nonetheless having an impact on the company. I argue in the paper that this is a new form of voice, one that lacks a coordinator (thus differentiating it from the Google Walkout just described, which was still coordinated by activists).

My findings were accepted in January 2019 for presentation at the 6th Regulating for Decent Work Conference in Geneva in July 2019. Afterwards I expanded the conference paper into this longer version, which is currently under review with the *Journal of Industrial Relations*.

Peer-to-Peer Online Employee Voice: Collective Action without Coordination

Abstract

E-voice is an important phenomenon because of workers' growing access to the internet and the potential for peer-to-peer communication. This case study examines Uber drivers combining interviews with 21 drivers with a netnographic study of online forum data. The research questions are (1) how do individual online expressions of e-voice become collectivised into a shared demand and (2) can such collective actions bring about a situation that workers consider to be an improvement regarding their shared concerns? E-voice can be collectivised as workers name commonly faced problems and actions and these neologisms spread and become online memes. This information sharing can improve working conditions, even without that being the intention of the person who originally 'voiced' them. That such non-coordinated actions can be worker voice and can create material change is a significant departure from the way voice has traditionally been understood.

Introduction

Can lone individuals ever improve their working lives by speaking up online? E-voice is an important phenomenon now that workers' access to the internet is near-universal in many countries. The internet has the potential to be used for peer-to-peer communication between workers without the need for formalised, institutional voice structures such as unions. E-voice can also persist across time and space, a

characteristic shared with some traditional forms of employee voice such as printed bulletins. Despite optimistic predictions (Silverman et al., 2013; Holland et al., 2016), it does not appear that organisations are engaging constructively with uninvited worker e-voice. Workers are instead left to speak to one another which is normally considered mutual aid and not voice (Ford and Honan, 2019). Can these individualised communications improve one's working conditions?

This question is examined in the context of uberpeople.net, an online forum used by Uber drivers. Established in April 2014, uberpeople.net has tens of thousands of users and over 2 million posts including more than 300,000 specific to Australian cities. Australian drivers also contribute elsewhere on the site. Over 2,000 posts relating to work-related grievances were scraped from the web and examined. This was then supplemented with semi-structured interviews. Paradoxically, while most workers did not believe they had agency to bring about change, their online communications did generate collective action against the company. This process shows worker agency unfolding in an indirect manner that is very different to how voice has been understood to date.

Literature

Employee Voice

Voice is the ability for workers to 'have a say' over their conditions of work (Markey et al., 2013) and is counterposed to managerial prerogative to determine same. The term was coined by Hirschman (1970) in the context of consumer choice and introduced into industrial relations (IR) by Freeman and Medoff (1984) although the concept of voice is implied in seminal texts of the discipline such as Goodrich's *Frontier of Control*

(1920). At the time Freeman and Medoff wrote voice was seen as being exercised by unions but by the 1990s union membership was falling and voice had to be broadened to include non-union employee representation (Hyman, 1997). The related discussion about participation and representation has influenced the discussion of voice as voice seems to be a lesser term that "does not denote influence and may be no more than spitting in the wind" (Wilkinson and Fay, 2011: 66). Within IR voice may still take the form of union voice or it may now also take the form of management-instigated voice such as open-door policies or town hall meetings (Dundon and Gollan, 2007; Mowbray et al., 2019). Some scholars believe that collective voice and unionism will have another upswing in due course (Kelly, 1998; Levesque and Murray, 2006). However, it is a questionable assumption that unions are destined to remain the central form of worker voice in workplaces going forward, given the collapse of membership over the last half century. Visser (2019) maps four possible futures for unions of which revitalisation is just one. In two of the other scenarios, marginalisation and substitution, unions continue to decline, and in the last, dualisation, they have to share their traditional role with other actors. The new channels of worker voice that have been seen to be filling the gap are more likely to be individualised and company-specific (Dundon and Gollan, 2007).

An unresolved question in the voice literature is the extent to which change-oriented actions have to be effective in order to be considered to be voice. Budd describes this as a debate over whether voice is an intrinsic or an instrumental activity (Budd, 2014: 478). Being recognised by management does not guarantee that a voice channel is effective and it seems such forms of voice can be ignored just as easily as unrecognised channels. There is a whole discussion around the deaf ear phenomenon (Peirce et al.,

1998), whereby voice processes exist on paper but their use is thwarted by management. Voice can therefore be acknowledged and effective or acknowledged but ineffective. It can also be ignored and ineffective but, presumably, can also be officially unrecognised but still effective in limiting managerial prerogative as in shopfloor level worker resistance, the kind of unwelcome dissent described by Thompson and Ackroyd (1999). Therefore there exists the paradoxical possibility of voice that is ignored yet effective. A more benign example is so-called sideways voice (Kochan et al., 2019); conversations had with co-workers instead of superiors to find solutions to problems at work. This is very similar to mutual aid which Ford and Honan claim cannot be voice because it does not create the necessary critical mass that brings pressure for change on an employer (Ford and Honan, 2019).

E-Voice

E-voice is a form of voice that is often ignored by employers unless it is harshly critical of them (Barnes et al., 2018; Thornthwaite et al., 2020). It is however very prevalent. A consequence of the advent of the internet is the shift of more and more everyday human dialogue from spoken conversation towards persistent text-based messages.

> Social media has, by design, fundamentally reshaped how we have conversations with each other, moving casual speech from the auditory ether to the realm of the written. And it has vastly expanded the audience for conversations that used to happen in small communities of relatively similar people (Franke-Ruta, 2017: n.p.).

The effect of this is analogous to the advent of printing although much more rapid and with a much wider reach. In the internet age, electronic communications can span the

globe almost instantaneously, most people alive today are literate, and the cost of electronic content creation is negligible.

E-voice, electronic employee voice, first entered the literature in a number of articles published in 2002-2003, including a special issue of the *Journal of Labor Research* (Volume 23, No. 2) and an influential but union-focused article by Diamond and Freeman (2002). Taras and Gesser (2003), in the JLR special issue, discussed the advent of internet-enabled communication creating a form of collective employee voice, speculating whether this phenomenon could substitute for a union. While a wage rise did happen in their case study, the authors believed that e-voice only played a minor role in achieving it and that market factors were more significant. Their example of e-voice thus didn't exhibit instrumentality. One distinctive aspect about the chat board in their case, noted in passing by the authors, is that collective action came about without collective intention. Another characteristic of e-voice that sets it apart from traditional forms of voice such as meetings or open-door management is its persistent character. E-voice remains available after it is expressed and can be encountered by other people. Further, if it is repeatedly expressed in the same place, it builds up and can create a time-compressed *gestalt* that would never have occurred if it had simply been expressed verbally. The persistence of e-voice is not altogether new –printing is also a form of enduring voice (Lumsden, 2012)- however a worker's inner thoughts are now just a Google search away in today's internet-saturated milieu. Also the function of search algorithm's to draw attention to popular or 'trending' topics by automatically collating many sources is something that was never possible in the days of press printing.

After Taras and Gesser, the theoretical concept of e-voice was picked up in Balnave et al. (2014) [since republished as Thornthwaite, Macmillan and Barnes (2020)]. This paper takes the position that individual expressions of dissatisfaction constitute employee voice which is a departure from the understanding of voice enunciated by, for example, Hyman (Hyman, 1989: 31). This may seem a fine distinction to make but purely individual expressions, if they remain isolated, do not seem sufficient to constitute voice in the way it is understood in IR. What is unique about e-voice is the potential for such isolated instances of disaffection to become aggregated and thus become a collective voice. It would be difficult to see how a single social media rant can meet the definition because it is difficult to imagine an employer giving in to demands voiced in this manner. If all it took was one expression of dissatisfaction to obtain a result, why would there even be a need for a voice apparatus to be put in place? People would just bypass it every time if it was simpler to simply state one's grievance and await redress. Even though it might be expressed individually and in isolation, e-voice, like any expression of voice, is only effective in aggregate and this collective aspect is an essential element. What makes social media comments merit attention is not their articulation per se but their ability to be seen and to persuade others.

Balnave et al. observe that "individual workers now have options for expressing voice through a range of non-sanctioned mechanisms as well as organizationally sanctioned channels" (Balnave et al., 2014: 441), citing Miles and Muuka (2011) who argue that technology is driving an expansion of employee voice options; some sanctioned, some not. Balnave et al. believe this degree of optimism is unfounded because of the reserve powers of the employer to forbid unauthorised online communication and follow

through with internal discipline. The authors go on to set out the precarious legal status of online speech in the Australian context. However, forbidden or not, unsanctioned employee blogging or social media commentary can still happen, and still influence managerial decisions. The discussion in Balnave et al. about online resistance concentrates on individual activity. It is about deviant individual behaviour that has very limited ability to influence an organisation if allowed to continue unchecked, as suggested by Hyman (1989: 31). Much of the online resistance that Balnave et al. write of may not intended to be constructive; some of it may be simply expressing disgruntlement or even malicious or defamatory language intended to bring reputational harm to an organisation or manager. That is not voice although may not be very different to the dismissive characterisation of voice at its weakest as ‘spitting in the wind’ (Wilkinson and Fay, 2011) or of Fleming and Spicer’s description of resistance acting as no more than a safety valve (Fleming and Spicer, 2007). It is understandable though. Individuals with no real likelihood of being ‘heard’ have no reason to frame their grievance in terms that point towards constructive resolution.

Holland et al. (2016) emphasise the potentially positive aspects of e-voice for an organisation when channelled or captured. They also put a number on the incidence of e-voice, at about one in six workers. They note the lack of research into social media as a form of employee voice. They argue that social media is of particular significance due to its “reach and immediacy” (Holland et al., 2016: 2623) in comparison to other forms of voice. They do not seem to think there could be a situation in which management tries unsuccessfully to ignore e-voice; they say that it simply fails to be effective if not responded to, which suggests that ‘deaf ears’ is a rational management strategy. This may be true in the short run, but e-voice can still trigger other kinds of action which

may rebound to the organisation's core, such as strikes or boycotts. Holland et al.'s study finds that 16% of employees use social media as a means of voicing concerns about work, that is, as a form of e-voice. A later study of platform workers found that 32% belong to and use online work-related communities (Newlands et al., 2018). This means that expression of e-voice on social media alone, let alone blogs and websites, is greater than the number of employees who belong to trade unions in countries including Australia (ABS, 1996).

While this all sounds very optimistic from a worker voice perspective, the counterfactual is that Wood et al. (2018) found that, even in a situation in which a majority of workers communicated electronically, this did not galvanise them into collective action around grievances, a finding supported by Ford and Honan's study (2019), which was also in the gig economy. Yet this is not the whole story. We do know that there has been worker self-organisation in the gig economy, hobbled by the fact that the platforms refuse to dialogue with these collectivities (Graham and Woodcock, 2018: 246). We also know that workers in the gig economy have sometimes been galvanised into strike actions (Cant, 2019), and that these actions are enabled by social media. Strikes are clearly a form of voice. Is it necessary for e-voice to erupt into real world actions before it can be considered a form of voice?

To help conceptualise e-voice, we might compare its various forms with their real-world forerunners. E-voice is not a subcategory but rather a parallel form of voice and many instances of voice, as traditionally understood, have an e-voice analogue or counterpart. For example, office graffiti (Bell and Forbes, 1994) is analogous to a social media 'rant'. The difference between traditional voice and e-voice can be

characterised as follows. Figure 4 shows options for voice as traditionally understood and examples.

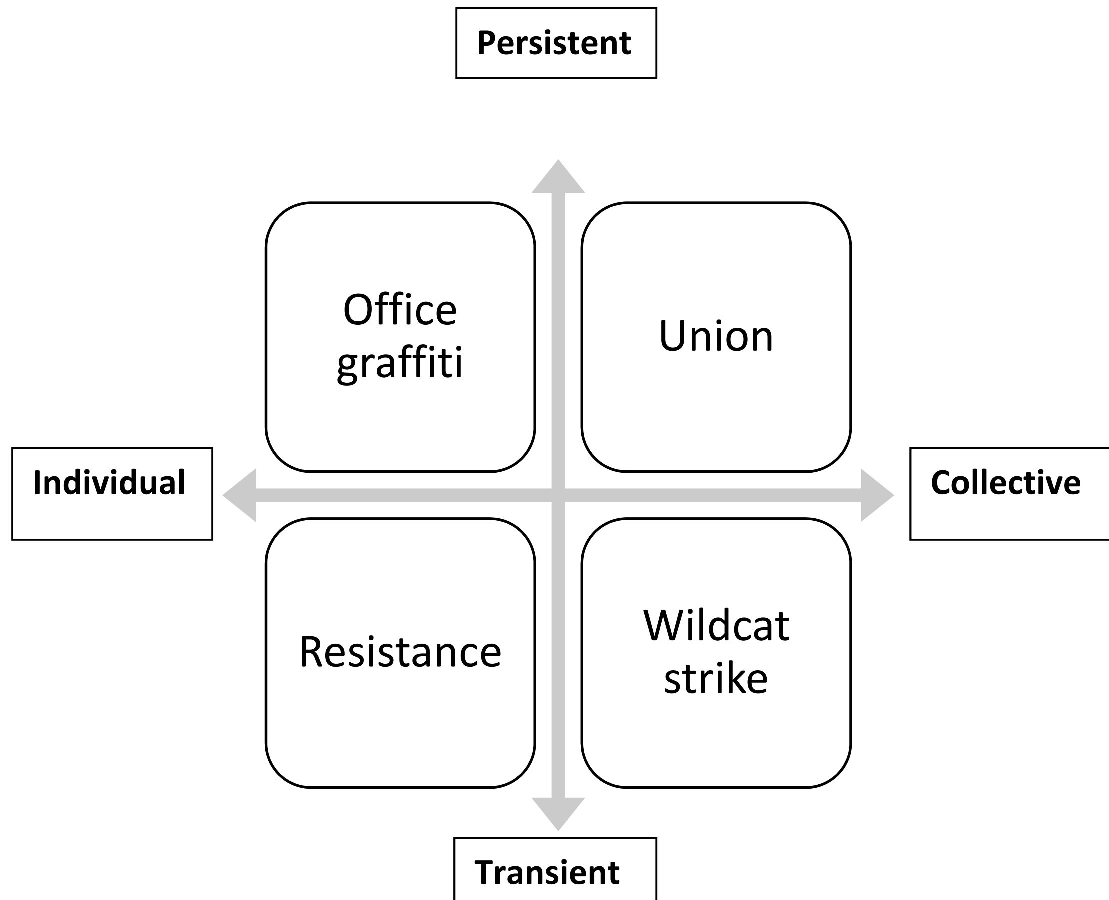

Figure 4: A taxonomy of different forms of 'traditional' voice

In this schema, the most stable form of voice is a union: collective and institutionalised. E-voice by contrast does not at this time exist as a form of unionism. Following Taras and Gesser it may be that e-voice can nonetheless fill the space (often vacant in the absence of actual unions) if it is sufficient to instigate change and

empowerment, without taking institutional form. When forms of e-voice are considered along these same lines (Figure 5), we can see that a form of e-voice can have the same characteristics as a union despite being significantly less institutional.

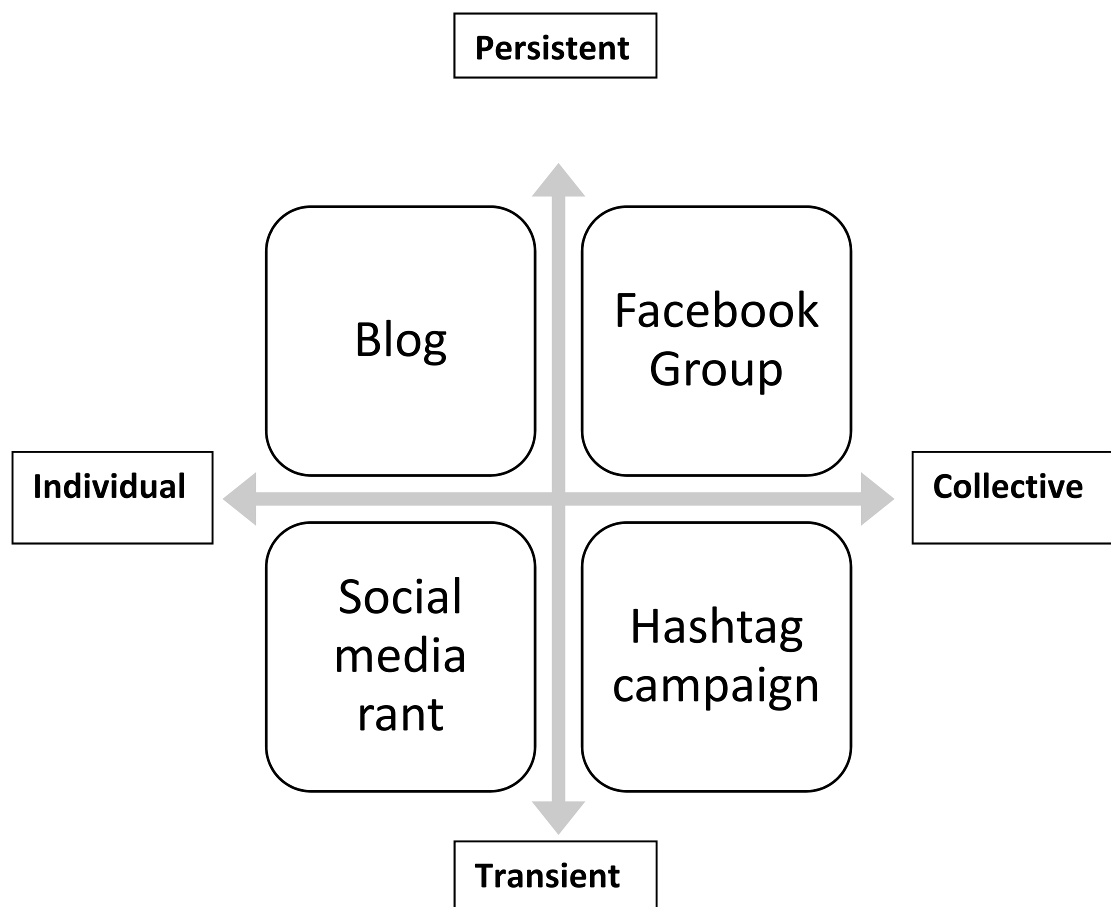

Figure 5: A taxonomy of different forms of e-voice

Facebook Groups and chat forums, while they are communities with rules and roles, are financially asset-light and subject to much less regulation. Cohen and Richards

write of the possibility of Facebook Groups to "strengthen and widen the options for employee resilience in an age of continuing trade union retreat" (Cohen and Richards, 2015: 222), noting their asynchronous nature which preserves employees' thoughts over lengthy periods of time. They also note, following van den Broek et al. (2008), joining such groups as a coping mechanism can be a precondition for resistance.

Balnave et al. (2014), in their overview of e-voice, discuss the problematic boundary between public and private speech on social media. Their chapter recognises that e-voice can occur outside of sanctioned channels, setting it apart from most discussion about traditional voice. What happens as a result of unauthorised or unwelcomed e-voice has been largely unexplored. Thompson et al. (2020), in their recent article about surveillance, find that large numbers of workers (18% in the UK and 11% in Australia) use social media to express dissent and dissatisfaction about work, even though for the majority of these workers there is an organisational policy that forbids them from doing so. Notwithstanding the widespread prevalence of e-voice, Holland et al. (2016), following Gorden (1988), argue that its destructive potential has been overplayed. Both these authors and Silverman et al. (2013) call for managers to engage with e-voice as it presents an opportunity to obtain meaningful employee feedback. The latter add that it also decreases the likelihood such voice will snowball:

> Organisations that have shunned or ignored social media have been lucky in that, to date, employees familiar with social media have not been highly organised. But that will doubtless change in the future. (Silverman et al., 2013: 18)

Arguably that moment is now upon us with the advent of online-organised protests by non-union workers in food delivery (Cant, 2019; Vandaele, 2018; Woodcock, 2016) and even tech company engineers (Walker, 2018). Still, these protests while very visible are still uncommon and it is the less dramatic instances of social media voice that are more widespread and deserve more investigation.

A recent study by Kochan et al. found that consulting with co-workers in this way is the second most common voice channel, utilised by 64% of workers. Only speaking directly to a supervisor is more common, at 71% (Kochan et al., 2019). McDonald et al. also found that freelance workers can resist downward price pressures through these kinds of communications (McDonald et al., 2018) which strongly indicates instrumentality.

Intent and Collectivism

Voice literature carries an implied notion of agency: that change happens because disgruntled individuals want to make it happen. Courpasson (2017) challenges this with his findings about e-voice in a counterinstitutional blog (which he describes through a critical management frame). He suggests that the eventual external result was beyond the bloggers' influence and may not even have taken a form that they desired. Once other people got involved, the protest took on a life of its own. Holland et al. made a related point when they say that shared opinion is usually more accurate than individual estimates, a potential 'paradigm shift' that moves towards the wisdom of crowds thinking of Howe (2009) and before that on research into complex adaptive systems displaying emergent macrobehaviour (Johnson, 2001). In other words, the ability to survey and synthesise many individual expressions of voice through digital crowdsourcing creates a more reliable picture of what changes the workforce wants

than listening to a small number of particularly insistent or accessible voices. That is very different to the demand-and-response pattern of union action and even of town hall meetings and open door policies as it bypasses the gatekeepers. On the other hand, human interpretation is still involved in determining genuinely collectivised requests from mere white noise. That happens either directly or indirectly through training of artificial intelligence. So if 'big listening' ever substituted for collective voice mechanisms it would be a substitution of one gatekeeper with another, more opaque one.

Despite these challenges, e-voice may still constitute a form of collective action. Soon and Kluver's study of web activists (in that case political bloggers) found that collective identity can arise from a mass of individualised online actions (Soon and Kluver, 2014). They identify three hallmarks: (1) shared consciousness, (2) identity signifiers and (3) the presence of a common adversary. Because some of the bloggers in that study did not identify as activists they therefore could not be said to be contributing to a collective project. Wilhoit and Kisselburgh, in a study of cyclists' collective action, go further and argue that collective action can happen even without collective identity of the protagonists and thus even without them intending it. They conclude that "our current understanding of collective action can be extended beyond intentional coordinated action" (Wilhoit and Kisselburgh, 2015: 575). Despite what we know about collectivisation of workplace grievances, Wilhoit and Kisselburgh's research raises the possibility of unintentional yet effective collective action in a workplace context by individuals who were not seeking to influence management and may only have seen themselves as acting out of mutual aid.

Research questions

In summary, e-voice is different to traditional voice in that it tends to persist, it is often unsolicited and it may be collective without collective intention. Traditionally voice has been considered to be a collective phenomenon (Hyman, 1989; Kelly, 1998), although there is a minority view that individual actions can be voice (Budd, 2014). The distinction may not matter as much with respect to e-voice since we also know that individual online speech can constitute collective action when viewed in aggregate (Soon and Kluver, 2014) and that this can happen even if it wasn't the intention of the actors involved (Wilhoit and Kisselburgh, 2015). Additionally, we know that online speech can instigate real-world change in workplaces (Courpasson, 2017). In the broadest sense, the question that arises is what impact e-voice, i.e. unsanctioned collectivised online voice, has on relations between employers and workers. Sub-questions are RQ1 How exactly do these individual online expressions of e-voice become collectivised? And RQ2 In a workplace context, can such collectivised voice bring about a material outcome even in the absence of intent, as Wilhoit and Kisselburgh seem to suggest? Or is it really so weak that it is no more than 'spitting in the wind' as Wilkinson and Fay suggest (2011: 66)?

Method

The data is a qualitative investigation of people driving for Uber who communicate online with other drivers. It combines netnographic analysis (Kozinets, 2010) of the online forum uberpeople.net with 21 semi-structured interviews with drivers. Uber was chosen for its scale, as it has more than a million registered drivers worldwide, and

also because the isolating nature of working for Uber means that workers have little to no form of physical contact with one another making e-voice an option of necessity. This is what Flyvbjerg calls an 'extreme case': if workers in this situation still participate in a form of e-voice it seems reasonable that less isolated workers do so also (Flyvbjerg, 2006; Flyvbjerg, 2011). The uberpeople.net forum presents a large resource of naturally occurring and publicly-accessible data. Social media communication is often secretive (Richards, 2016) so using this site resolved that challenge to some extent. We used a webscraper to download and examine 2,183 forum posts that included words indicative of disgruntlement or protest. The CAQDAS program Leximancer was used to analyse forum data as a way of making use of the large volume of data available and also limiting researcher bias because themes emerge from the text (Sotiriadou et al., 2014).

Forum users rarely write at great length but usually in straightforward question-and-answer posts (Rosenblat, 2018). Interviews provided an opportunity to hear drivers speak at length about their motivations and experiences seeking solutions to challenges in their working lives. Interviewees were solicited via advertisement on uberpeople.net and in several Facebook Groups with interviews taking place over a four month period. In addition to the forum and Facebook Groups there are also WhatsApp driver networks which were discussed in several interviews but not observed directly during the study. Interviews were coded by matters brought up by interviewees, focusing on issues/grievances with Uber and the thematic of collective action. Data were analysed in a two-step process. Firstly, common themes and patterns are identified using a grounded theory approach (Glaser and Strauss, 2017; Strauss and Corbin, 1998). The aim of this initial step was to develop a second

interpretive move, yielding categories that could be used to illuminate the data, demonstrating their relevance by saturating them with a number of appropriate cases. In practice we identify a number of observed, recurrent phenomena that seem to characterize the power relationship between Uber drivers and the company.

As this study is limited to a single company only it is not possible to comprehensively answer the theory questions based on this one case but it does provide insight into the dynamics of e-voice including its shortcomings when compared to traditional voice.

Findings

Before determining whether an outcome can be catalysed in the absence of collective intent it is necessary to determine whether collectivism was present amongst the drivers or not. There was just one instance where a driver in interview described a situation that resembled a traditional type of collective action:

> We have helped them, we actually changed - through my group we complained enough through all the drivers in my group about the area at the airport - yeah, the pick-up zones at the airport, yeah. They changed those due to my WhatsApp groups. (Driver interview)

In contrast, several interviewees explicitly stated they believed that traditional collective action was unviable for Uber drivers.

> Less than 10 per cent of active drivers in the Brisbane, Gold Coast area are members of those [online] groups. So there's no way to reliably

> arrange any kind of action that would make Uber listen to us. (Driver interview)

Drivers being disconnected and isolated was a much stronger theme than being connected and able to act collectively:

> Normally you're just a lone wolf and you're out doing your own thing. (Driver interview)

> I don't have any contact with any other Uber drivers apart from my friend only. (Driver interview)

Even those drivers who did form connections with each other and discovered that other people had similar grievances, their conversations didn't move in the direction of creating change, but acted more like Fleming and Spicer's safety valve (2007):

> There's a handful of drivers, we get together about every three months, go out for a dinner, a couple of drinks and all get around and bitch and moan about Uber. (Driver interview)

Similarly, another driver notices that while there was discussion about collective action on uberpeople.net (effectively a strike), the discussion never leads anywhere in the absence of a coordinator.

> There's not a body of anything that can raise all these concerns with Uber. Uber have the control. (Driver interview)

This line of reasoning was directly observed on the forum. Discussion of collective action as traditionally understood was therefore very limited. However, drivers did still act in each other's mutual interest by providing information and answers that helped

not only the person who solicited it but also anyone who discovered and read such posts afterwards. For example, drivers helped one another to identify the ‘surge’: places where Uber temporarily increases fares due to high demand. These two competing tendencies –lack of worker solidarity and driver mutual help– are intermingled.

> There's one guy on one of the groups he's just all rah-rah, come on guys, we're doing really well, and then there's other people who are like shut up, mate. We're all working for ourselves and in a way we're all competing with each other. (Driver interview)

Voice on the forums sometimes took the recognisable form of complaint

> Average Uber driver quits in 4 months or less. How much "extra money" do you think you can make at less than a buck a mile and a few thousand other "Ubers" doing the same as you? (User Luca)

> They will no longer be posting monthly tax summaries. They have now taken away our ability to print statements and now monthly tax gross summaries and Uber fees. They are doing every thing they can to hide what they are doing from drivers. Only way now to track gross income is to go into uber partner and add up every single rider payment and fee uber takes. Which is a PITA to do. (User Valstar)

More often, though, forum posts are about mutual aid: how to deal with the myriad issues that each driver is encountering for the first time. For example, drivers often share tips on how to drive to minimise down-time, indirectly revealing that unpaid

waiting time is a concern for drivers. In one thread, a driver asks what is a good way to see where the other drivers are on the road and another replies, suggesting to download and open the passenger version of the app.

A number of recurring, invented expressions appeared on the forum. Through these memes, drivers developed their own language and created a sense of shared identity and one in particular had a more far-reaching effect.

"FUber" refers to Uber. The meaning is that Uber don't care about their drivers i.e. "F U –ber". There are over 8,000 uses on the forum and the expression may predate its existence as the first occurrence was on 6 June 2014, very soon after the forum was launched, in a conversation about wireless hotspots:

> I'm with GJ. How many data plans must a person endure. My very first frickin' day driving **FUber**X I had a (waaaaay entitled) client ask for it and while I can easily do this w/ my Galaxy Nexus (rooted) I don't need the anxiety of bill-shock. Or the added expense of a MiFi. Leave that to **FUber** Black I say! (User The Geek)

The expression is an example of passive resistance to domination and its use asserts a tone of enmity between drivers and the company.

"Ants": a slightly deprecatory word for Uber cars because they look like ants when viewed in the app. This term is used 16,600 times on the forum and was also used by two interviewees. First use in the forum was on 10 September 2014:

> Every time I open the Uber app it looks like a gosh darn **ant** farm. Tons of little black things either barely moving or sitting on top of each other. (User uberfool)

This term creates a common identity among all drivers. A forum user might call other drivers ants but he or she is still an ant as well.

"Ubernaut" can mean one of Uber's white collar workers; usually the people in the support office but can be used to mean any non-driver. It is used disparagingly to mean they are out of touch with the realities of driving. In that sense it builds occupational solidarity with the drivers in opposition not to Uber's owners but to another group of Uber workers. Used this way, there are 47 instances of ubernaut on the forum, most of them from Australia and most from one user, Hugh G. There are also other forum users who use the same word ubernaut to mean drivers. It was first used in reference to white collar workers on 30 November 2016 in the Asheville forum and first used in this sense in Australia on 1 February 2017 by user Hugh G. He used the term eleven times over six months before another user, Spursman, picked it up on 10 September 2017:

> Been saying the same thing for weeks. Yep it's bloody dangerous alright. Made pointed mention of this at the local greenlight hub and got a blank look from the **ubernaut** who then said "just accept then cancel if you want". I asked what was wrong with the old ping screen and was told "dunno". (User Spursman)

Occurrences of Ubernaut with this meaning are set out on Table 1:

2017	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	-	2	-	-	1	-	1	7	6	5	-	-
2018	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
	-	-	-	2	2	2	3	1	1	4	5	4

Table 1 Occurrences of 'Ubernaut' on uberpeople.net

Unlike Fuber or ants, Ubernaut has not caught on.

"Longhauling" means gaming Uber by taking longer-than-necessary trips to counter Uber's changes to 'surge' pricing (which drivers had also gamed) and to reduce the relative amount of time per shift spent waiting for a ride. This was first mentioned on uberpeople forums in September 2017. In August 2018 it was mentioned in an article in the *Wall Street Journal*, a publication with a global reach of 42 million digital readers. The journalist explicitly names uberpeople.net as his source (Bensinger, 2018). The expression caught on in October and November 2018 after Uber introduced upfront pricing, a system whereby customers are quoted the price of their trip in advance. Drivers however are paid by the mile and thus benefit if they drive longer-than-necessary routes once they have a passenger onboard as it won't matter to the passenger, other than the inconvenience of a longer trip. The posts alert forum users to this practice. It could be considered a form of go-slow protest or conversely as a way of reducing Uber's cut of a fare. In the month of December 2018 alone there were 132 forum posts about longhauling. To date Uber has not taken any action in response to the practice.

Discussion

Drivers did meet the three tests of collective action put forward by Soon and Kluver: They had a shared consciousness, identity signifiers (their occupation) and the presence of a common adversary. The data also supports Wilhoit and Kisselburgh's position that collective action is possible even in a situation where the actors are not attempting to act collectively and even, sometimes, distancing themselves from one another. The forum discussions about longhauling are particularly notable as they resulted in increased pay, at Uber's cost, for discussants who chose to engage in the practice. I therefore answer RQ2 in the affirmative: that this kind of e-voice can lead to a material outcome in the absence of collectivity of the deliberate kind discussed in the literature until now.

With respect to RQ1 (how e-voice becomes collective), the examples given above do not look like examples of collective voice; there is no evidence of any other Uber workers assisting. Prima facie they are more like 'social media rants': individual and transient expressions of e-voice. Yet, even though their presence online did not cause the company to change, they still brought about an improvement in the circumstances of many drivers who found a way of increasing their pay at the company's expense. In that sense, even though the company exhibited deaf ears to drivers' desire for higher pay, the drivers still devised a way to increase their hourly take-home pay. A formally agreed solution wasn't actually necessary for them to do this.

E-voice, because of its public nature and its persistence, can also amplify worker grievances where they are picked up in public discourse, as happened when

longhauling was referred to by a major news outlet. Traditional voice, whether exercised through a union or some other consultative mechanism, is often kept within organisational boundaries but e-voice by definition is exercised somewhere else (Conway et al., 2019). While the drivers' private Facebook and WhatsApp Groups were not observed in this study, the enormous and very active uberpeople.net forum is content rich and publicly searchable. Journalists and labour advocates who visit such sites learn about issues that they further publicise. This can ultimately garner Uber's attention when it sparks lawsuits and regulatory responses or harms the company's public image in the eyes of consumers. In this way, e-voice can become even more influential than if it were a form of sideways voice only.

This kind of idea sharing over the web has been characterised as a form of employee information sharing (Taylor, 1982) or mutual aid (Irani and Silberman, 2013; Ford and Honan, 2019). While clearly different to orchestrated or coordinated mobilisations that intentionally and deliberately seek workplace change, these small-scale actions have nonetheless been described as sideways voice (Budd, 2014; Kochan et al., 2019). If they are a form of voice then they are an important one as they are far more prevalent than unionism in today's workplaces – four times more prevalent according to the MIT Kochan study. Castells also argued that the internet presents an additional challenge for unions as it is not just a rival to their power but because it is a rival to the *type* of power that they exercise (Castells, 2004). Upchurch and Grassman similarly observe that web-based communication "transcends not just the content but more importantly the form of power and authority in trade unions" (Upchurch and Grassman, 2016: 643). However there are examples of nascent unionism amongst gig economy workers, including UberEATS couriers (Vandaele, 2018). Wood (2015) argues that unions can

work compatibly with this kind of distributed network, using the example of a successful partnership between the United Food and Commercial Workers, a traditional union, and its internet-based offshoot, OUR Walmart. If there is no union partner, the e-voice vehicle may begin to take on an institutional form as observed in this study where the fledgling Ride Share Drivers Association of Australia began to demand a seat at the table with Uber and with Governments whereas, at the time, the Transport Workers Union had not shown interest in recruiting and representing Uber drivers.

As argued above, it is unlikely that a lone employee will have sufficient impact that management are forced into making a strategic choice about engagement. It is only if the exercise of voice receives the support of other employees and perhaps of external stakeholders that it either warrants engagement by management or else catalyses into an ongoing or even organisational form of its own. A matter for future research is the relationship between e-voice, an online form of voice, and offline modes of voice. Is the influence of the web now so great that it is possible for today's 'keyboard warriors' to instigate change through e-voice alone, or is it still necessary for voice actions to take place in the real world? Finally there could also be lessons for unions in how e-voice plays out, as they adjust to become more effective in an environment of low membership, with some suggesting the potential of unions to act as coordinators of online networks and thus expand their reach (Wood, 2015; Heckscher and McCarthy, 2014).

This re-emergence of informal protest could be seen to be an inversion of the pattern of the 19th Century (Quinlan, 2017), where widespread disgruntlement led to wildcat

strikes and abscondment before organised labour and human resources management took shape and resolved worker grievances through less disruptive channels. In today's era where unions are in decline, and non-union employee representation has not filled the gap they have left (Freeman et al., 2007; Pyman et al., 2009), it seems intuitively plausible that these old patterns would return to the fore (Flanagan, 2019) and there does seem to be some anxiety about this amongst employers (Freehills, 2019). However, the internet era presents a form of voice that is different in kind to the 19th Century. The possibility to transcend space and time presented by the Internet are so much greater now than those available through the use of printed pamphlets. Internet chat boards present the possibility of real-time connection to all workers doing the same kind of work within a city or jurisdiction, regardless of where they are or even what else they might be doing at the time. The reach and speed of e-voice makes it a new kind of phenomenon altogether and not a return to something that has existed before. It is bypassing established channels of employee voice and, now that it can be seen to lead to material improvements, it deserves close attention.

Conclusion

In the case observed here, e-voice did generate a material outcome. The situation of some drivers was improved after they learned about the subversive practice of longhauling and participated in it, thereby increasing their pay. This came about through their peer-to-peer forum discussions which, unintentionally, amounted to collective action. This supports the findings of Wilhoit and Kisselburgh in the context of work and employment: change can be instigated through collective action without

deliberate collective intent. However it is a very weak form of empowerment and e-voice as observed here is not as effective as traditional forms of voice. The benefits of longhauling are not secure and drivers are fully exposed to the risk that the company will find some way of retaliating against them; that would be less likely if higher rates had been agreed to through a normal form of voice such as union negotiation or HR consultation. However as neither of those was an option in Uber at the time, the drivers' guerrilla outcome was better for them than nothing. While we have known that e-voice can have unintended collectivity since Taras and Gesser (2003) it has not been clear before that it can achieve change on the ground even where there is no coordinator. E-voice may actually be generating change on a very wide scale but, because employee voice scholars are accustomed to look for coordinators, its impact has been going unnoticed.

Reflection Three

While I was writing up the conference paper version of Paper Two in late 2018, an example of this unplanned, swarm-like voice occurred: the models who work for Victoria's Secret turned on their employer over lack of diversity. This is a perfect illustration of uncoordinated voice in action. There was no real coordinator, it 'just happened', yet it led to a hard outcome: a change of policy and the resignation of key managers. Moreover, the workers involved –the models– were in nonstandard employment and had no access to traditional channels of voice. Lastly, since it was about gender identity, the dispute is an example of identity-based mobilisation of the kind foreshadowed in Paper One.

I wrote the following short piece about it which was published on ABC Opinion.

As a postscript: This piece was written when the controversy was still recent. The fallout has since continued:

- The Victoria's Secret fashion show was not held in 2019
- In the months that followed, the company hired both a trans and a plus sized model, meaning that the protest achieved its aim

Victoria's Secret backlash over trans and plus sized models is a 21st century labour dispute, *ABC Opinion*, 20 November 2018

Victoria's Secret CEO Jan Singer has resigned after two years in the job in a storm of controversy.

Part of the reason for her departure was the declining financial performance of the company, but the immediate cause was a public relations crisis brought on by the models and influencers the brand depends on.

It all unfolded over a week. On Thursday, November 8, marketing director Ed Razek gave an interview to Vogue ahead of the recording of the Victoria's Secret fashion show.

In it he confirmed what many suspected: that Victoria's Secret would not feature transgender or plus-size models in its fashion show, arguing that their brand was based on fantasy and being "politically correct" wasn't part of their brand.

This provoked a swift backlash across digital and social media, where Mr Razek was condemned for displaying an out of touch attitude.

Teen Vogue published critical interviews with transgender models Carmen Carrera and Leyna Bloom and plus size model Tess Holliday on Saturday 10 November.

Later that evening, Victoria's Secret issued an apology, but it was too late and the pile-on continued. In the days that followed, even some "ultra-influencers" got involved.

Kendall Jenner, the daughter of trans icon Caitlyn Jenner and who starred in the show herself, posted "celebrate trans women" to her 98 million Instagram followers.

Rihanna, who has previously sung in the show, was seen by some of her 65 million Instagram followers to have liked a screenshot of this tweet from plus model Louise O'Reilly.

The backlash, for a company so dependent on its brand, was all too much.

By the end of the week, word was out that Ms Singer was stepping down. Whether the company will change course remains to be seen.

Models — the workers — can strike back

It might not appear so at first glance, but this incident was a 21st century labour dispute.

Victoria's Secret's executives are the boss, and models and influencers are their workers, and the workers decided to take a stand on what they saw as discrimination.

Indeed, the pushback was aided and to a degree co-ordinated by The Model Alliance of New York, a tiny labour advocacy group fighting for models' rights, along with the Time's Up movement.

Workers want a voice at work. Research shows this is a largely unmet desire among US workers. Even models, who in the US have never had a union, still want a voice.

A social media storm hits the bottom line

The other take-away here is that social media criticism is not mere venting, and the brand damage it inflicts can impact the bottom-line. It's better for a company to listen than to try to "ride out" these kinds of crises.

Indeed, Victoria's Secret's tone deafness is arguably the reason why their sales are in a slump to begin with.

Changing demographics and markets mean the all straight, all thin line-up of the Victoria's Secret fashion show is not as appealing as it once was.

If the company continues to hunker down, as it well might, the winner will be the likes of Rihanna's Savage X Fenty label, that go out of their way to be more inclusive.

The models don't really mind if that's how it plays out. One benefit of being freelancers is that they aren't invested in any one employer, the work will always be there.

Victoria's Secret may continue to decline but lingerie marketing in general is not going away any time soon.

The original version of this article is published online at

https://www.abc.net.au/news/2018-11-20/victorias-secret-backlash-is-a-21st-century-labour-dispute/10510318

Paper Three

Papers One and Two present a neat continuity: I suspected that social media voice was taking place and it was, although the absence of coordination was a surprising twist.

However after completing Paper Two and after observing the Victoria's Secret incident just described, I felt that something was missing from the picture. If it was really that easy for uncoordinated social media voice to attain an outcome, it should be taking the world by storm, but it clearly isn't.

In the first half of 2019 I thus revisited the interviews and web forum data used in Paper Two with fresh eyes, looking for counterfactuals: signs that attempts at grievance-raising were being neutered or thwarted. The paper that follows is the result of that re-examination of data, which also required a re-examination of literature as there were no theoretical hooks in the discipline of industrial relations to explain the phenomenon observed.

This Paper was completed in June 2019 and submitted to a special issue of the journal *Organization*. The version here is the version accepted for publication in July 2020.

"You Can't Pick Up a Phone and Talk To Someone": How Algorithms Function as Biopower in the Gig Economy

Abstract

This paper asks why there is so little collective dissent and mobilised resistance in the gig economy, especially when labour-based digital platforms are used. We suggest part of the answer lies with 'management by algorithm'. Drawing on an empirical study of Uber drivers in Australia, we found that algorithms function as a form of *biopower*, a concept introduced by Michel Foucault (2008; 2007; 2003). As Uber drivers 'life processes' are put to work, fragmentation, isolation and resignation ensue. We explore the implications that our findings have for appreciating how biopower operates within platform capitalism and beyond.

Introduction

The application of the 'free market' ideals associated with neoliberalism (Harvey, 2005) to the employment relationship, have significantly eroded worker protections associated with the post-war capital/labour compact (Kalleberg, 2018). Employers' power has increased also thanks to the newfound capacity to externalise costs via various forms of indirect employment systems. We focus in particular on a technologically enabled variant of this: digital platform labour (Hill, 2015; Prassl, 2018; De Stefano, 2015).

While the electronic mediation of social activity more generally may have once held potential for open collaboration (Levine and Prietula, 2014) and participatory citizenship (Stevenson, 2015; De Angelis, 2003), large swathes of the 'digital commons' is now subservient to capitalism (Ossewaarde and Reijers, 2017), including how individuals generate income. This has seen the marketization of human lives far outside the time and space where work has traditionally been undertaken (Zuboff, 2015), with platforms devising ways to extract profits from individuals' spare time, their idle motor vehicles, second-hand belongings, and unoccupied accommodation (Srnicek, 2016). According to this business model, individuals are more or less permanent/continuous carriers of corporate values and almost any aspect of human life can (and should) be monetized, with the extracted value immediately 'reinvested' in consumption, fuelling a perpetual cycle (West, 2018).

Researchers have recently become aware of the significant 'negative externalities' associated with this business model and their impact on various stakeholders in and around the employment relationship (Kessler, 2018; Stanford, 2017; Shell, 2018). Indeed, the reduction of all social relationships to 'spot' market transactions and use of digital interfaces in place of human interactions can have some detrimental consequences for workers (Scholz, 2016; Wood et al., 2019) – as dramatically portrayed in Ken Loach's movie, *Sorry We Missed You*. This presents a puzzle in relation to the gig economy: despite educational attainments and the widespread availability of communication tools that could effectively mobilize collective dissent, workers in the gig economy frequently appear powerless. Indeed, the picture we get

from the extant research is of a defeated, supine and largely non-resistant workforce. Loyalty or exit (Hirschman, 1970) appear to be the predominant alternatives.

We argue that this lack of collective resistance is due to the techniques of power that are used by platform firms to regulate their *de facto* workforce. No doubt traditional capital/labour power relations are at play; yet the use of digital mediators and the formal classification of self-employment clearly introduce additional dynamics into these relations. In this paper we specifically focus on the use of *algorithms* to reveal a novel form of power, one that encompasses the 'bios' or life processes of workers, rather than just their formal labour time. Algorithms are a set of rules modulated by computer programs, often using Artificial Intelligence (AI), to regulate supply and demand in the gig economy. We employ the notion of biopolitics or *biopower* to examine the way in which algorithms shape the political possibilities of participants under platform capitalism. The neologism 'biopolitics' (or biopower) was discussed by Michel Foucault in a series of lectures delivered in the 1970s to analyse the insinuation of market values into everyday life (Foucault, 2008; 2007; 2003) Biopower represents a form of regulation that utilises life itself, individuals' bodies, time, personalities and everyday decisions, much of which falls outside the typical 9-to-5 pattern of employment (Fleming, 2014; Moisander et al., 2018).

We submit that platform firms epitomise this expression of power since it encourages low-wage or unemployed individuals to fill up their evenings and weekends with income-supplementing activities. Company rhetoric celebrates this as giving workers 'flexibility' to earn income whenever they want. However, the world has not changed so much that weekends and weekdays are interchangeable (Yu and Peetz, 2019). Thus

work and life, as Foucault (2008) forewarned, become impossible to disentangle in this sector. Ridesharing platforms, for example, incentivise workers to leave home to work during 'surge' periods which are usually evenings and weekends, deploying techniques derived from behavioural economics to 'nudge' drivers so that the 'choice' feels more natural.

While there have been some cases of collective resistance to platform capitalism (for instance, the class actions against Deliveroo and Uber), we contend that resistance has been remarkably absent in this sector, an observation others have made too (Stanford, 2017; Wood et al., 2019; Scholz, 2016). This is surprising given the exploitation and hostile management practices that frequently accompany labour-based digital platforms. In this paper, based upon an empirical study of Uber, we argue that the use of algorithms is one reason why platform capitalism has so successfully displaced resistance. While this mode of biopower harvests value from the full 'life' of workers, it paradoxically dehumanises management, replacing supervisors with a set of highly depersonalised and disembodied commands. Being faceless, algorithmic constraints are not construed as decisions by antagonists, but 'naturalised' and treated as inevitable hurdles that can only be navigated or 'gamed'. Moreover, with the help of AI, any resistance that does occur is deflected onto co-workers or other stakeholders instead of employers. In this context, paradoxically, individual acts of defiance end up functioning to the platform's advantage, sustaining the power asymmetry between employers and workers.

In making this argument, the paper is structured as follows. First, we give an overview of digital on-demand employment, focusing on the use of algorithms as a significant

regulation mechanism. Second, we introduce the concept of biopower, explaining its utility for describing the power dynamics that characterize the relations between employers and employees in the gig economy, highlighting the intermediary role played by algorithms and AI. Third, in order to understand how resistance is both thwarted and deflected, we draw on a case study of Uber drivers in Australia. And fourth, the implications for studying the gig economy and the emergent patterns of employment it signals are discussed, emphasising the contribution this paper makes to the literature.

Digital On-Demand Working: The Capitalist Colonization of Digital Commons

The speed at which digital technologies have been adopted and their transformative effect on economies is so profound that many have begun to call the present era the 'fourth industrial revolution' (World Economic Forum, 2016). Digital technologies are clearly attractive to for-profit enterprises for many reasons. 'Big data' accelerates computing capacity beyond that of human operators. Digital on-line apps cut the overhead costs of capital (such as cars in the ridehailing industry). And social media's main benefit, from a corporate point of view, is not connecting people with each other but rather its ability to predict and exploit consumer behaviour for marketing purposes (Zuboff, 2019).

Digital mediated open collaboration (Levine and Prietula, 2014) has offered unprecedented opportunity of developing new forms of non-hierarchical, open-access organizations; here its emancipatory potential has been realized in the development of

collective endeavours such as Wikipedia or Linux (Stevenson, 2015; De Angelis, 2003). However, it has not taken long for the 'digital commons' to be integrated into capitalist modes of production and consumption, colonizing these new spaces and harnessing them to market logics (Ossewaarde and Reijers, 2017). A much discussed recent example is the rise of 'surveillance capitalism' that operates by using digital technologies for behavioural monitoring, employing this information to predict future behaviour for marketing purposes (Zuboff, 2019).

As a specific manifestation of this trend, the 'platform economy' allows enterprises to utilize technology so that they do not themselves provide services but merely link buyers and sellers in the marketplace, and receiving a fee in the process. A significant subset of the platform economy are firms that use on-demand work systems - managed through smartphone apps - to mediate between individual service providers and service users (De Stefano, 2015). These for-profit companies mobilize a *de facto* workforce, who are technically considered self-employed. Digitally parceled out microtasks have been around since Amazon launched its Mechanical Turk service in 2005, but the model has expanded significantly with the advent of smartphones (Hill, 2015). Firms do not need to pay workers during idle time, only the units of labour they perform. The largest on-demand work platforms number registered users in the millions (Scholz, 2016). For sure, if their workers were considered their direct employees, Crowdsource, Crowdflower, Care.com and Uber would all be larger than any other existing employer in the service economy (Kessler, 2018).

Digital platform firms frequently extol the virtues of self-employment, entrepreneurship and financial independence. However, critics suggest there is a

profound incongruence between the rhetoric of entrepreneurial freedom and the reality of precarious, low-paid work (Prassl, 2018: 9; Wood et al., 2019; Woodcock and Graham, 2019). Fleming (2017) lambasts the 'radical responsibilization' involved when firms shift the risks and costs of employment – usually covered by employers in the regular economy – onto workers themselves. Uber's business model pursues this principle to its logical conclusion, disavowing any responsibility for worker entitlements and benefits, whilst fervently fighting unionization (which is illegal for Uber drivers in the US, for instance). In a context of stagnating wages more generally, this is why some argue that on-demand working is one mechanism through which wealth inequality has increased, with a greater share of profits being distributed as dividends rather than worker income (Srnicek, 2016).

As they carefully avoid structuring themselves as formal 'employers', platforms are able to pay considerably below prevailing minimum wages, e.g. USD 1.00-5.50 per hour on Amazon Mechanical Turk (Berg, 2016) and as little as USD 3.99 per hour on Uber (Prassl, 2018: 61). Those who control the platform capture most of the value created by these workers; and at the same time capital owners enjoy relatively low overheads by corporate standards as they do not have to invest in plant or equipment (Scholz, 2016).

Algorithmic Management

Although not confined to the gig economy, management by algorithm is a salient feature of this business model. According to Mateescu and Nguyen (2019: 1),

algorithmic management can be defined as "a diverse set of technological tools and techniques to remotely manage workforces, relying on data collection and surveillance of workers to enable automated or semi-automated decision-making."

Algorithmic management has multiple facets. It operates remotely through various forms of technological mediation, especially where apps are rented to private citizens (e.g., Uber drivers). It is highly computational, meaning that it runs through various forms of big data methods that allows for impressive surveillance capabilities. The use of smartphones has been central to this since it permits individualization (the worker owns the device rather than the firm) and near constant monitoring. Furthermore, the deployment of consumer rating systems means that workers are evaluated via the consumption moment itself, shifting this facet of appraisal away from the firm and onto an ostensibly 'private' transaction. Hence, and as Curchod et al. (2019) argue, this is no ordinary panopticon, because workers are not subject to the gaze of managers but by users themselves, which has implications for job security and rewards.

There is little research on how algorithmic management systems intersect with some very human power relationships in the platform economy. We argue that the clear tensions involved do not just emerge between human actors and non-human actants: this technology also has implications for decision accountability regarding hiring, appraising and firing that have previously been made by real people, like employers and managers. Whereas a human boss can be rendered accountable to unfair dismissal and follow due process to ensure fairness, an algorithmic manager obviously cannot. Even under the EU's recent General Data Protection Regulation legislation, companies are exempted from revealing the decision-making criteria used by algorithms for these

kinds of decisions. Gig workers governed by AI thus often fall through the cracks of employment legislation both with respect to their employment status as well as protections from discrimination and unfair dismissal. We therefore need to consider how algorithms mesh with power struggles between employers and labour, managers and the managed. This will help address our question as to why there is so little effective industrial action in the gig economy.

Enter Biopower

In his later years Foucault argued that power was not simply exercised through sovereign force or even disciplinary techniques, but through managing *bios* or 'life itself', linking peoples' social existence to market forces, not just their paid labor time (Foucault, 2008; 2007; 2003). Foucault called this 'biopolitics'. The specific techniques involved are called biopower, a concept that has seen some application to workplaces (Fleming, 2014; Moisander et al., 2018; Weiskopf and Munro, 2012; Munro, 2012). Biopower sees individuals 'marketise' their own private life activities including work, leisure, consumption, romance and life in general. Foucault developed the concept of biopolitics to describe a variant of power that no longer simply restrains or delimits individuals but invests in 'life itself', frequently expressed as (putative) free choice.

According to Foucault (2008), human capital theory – popularized by neoliberal economists - is an exemplar of biopower. Under this paradigm, there are no longer employees, bosses, students, owners or managers *per se*. Instead, all individuals are

conceptualized as ‘micro capitalists’ who constantly perform a cost/benefit calculation regarding their daily choices. In this respect, biopower consists of,

> … generalizing the ‘enterprise’ from within the social body or social fabric […] The individual’s life itself – with his relationships to his private property, with his family, household, insurance and retirement – must make him into a sort of permanent and multiple enterprise (Foucault, 2008: 241).

The idea has proved useful in explaining how neoliberal economic theory has redefined contemporary organizations, especially in relation to the blurring of the work/non work boundary: the human capitalist, for example, is a permanent enterprise who never switches off (Moisander et al., 2018; Weiskopf and Munro, 2012) and considers all aspects of his or her life in purely economic terms. Importantly, this mode of regulation relies on ‘formal’ freedom and self-direction rather than disciplinary enclosure because life itself becomes the primary vehicle of subjugation. As Weiskopf and Munro (2012: 687) argue with respect to human capital theory, biopower infiltrates the everyday processes of individuals and regulates them without overt intervention: biopower implicitly “defines the frame within which choices can and must be made. It is associated with a specific type of organization, which allows freedom of movement but channels that movement and its flows in specific directions.”

The architects of ‘Uberization’, as the diffusion of platform work systems is often called, have capitalized on this form of power and control in relation to labour,

especially with the use of managerial algorithms. This form of management follows the worker in an ongoing and continuous fashion. Direction and monitoring are inserted into the worker's decision-making process, both on and off the job. The nudging technology involved (with the help of 'big data') seamlessly weds regulation with workers' daily living patterns, how they respond to a surge and the number of breaks they take. As a result, many gig economy workers find it difficult to differentiate labour time from personal time. This fits Foucault's concept of biopower very neatly, and is an excellent descriptor of how control functions in the industry, particularly given that no direct supervisors are present.

Whither Resistance?

This begs the question as to how platform workers respond to the negative aspects or 'externalities' of this biopolitical regulation. There have certainly been flashpoints of resistance to platform capitalism, including class action lawsuits against Uber in the US and intermittent industrial action, but by and large, collective resistance has been conspicuously absent (Kalleberg, 2018; Woodcock and Graham, 2019).

By resistance we mean the active attempt to oppose and/or reverse a specific power relationship (Fleming and Spicer, 2008). It is worth noting that control and resistance in the workplace are often not separate entities but interconnected through complex processes (Mumby, 2005), a point we will return to in our discussion. In relation to our focal research site – Uber and its drivers – we ask why more drivers are not collectively opposing the increasingly draconian pay and conditions they face. The largely docile

state of the workforce is clearly reflected in the paucity of labor regulations: to date New York City is the one jurisdiction in the world that has applied minimum wage laws to on-demand workers (a similar ordinance as recently passed in California was passed but is subject to legal challenges at the time of writing).

There are probably a number of reasons behind this absence of organized resistance. The gig economy lacks the typical support structures that can encourage organized opposition. Take, for example, space. As classic studies of the capitalist labour process reveal, the workplace is both a place where workers are subjected to disciplinary control but also come together as a collective unit, enabling occupational solidarity to emerge (Edwards, 1979). It is precisely where power is spatially productive that new forms of cohesion and resistance can develop (McKinlay, 2006). This is why unions, for example, tend to focus on certain collective spaces. But this kind of classic 'shopfloor' is remarkably absent in much of the gig economy. By design, the workforce, combined with technological assets that remain their property (be it a smart phone, a lorry, a car or a bicycle) constitute a myriad of fluid and moveable workplaces. Digital labour markets are lonely places, in which workers toil independently, in isolation, and sometimes in direct competition with one another (Johnston and Land-Kazlauskas, 2018).

Another factor for the lack of coordinated resistance could be the reluctance that some workers have with self-identifying as an employee: many drivers claim they are only using the ridesharing app as a fun and/or temporary way to earn extra income (Lee et al., 2015). The high turnover rates in platforms firms - where participants move in and out of different 'gigs' in a variety of sectors - disincentivise the effort to invest in

community-building activities with co-workers or organizing labour interests therein (Johnston and Land-Kazlauskas, 2018).

Nevertheless, Uber drivers have many opportunities to meet, socialize or converse, be it on the road, in cafes, waiting points and – more importantly – in cyberspace, through social media and chatrooms. Indeed, there are several social media forums used by gig workers to share experiences, news and concerns on the job. So given that digital on-demand workers use the internet so extensively, should we not be seeing them turn to the web in order to facilitate the development of collective voice?

The potential, at least, for this has been noted. For example, Van Zoonen et al. (2016) found in an analysis of tweets from 433 digital platform users, one-third were related to work conditions. Clearly some of this digital chattering could fuel mobilized opposition in order to obtain better pay and conditions. For sure, the role of social media in coordinating dissent in other contexts, such as the Arab Spring, has been well documented (Eltantawy and Wiest, 2011). However, it appears that digital employers are not taking any chances in this respect, actively undermining social media use when it contravenes their socio-economic interests. A blatant example was Amazon enlisting an army of fulfillment-center employees to write positive comments about working in its warehouses (Coldewey, 2018); similarly, the company pays some of its warehouse workers to counter-troll anyone who tweets negative comments about pay and conditions in its vast warehouses (Johnston and Land-Kazlauskas, 2018).

The debate remains open on whether the internet on the whole either enables or discourages worker resistance (Thierer, 2014). More generally, the capacity of the

‘digital commons’ to generate genuine oppositional solidarity has been questioned, mainly due to the lack of human contact and shared space necessary to build social trust and a shared identity (Ossewaarde and Reijers, 2017). Some online expressions of criticism by professional workers amount to little more than coping strategies, ‘safety-valves’ that do not unsettle the dominance of the firm (Kärreman and Alvesson, 2009). Therefore the existence of online forums cannot be taken as prima facie evidence of effective resistance (Upchurch and Grassman, 2016).

This conspicuously apolitical situation is not without precedent, as studies have identified other ‘hard to organize groups’, particularly among conventional contingent workers. But even here alternative forms of opposition have been observed to some degree (Heery, 2009; Fine, 2015; Milkman and Ott, 2014). Therefore, we suggest that the gig economy appears to be a rather unique case, with its own reasons for the apathy and lack of collective dissent. So to address the research question motivating this paper (why does collective resistance fail to coalesce among on-demand workers in the platform economy?) we will now discuss our case study of Uber drivers in Australia.

Method

Uber was chosen because of its scale with over a million registered drivers worldwide and because it has become an icon for the so-called Uberization process, which is heavily reliant on algorithmic management. Uber is a leading player in this sector and also presents opportunities that arise from studying a ‘paradigmatic case’ (Flyvbjerg,

2006; Flyvbjerg, 2011). We argue it represents the ideal-typical dynamics of the gig economy for three reasons. First, the drivers' relationship with company management is almost completely mediated by computer interfaces. Second, drivers are isolated and have little or no physical contact with one another or with the company. Third, their 'IT literacy' (an indispensable condition to participate in the gig economy) offers them with opportunities to express views about work, to connect and build solidarity over social media forums. In other words, these workers could "turn to digital culture to crowdsource information that they don't get directly from their algorithmic boss" (Rosenblat, 2018: 202).

To investigate the behavior of Uber drivers in Australia we combined two qualitative methods. The first is a netnographic analysis (Kozinets, 2010) of the online forum 'uberpeople.net'. Established in April 2014 by drivers themselves, uberpeople.net has over one hundred thousand users and nearly 5 million posts, including more than 400,000 referring specifically to Australian cities. Australian drivers also contribute elsewhere on the site. The uberpeople.net forum presents a large resource of naturally occurring and publicly-accessible data. Social media communication is often secretive (Richards, 2016) so using this site helped overcome that challenge to some extent. We used a webscraper to download and examine 2,183 forum posts that included words indicative of disgruntlement or protest. Additional netnographic data were collected through Facebook driver groups too.

Forum users rarely write at great length, usually communicating in straightforward question-and-answer posts (Rosenblat, 2018). So to enrich our data-set, additional information was gathered from a second method, 21 semi-structured interviews. This

provided an opportunity to hear drivers speak at greater length about their motivations, experiences and challenges in their working lives. Interviewees were recruited via advertisement on uberpeople.net and in several Facebook Groups, with interviews taking place between December 2016 and March 2017. Interviews were coded according to themes raised by interviewees, focusing on issues/grievances with Uber and the thematic of collective action.

Data were analysed in a two-step process. Firstly, common themes and patterns are identified using a grounded theory approach (Glaser and Strauss, 1967; Corbin and Strauss, 1998). The aim of this initial step was to develop a second interpretive move, yielding categories that could be used to illuminate the data, demonstrating their relevance by saturating them with a number of appropriate cases. In practice we identify a number of observed, recurrent phenomena that seem to characterize the power relationship between Uber drivers and the company.

Findings

Findings are now presented in relation to key themes associated with the power/resistance dynamic that we suggest is indicative of how gig economy workers are regulated under platform capitalism. In particular, we identified data that is illustrative of how algorithms display biopolitical features that may regulate workers and block either their desire for or ability to collectively resist as discussed above. In doing so we have categorised the data into four significant themes.

1. Resignation and Hopelessness

We found that Uber Australia's algorithms are firmly in control of the drivers' working lives. They significantly delimit their choices, coaxing them onto the road at busy times, punishing them for refusing to accept rides, 'sacking' them for negative customer ratings and so-forth. Drivers also said that they 'lived' with the app, and it formed a dominant background to their daily living patterns. While this was meant to be empowering – officially at least – it appeared to create a sense of hopelessness among workers. Most drivers were resigned to the low pay and did not believe this could be improved through collective action. Given the algorithms involved, Uber is typically described in fatalistic terms: an omniscient and unforgiving entity to which drivers do not belong, yet sets the rules of the 'game'. Moreover, drivers often feel that they have little choice but to comply and play along with this game:

> There's not a body of anything that can raise all these concerns with Uber. Uber have the control. (Driver interview)

> Uber is a horrible company. I think many of us will agree with that but they're entitled to do what they do. (Driver interview)

This resignation inevitably undermines the possibility of considering collective action. When the idea is entertained, it leads to a form of self-censoring, based on the belief of the hopelessness of the initiative.

> It's very difficult for drivers to organise collectively […] despairing is probably a bit of an exaggeration but I don't have a lot of hope for being able to do that and that's a victory for them [Uber] because

> that's exactly what they want. They want drivers to not have the ability to organise, they want drivers to not have the ability to act collectively, and they're getting it. (Driver interview)

Other drivers noted that social isolation and fragmentation was an intrinsic part of the experience of driving for Uber. One said, "I don't think there's many drivers that really know each other". Another admits to having never had contact with any other driver. Apart from some WhatsApp groups that meet in person there is little evidence of coordinated attempts to meet at all let alone organize. Generally, the mood was one of resignation:

> They just expect you to give up, they expect you to give up (Driver interview).

> They don't respond to complaints at all, no. They don't want to respond to complaints (Driver interview).

> These WhatsApp groups and Facebook groups – I mean they threaten Uber's rule in the sense that we have the opportunity to become a collective if there's a political will amongst the drivers which I don't necessarily think there are (Driver interview).

Forum posts have the same resigned tone:

> When the realization kicks in that none [sic] gives a tomato about their little strike and nothing will result of it, except your time wasted on a ordinary Wednesday. The app will still work and there will be some drivers making some extra on the surge, that's all. I pray for you guys

> and feel second hand embarrassment from the thought of how the event will unfold. Just like Taxi drivers striking to ban Uber, resistance will be futile.
>
> And even hypothetically, the strike hurts Uber, how exactly is striking a blow to one of your only two business partner [sic] that is already hurting going to magically increase your wage? It won't, if anything it will decrease it as Uber has to show financial result. The more you strike, the harder the squeeze will be on your rate to make up for any potential damage. (User AveragePerson)

Not all drivers arrived to the conclusion that resistance is futile or even that Uber was a target to be resisted in the first place. Forum user AveragePerson, for example, appears to have internalized the rhetoric that what's good for Uber is unquestionably good for drivers too. Other drivers draw on the discourse of 'the market' to the same effect, believing that the inexorable forces of supply and demand will compel Uber to increase pay. From this perspective, resistance looks irrational and counter-intuitive to the shared pursuit of economic self-interest:

> Uber really hates a driver not accepting a ride, it will eventually be forced to substantially increase our rates and earnings. Watch it increase rates. Ain't no way Uber will survive with this crap if giving us .60 cents a mile or .40c. (User Ozzyoz)

2. Distance and Isolation

Another prevalent theme in the data was Uber's desire to keep its workforce at arm's length, both individually isolated from each other and the company itself. This was achieved not only legally – by being legally classified as independent business owners - but also by creating the impression that the company was aloof and inaccessible. Management by algorithm was very important for doing this. Consequently, drivers' daily movements are shaped by algorithm as are their formal channels for recourse:

> You can't pick up a phone and talk to someone (Driver interview).

> It's difficult the way they've got it because it's just like, if it's an issue that's not related to all their points it's difficult to talk to them. Unless it's an issue that they have in their drop box (Driver interview).

> You get more answers on the Uber forum than from Uber itself (Driver interview).

> …Sadly Uber Support as I understand it, all initially go to somewhere, the Philippines or India or just somewhere else and virtually the answers are all copy and paste. So, it's a circus […] your first one starts off thanks for reaching out and then they recite the same old line, this is designed to make you more successful. Then you go back and say that's not what I, please can you read my email and respond to my concerns here. So eventually after four or five of this it does come up the chain to Melbourne and somebody in Melbourne will write and say oh, we're sorry you feel that, this is not the experience

> of all our other drivers but we're sorry, we will persist with this because we've found it to work everywhere else in the world. You just knew this wasn't going anywhere (Driver interview).

This distancing process can also be considered as an exercise of power based on non-decisions (Bachrach and Baratz, 1962), a form of manipulation that restricts the possibilities for raising certain issues (Fleming and Spicer, 2014). Drivers can 'fight back' but only at the cost of a significant investment in time, which eventually induces fatigue that further reduces their will to resist:

> I'm just going to have to wait here until you let me know when [overdue payments] come in. Otherwise you're going to have 150 drivers in here before four o'clock (Driver interview).

We interpret this excerpt as evidence of how biopower – as the regulation of life itself in relation to the controlling party – monitors the interactions between the driver and company. Because this was preset by the algorithmic feedback system, drivers had little choice but to accept the relationship. This is also consistent with Rosenblat's (2018: 192) observation that, "drivers repeatedly meet with the pain of realizing that their frustrations don't merit much more than auto-replies from Uber Support". Rosenblat argues that this stonewalling is also a direct cause of the prevalence of online chatting: "distanced from their employers, drivers turn to digital culture to crowdsource information that they don't get directly from their algorithmic bosses" (Rosenblat, 2018: 202). Only one interviewee persisted with the company until heard to her satisfaction.

3. Gaming the System

Drivers are encouraged to play by Uber's rules for higher pay, treating it almost as a game. Once again, this represents a form power that evokes the life skills of workers, their ingenuity and innovativeness, as part of the control system. Management algorithms provide the medium through which this is accomplished. Most are well aware of that the company's tactics are designed to suppress their interests yet seem to go along with the limited options put before them to increase earnings, mostly by driving when fares are 'surging', i.e. increased by algorithm in response to high passenger demand.

Notwithstanding their aversion to direct conflict with Uber, many drivers openly discuss ways of gaming the Uber system to make it work better for themselves. This often goes beyond what the company would regard as legitimate. For example 'longhauling', taking a longer than necessary trip to take advantage of Uber's switch to upfront pricing, means drivers spend proportionally more of their shift carrying a passenger and therefore earning money while the passenger is not charged any extra so, unless she or he is in a hurry, is not adversely affected. User koyotemohn said, for example:

> So if the trip is more than 3 miles...find a way to make it 5. It's these little details that accumulate into larger bounties

User 3.75 replies:

> Correct. Base rate is no longer your enemy but your friend. Be in control, use all tools whenever possible. Make u turns if necessary, if pax complains tell them you're unfamiliar with the area

These workers are exploiting loopholes and blind spots, manipulating and identifying workarounds to the algorithm system (Bader and Kaiser, 2019). It appears optimistic, but looks can be deceiving. While doing so they are drawing on their own personal insights and skill (a clear indicator that biopower is being exercised) and implicitly valorizing the very algorithm that they are gaming. In the end, it *they* who are being gamed by the algorithm and company.

4. Deriding 'Uber Ambassadors'

The excerpts presented above are drivers who believe that pushing for higher pay is futile and that tactical moves within the system are better pay. They still remain rather negative about the firm. However, that is not the case for all drivers. Some espouse and endorse the rhetoric of Uber so completely that other drivers believe that they are, like Amazon's Warehouse Ambassadors, being paid to encourage their peers to work longer and harder.

A driver who goes by the username mulder99 especially embodies the values that Uber seek to instill in its workforce: namely, that the best thing drivers can do to better their situation is to simply work longer hours. It does not appear that mulder99 really is an 'Uber Ambassador' because in some posts he is seen to make remarks critical of the company and in others he claims to drive for multiple rideshare companies. Mulder99's profile picture is the Marvel character Ant-man, a self-deprecatory

reference to the word ‘ants’ that some drivers use to describe themselves on the forum. He is very vocal on the forum and as a result generates much reaction from other drivers, which reveals how most drivers despise this level of loyalty. On a number of occasions, user Spy For Uber (whose very username appears to be openly disparaging mulder99) says:

> he is amazing our mulder99 he's the most breathtaking driver on the australia uber fleet mulder99 understands that the only thing in life is only uber * he has his priorities right & doesn’t worry about family or friends or anything. his friends are the riders he spends 17 hours z day with for seven days a week and keep your comments to yourself coz mulder99 is not a big head egotistical show off no & no it's not fair you called him a narcissist it's not true he has great pride in showing you his little wins after doing 17 hours of driving going back to an empty flat for a five or six hour turn around to be weary eyed back on the road again we love you mulder99 & don't worry about those sour grapes tissue box drivers

In another thread mulder99 offers some free advice:

> Give it away if you can’t make money on Mardi Gras You either have no idea or not researching on how to UBER

To which Spy For Uber responds:

> See this is the type of person we want forever on our uber fleet! Mulder99 never whinges, he is like a machine, he keeps going &

> going. Mulder99 his work ethic is Fantastic. Our staff here in the city xmarvel at his performance. the rest of you need to smarten up your act, why do you care if you get a lot of Glitter in your car from Mardi gras, most of your cars are rentals. we feel for you too mulder99 knowing that because of the 12hr regs you would like to push on to your old days doing 17 straight hours. we might have to make an exception for you mulder99 as your work is breathtaking. your a brilliant uber driver & you almost could keep the whole of Sydney moving just by your lonesome.

Not everyone is as cynical as Spy For Uber. User Uber TopGun takes mulder99's helpfulness at face value:

> Maybe Mulder99 can help with this issue and with his contacts at Uber Admin Mgmt, maybe Mulder99 can get uber to be proactive and have this fixed up? Can you sort this Mr Mulder99 for Slazrnger & others?

To which mulder99 responds:

> You are mostly likely the closest car around due to traffic won't be any available cars on Anzac bridge. The pax will generally wait unless they impatient and grab a taxi from the rank

And another from user RustaSam:

> Mulder99 is a hard worker. And good on him. Some people just don't have the work ethic he has. You need discipline to make money. You

> need a plan. Good on you Mulder99 keep up the good work. Thank you for your contributions to the forum. Some of you should take a hard look at yourselves you may have Tall poppy syndrome

Here we can see how the social media forum was certainly a format for expressing dissenting views regarding Uber and its management systems. However, Spy For Uber's cynicism is a good example of how this dissatisfaction is displaced or redirected onto other workers perceived to be ambassadors, rather than the company. This in turn provokes more sympathetic views from other drivers, effectively fragmenting any potential solidarity that could have emerged against the company. Moreover, mulder99 in his own way is causing problems for drivers who listen to his advice, by selling false hope. By broadcasting hidden routes and high-earning sites, they are no longer hidden, which dilute their benefit for any subsequent drivers make by following him.

Discussion: Biopolitical Algorithms at Work

Our analysis of online conversations and of informants' reports shows that one reason why collective opposition does not coalesce among the Uber drivers we studied is because management by algorithm effectively isolates and fragments the workforce. In the words of a driver quoted above, and alluding to irony of the situation, you simply cannot get the company on the phone. This means that the social distance that is supposedly inherent to this kind of work is reinforced and reproduced by the use of algorithms and of IT mediated communication.

Moreover, the use of algorithms to assign, optimize and evaluate tasks (Lee et al., 2015) has the additional effect of depersonalizing authority. Commands and rules that would likely generate opposition and social tensions if enacted by human managers are accepted as indisputable hurdles that can be navigated and 'gamed' rather than resisted or contested.

We suggest the best way to theoretically explain these phenomena is with the help of Foucault's (2008) notion of biopolitics. Each of the four themes described above demonstrate biopower at work in the gig economy. First, the sense of an all-encompassing power that tracks everyday life processes gives the control a sense of inevitability, sparking a mood of resignation. Second, the depersonalized distance of management by algorithm makes it difficult to confront the company and also isolates workers, meaning they are on their own and once again blurring the work/life boundary. Third, some drivers accept the algorithm – with the above preconditions – and attempt to game it to their own benefit, thus drawing on skills that are not officially part of the job. And fourth, management by algorithm displaces resistance onto other workers via the social media platforms, fragmenting potential solidarity and reproducing the other facets of this biopolitical control matrix.

Although organizational struggle (especially online) did forge connections between workers that might not otherwise have happened, it was not as widespread as one might expect and definitely did not form a substantive network of organized resistance. The majority of forum users do not participate with the intention of engaging in organized dissent but merely as a form of employee information sharing (Viveros et al., 2018).

This dearth of collective solidarity is – in part at least – a product of the biopolitical algorithmic management used by Uber, which circumscribes drivers' options while constantly nudging them to working harder. Drivers' complaints are met with the canned response, "this is designed to make you more successful". This almost implies a form of social Darwinism; the idea that market competition, lightly regulated by impersonal agencies, will select the best solutions, sparking individual self-improvement and self-reliance. The approach remains consistent with Uber's public pronouncements about encouraging entrepreneurialism and describing drivers as 'partners' rather than employees or workers. However, as an instrument of biopower – where regulation is embedded into the life process itself - the algorithm is far more effective than efforts to create a 'culture of entrepreneurialism' which drivers can, and do, resist through cynicism.

Key to the power exercised over Uber drivers – which shapes their resistance too – is the dematerialization of the antagonist (the capitalist firm), which is replaced by an apparently neutral and impersonal force, an algorithm that mediates the drivers' interactions with both customers and the company. Its complexity, which makes it an impenetrable 'black box', means that managerial decisions are largely inscrutable and therefore incapable of being contested or appealed. Moreover, this leads drivers to forget that the algorithm is a bundle of rules and policies devised with the intent of maximizing utility for one party (the owners of the platform), rather than operate as an impartial arbiter. Many drivers accepted this technological infrastructure – both the algorithm and app that matches rides and riders – as the uncontestable parameter for working with the company. More surprisingly, many perceived it to be inherently fair

because drivers assume algorithms always work as promised and in a consistent fashion (in actual fact, Uber regularly benefits from uncorrected errors that nearly always work to the company's advantage). Drivers typically see it as a neutral user-interface – helping them to quickly make decision about whether to get a ride and how to complete it, a useful ally or at best a game to be mastered.

Algorithmic management is an evolution of what Foucault (2007) called government from a distance, an important feature of biopower. It seeks to change and regulate behavior without resorting to crude methods of prohibition and punishment. Algorithmic management specializes in this due to its unusual opacity. For Uber's drivers, it is unlikely that even total transparency around the algorithmic rules would help since it requires such a high degree of computing expertise to understand how and why certain 'nudges' were made.

Ironically, this ultra-electronic depersonalization and distance did not transform drivers into robots or automatons, but the exact opposite, which is why we consider it biopolitical. Drivers had to draw on their personal life skills, ingenuity and cunning – both on and off the clock – to get the job done and game the system. However, since Uber's drivers have no real person to complain to and are controlled by a 'neutral' algorithm, these energies are not used for contesting the company. Rather, occasional resistors identify and criticize coworkers who are deemed to be 'champions' for the company, and vent on them instead. This is displaced resistance, where drivers try to rehumanize their sense of disgruntlement by directing it at another driver – the most proximate human target available in some cases – rather than the company. This has

the unexpected, but to Uber beneficial, effect of causing workers to squabble among themselves rather than mount a unified challenge to the firm.

Drivers' attempts to game the system also had notable consequences. Workers used the pre-given parameters to try and outsmart the algorithm, devising unforeseen ways to maximize income and not just follow Uber's playbook (e.g., getting on the road and driving during the surge). We saw this in relation to the practice of 'longhauling' (artificially extending a trip to take advantage of the 'switch to upfront' pricing option), which manipulates the algorithm to increase revenues at the cost of Uber, without charging the passenger extra. Interestingly, even this attempt to manipulate algorithmic management is determined by the biopolitical frame imposed by the company. Uber drivers cannot use taxi drivers' time-honored trick of 'taking the long way', because of the negative user-feedback may jeopardize their job.

All this gaming had little impact on the firm as a whole, because it tends to be isolated and individualistic. Here we can note the apparent contradiction between drivers being, for the most part, fatalistically docile about the prospect of Uber paying more while at the same time displaying inventiveness and tenacity when it comes to gaming the system. We might see this as a digitalized version of the 'making out' games Burawoy (1979) famously observed in a factory setting over 40 years ago. As Burawoy also observed, exploiting blind spots in the labour process to maximize income was counterproductive, since it sublimated the desire to resist domination in any confrontational fashion.

The low identification with the company, which in a traditional context might fuel resistance (Humphreys and Brown, 2002), is in this case yet another factor that undermines collective opposition. The high turnover rate and low barriers to exit (Rosenblat, 2018) impede the likelihood that enough unity could be generated for resistance. Even if some drivers rely on Uber as a single source of income, many are also side-hustlers, supplementing their income from another occupation, or 'hobbyists' who do it mainly for the social interaction. In other words, the tenuous relationship between drivers and Uber is a barrier to the formation of worker solidarity. We have noticed how identification or investment in the occupation is frequently derided as fake or contrived. Since drivers only become Uber's 'employees' when logged into the app, and technically 'resign' from their post every time they log off, Uber is often not understood as an employer, but a sort of impersonal marketplace. Algorithms are 'the invisible hand' of this marketplace.

Conclusion

Our paper has argued that algorithmic management in the gig economy can been interpreted as a form of biopower in which life itself is enrolled and put to work. The manner in which it does is anathema to the kind of solidarity required for collective resistance and industrial action. Hence why workers in this sector – now infamous for its exploitation and economic insecurity - seldom summons meaningful opposition to obtain better pay and conditions. In the face of such power relations, it is easy to see why exit and loyalty are perceived to be the only viable options available. And for those who find these two responses to the gig economy undesirable, social media

forums provide a space to vent and displace their disgruntlement onto fellow workers, rather than forge social bonds of rebellion.

The algorithmic techniques of biopower we have examined do not function in a vacuum. They are clearly aided and abetted by the 'self-employment' status of drivers, a fundamental aspect of the platform business model. And by law, Uber drivers cannot negotiate collectively because they are not employees but independent business owners. Some jurisdictions go even further and forbid them to form a trade union, which has not completely eradicated the alt-labour movement in this sector, but certainly rendered it very difficult to achieve. In the face of such forces, not even the social media forum we investigated could build a collective sense of opposition (notwithstanding the highly negative views some drivers had of the company).

It is ironic that biopower – the power over and through living human beings - is at its most potent when guided through an ultra-dehumanizing algorithmic app that appears robotic, neutral and devoid of life. This rather lifeless instrument of domination allows gig firms to access and harvest wider life processes as a key resource, including the ingenuity, downtime and everyday knowhow of workers. And in the end, drivers shoulder the risks, externalized costs and responsibilities for this business model, often drawing on other jobs, governmental welfare services and family networks in order to participate. For this reason, we suggest, gig economy organizations like Uber not only instrumentalize *bios* through its algorithms, but also display parasitical tendencies. Perhaps this parasitism is characteristic of platform capitalism more generally, mining and riding on the 'social commons' (Hardt and Negri, 2004), thriving on the fringes, rather than having anything to do with genuine 'sharing'.

The actual computer codes that govern these algorithms are vigorously defended from scrutiny by firms like Uber, Deliveroo, Taskrabbit and Lyft. As these platforms expand into our lives, algorithmic biopower moves into the hands of platform owners. While only a minority of the workforce are engaged in app-based jobs, the acceleration of AI-enabled algorithms represents a qualitative shift in power relations are exercised in organizations. The kind of biopower coalescing here is far more insidious than anything existing when Foucault coined the expression in the 1970s. Therefore, new conceptual and practical tools are urgently required if workers are to effectively resist this troubling development in neoliberal economies and beyond. This includes a comprehensive understanding of the complex forces at work. Towards this end, we hope our paper helps.

Reflection Four

Despite the rather bleak conclusions of this third paper, it is clear that not all is lost and that workers in the gig economy *do* organise and, moreover, that online communication is essential in the way they organise since they do not have a fixed workplace. Gig workers have periodically gone on strike around the world, including at Deliveroo in London which I wrote about in the piece below. It was particularly interesting because, unlike the Uber drivers in Reflection One, the Deliveroo couriers achieved a result and the company backed down. All is not lost.

Deliveroo strike win shows gig workers can subvert the rules too, *The Conversation*, 19 August 2016

The standoff between couriers of food delivery service Deliveroo and the company's owners is a standout case of workers using different methods to fight back in an emerging economy with loose employment relations.

Deliveroo is a UK-based meal delivery company. Its partners include many popular chains that had not offered a delivery service before. It has grown rapidly, expanding into 12 countries in just three years. Couriers working for Deliveroo are becoming a common sight as they weave through the evening traffic.

When Deliveroo proposed a change in courier pay structure, hundreds of Deliveroo's teal-jacketed riders took to the streets of London. The original rate of £7/hour plus £1

per delivery was going to be reduced to £3.75 per delivery. Riders very quickly calculated that they would not be able to achieve a sustainable income without working longer hours or rushing.

After a standoff lasting six days the dispute was resolved largely in the riders' favour. The proposed pay-per-delivery structure will now be optional and any rider who had made the switch is allowed to opt back out.

Once the strike began, the riders were aided by the Independent Workers of Great Britain (IWGB). IWGB was founded just four years ago by former members of older unions UNITE and UNISON. It got involved despite the riders' nontraditional employment status. Older unions have been reluctant to engage with companies like Deliveroo, preferring perhaps to pick battles on more familiar ground.

The riders set up a crowdfunded strike fund that had raised more than £10,000 by the time the strike was called off. Uber and Lyft drivers in the US have taken this to the next level; they have set up an employee-owned alternative app called Juno which pays drivers higher rates.

The UK's Tory Government took the unusual step of backing the strikers, saying Deliveroo should pay a living wage. After this, management were left with little choice but to back down.

Not an isolated case

Deliveroo is not the only app-based company to face protest by their workers, although this was the first case in which the workers substantially won. Collectively companies such as Deliveroo, Uber and Airbnb are often referred to as the "gig

economy”. People who work for them are engaged in a loose arrangement that resembles employment in some ways but not others.

But loose employment relations are not the sole preserve of the gig economy. Precarious or at least ambiguous employment relationships are present in the traditional economy.

A direct comparison exists in the traditional transport and logistics sector where performance pay has been directly linked to road fatalities due to the time pressures it creates. As far back as 1989, one coroner investigating fatal road accidents in NSW dubbed performance pay for drivers “decidedly unhealthy”.

The capacity of Deliveroo riders to inflict injury on other road users is obviously at a different scale. However, payment-per-delivery could prove a “decidedly unhealthy” outcome that would only encourage riders to take risks.

New technology and the app-based economy played its part in the Deliveroo victory but the victory itself was based on a much more timeless concept: that the power of workers lies in their capacity to withdraw their labour. The significance of a win based on such an old-fashioned notion cannot be overestimated.

Some commentators have credited the gig economy’s growth to a trend towards worker individualism but the Deliveroo strike suggests collectivism still works.

Strike action in the UK and in Australia is historically very low (2.6 days lost per 1000 employees in the March quarter 2016), making the Deliveroo strike significant.

"Wildcat" strikes like this one are not initiated through recognised unions or using established legal processes. They occur outside of the formal industrial relations system without the protections such systems afford, but also circumventing their constraints. In recent years wildcat strikes have mostly been associated with campaigns for better wages and conditions by workers in developing or non-democratic countries such as China and Vietnam where there is limited capacity to engage in legal industrial action or other forms of grievance settlement.

The actions of Deliveroo riders and other groups in the gig economy such as Uber drivers suggest these workers, though often located in developed and democratic countries, also feel compelled to take actions outside existing systems.

The lesson here may be as much for business as it is for other groups of "self-employed" gig workers. If businesses attempt to place themselves outside of existing frameworks that ensure minimum labour standards through creatively classifying their employees as self-employed, their workers may also look to remedies outside of legal avenues. And every now and then they may just win.

This article is republished from [The Conversation] under a Creative Commons license. Authors: Sarah Kaine and Michael Walker. Read the original article at https://theconversation.com/deliveroo-strike-win-shows-gig-workers-can-subvert-the-rules-too-64049

I had suspicions that this strike might have been covertly coordinated by IWGB organisers however in his 2019 book *Riding for Deliveroo*, insider Callum Cant confirms that the strike was indeed uncoordinated (Cant, 2019: 20). The riders were connected through WhatsApp and Facebook groups through which they remained in contact and exchanged stories of their grievances (Cant, 2019: 29; Woodcock and Graham, 2019). The incident therefore turned out to be an example of uncoordinated social media voice leading to a real-world outcome and is the most perfect illustration of the potential of uncoordinated e-voice to catalyse real-world action in the gig economy, although I didn't know that in 2016 (and, even if I did, didn't yet have the vocabulary to describe it as such).

So now that we have established that e-voice does provide a means of voice, what prospects are there for gig workers to counter the power of the platforms? Sporadic protests have taken place all over the world. Has these workers' exploitation been pared back anywhere? That is the question I explore in the next and final paper.

Paper Four

The troubling finding of the thesis to this point is that orchestrated twentieth century voice systems aren't happening in the platform economy and, perhaps, *won't* happen in the platform economy. The challenges that 'gig' employers like Uber and Amazon Mechanical Turk represent were known in 2013 when I began conducting my preliminary literature review (Irani and Silberman, 2013). In the seven years since, I can say that two things have *not* happened: Firstly gig workers do not seem to have become any more organised. Union membership amongst these workers remains negligible. The companies happily carry on with very high rates of churn that, perhaps not incidentally, make organising extremely difficult (Rosenblat, 2018, 51) and, as explored in Paper Three, the dynamics of algorithmic management serve to deflect worker grievances by dehumanising management (Prassl, 2019). The second thing that has not happened is that, despite a lot of talk, Uber has not been regulated. This reality challenges the mechanistic assumption in industrial relations that worker voice can be translated into policy and legislative outcomes.

At the invitation of the editors I contributed a chapter to the casebook, *Case Studies in Work, Employment and Human Resource Management* (Dundon and Wilkinson, 2020) in which I explore this further. In this chapter, I take for granted that the object of my study, Uber, does not want to play by the rules and lawmakers or regulators who want to constrain Uber's actions ought to approach the problem with an outcomes mindset rather than trying vainly to force the gig employment genie back into the bottle.

Uber and the Problem of Regulatory Arbitrage

An underlying assumption of employment law, indeed law in general, is that it is enacted in a milieu in which actors want to follow the law or, if they don't, that the state has adequate means of enforcement. Increasingly this assumption is proving untrue, resulting in organisations paring back employment conditions and states seemingly impotent to prevent it.

There are well-documented problems in supply chains in which lead companies meet all their legal obligations but the companies to whom they subcontract work are less scrupulous about it. This happens both with respect to global supply chains, where production is outsourced to countries that do not enforce labour standards, and even in domestic supply chains. Industries such as horticulture and cleaning have been found to have horrendous working conditions far below minimum legal standards yet fixing the problem has proven notoriously difficult as these workers are not unionised and labour inspectors do not have the resources to investigate their way through multiple layers of subcontractors to find the right person to prosecute.

Background and context

Uber presents a new iteration of this problem: in this case the lead company itself has shown it is happy to be a rogue actor, indeed this is an essential aspect of its strategy for growth.

Uber’s early corporate culture was that it is too innovative and fast-moving to be bound by regulations that were designed for another era. Rather than waiting for local authorities to grant it permission to operate in their jurisdiction, its approach was to set up and then deal with any fallout as it comes. Uber’s early founders gambled they could disrupt the transport economy in a particular market so rapidly that regulators, by the time they took notice, wouldn’t be bold enough to shut them down and would instead negotiate to allow them to carry on business. The company scaled up as fast as it has by acting outside the law at first and reaching critical mass, after which dislodging it will cause more harm than good to a city’s transportation networks. The losers in this equation are the legacy taxi drivers and to some extent public transport operators whose market share Uber cuts into. However, as local officials can quickly calculate, Uber’s customers greatly outnumber taxi drivers so it is more politically expedient to turn a blind eye to Uber’s regulatory noncompliance than to ban it.

A second important element of Uber’s growth strategy is to keep prices low and to do this by keeping drivers’ share of earnings as low as possible. Even then, the service actually runs at a loss nearly everywhere, burning through over a billion dollars in venture capital funding every year, while it continues its price war with local taxi operators. Driver pay fluctuates based on demand but average out to roughly the minimum wage or a little more before taking into account overheads such as vehicle depreciation, repairs and taxes. It can be below minimum wage when these are accounted for. Some drivers receive slightly higher pay by flouting tax and insurance obligations either out of choice or ignorance. Uber’s users get to enjoy cheap access to the service for as long as taxis remain a viable source of competition but the company

cannot carry such steep losses indefinitely; prices will have to go up eventually if investors are to ever see a return on their money. Uber doesn't want to increase driver pay as that would neuter the benefit of price increases and, in the short term, result in even steeper losses.

Uber's growth strategy hasn't worked everywhere. A number of jurisdictions as varied as Taiwan and Greece had the resolve to kick them out for not following the law. In others there have been strong local competitors that have forced Uber to retreat: Didi Chuxing in China and Grab in South-east Asia. Still, Uber's strategy has worked in many countries including all the major common law jurisdictions of the USA, UK, Canada and Australia where it now has hundreds of thousands of drivers offering millions of rides a day and has become a part of popular culture.

Union membership in Uber is negligible apart from two small unions in New York and London: the Independent Drivers Guild (IDG) and United Private Hire Drivers (UPHD) respectively. Drivers have however devised their own means of worker voice in the form of online forums, social media groups and group chats where they share information, build a sense of collective identity and from where, occasionally, wildcat strikes have been organised to protest low pay or changes in company policies.

In each of the common law jurisdictions Uber has been a target of litigation, usually designed to force the company to accept that its drivers are employees and thus covered by employment laws. The cases tend to be brought by unions or city councils trying to force Uber to be bound by regulations applicable to taxis including employment and safety standards. Uber has fought against these lawsuits, particularly with respect to employment standards. Whenever jurisdictions have threatened to

make an enforceable ruling that Uber drivers will be entitled to all the benefits of employment status, Uber has threatened to withdraw from that market. The reason is fairly clear: after investor subsidies end and prices increase, the company would be no more profitable than a taxi firm. The technology behind the Uber app does not create economic efficiencies or make it a superior operating model to taxis; in the end it is still just a vehicle with a driver. Local governments however don't want to push Uber so hard that it leaves because they fear the public backlash, so Uber plays the threat for political leverage.

Two successful regulatory rein-ins

Uber's founding CEO was forced out of the role in mid-2017 and since then the company has adopted a slightly less belligerent ethos. Two milestones have been achieved:

- In London, the regulator Transport for London (TFL) sidestepped the employment status question and went after Uber over noncompliance with safety issues, sparked by a number of cases where passengers were sexually assaulted by drivers. TFL briefly stripped Uber of its license to operate in the city. Supporting the ruling was the GMB union who represent London's traditional black taxi drivers. Uber's drivers however were opposed to the ruling on the grounds that it would deprive them of their livelihood. Uber organised a petition amongst its 3.5 million London-based users, putting pressure on London Mayor Sadiq Khan to overturn the ban. After negotiations, a compromise was reached in which Uber agreed to implement additional

safety measures including disclosing drivers' private hire license numbers to passengers and allowing passengers to share their real-time whereabouts with a third party. It also required drivers to take a break of at least six hours after being logged on for ten hours continuously.

- In New York, the regulator the New York Taxi and Limousine Commission (NYC TLC) decreed that all private hire drivers, including Uber drivers, must be paid a minimum wage of $27.86 per hour (resulting in net pay of $17.22 per hour after expenses) irrespective of whether they are employees or contractors. This gave a large boost to drivers' income which was estimated to be $11.90 per hour net before the ruling. In this case the change was supported by both the taxi workers union *and* the Uber drivers' union, the IDG. Importantly, rather than leaving, Uber agreed to pay the minimum wage and responded by increasing prices. This is the very outcome the company has sought to avoid: something close to a level playing field with taxis.

  New York also has legislation pending that would cap the number of ridesharing vehicles on its streets. This will also help Uber absorb its increased wage cost in New York by ensuring that drivers have less down-time, however fewer vehicles also means less profit.

These two jurisdictions are examples where regulators have taken a more creative approach to Uber, rather than trying to force them to comply with the existing legal framework. It's also helped that the company itself has been more willing to negotiate.

At the time of these rulings London and New York were mature markets where Uber had reached an equilibrium with taxis. In New York that meant Uber is in a position to ameliorate the wage impost by increasing its prices. It's also notable that the New York ruling fell short of bestowing full employment status on drivers as it did not include paid leave and pension contributions. Neither side got entirely what they wanted.

Are the drivers employees?

A central argument in the debate over Uber and other companies in the so-called 'gig economy' is whether on-demand workers are employees. Uber's position is that drivers are not employees but rather independent contractors. The reasoning for this is that drivers can choose when they want to drive, or whether they want to drive at all; they are not under any obligation to present themselves for work. Uber says it is not a transportation company but a technology company, merely providing software. Courts have found this argument to be far-fetched. Uber exercises very close control over the way drivers do their work, more than would be expected in a contract for service and far more than would be expected of someone simply making use of an app to do his or her job. Uber designs the environment, monitors behaviour and collects vast amounts of data which it uses to adjust environmental conditions (Howcroft and Bergvall-Kåreborn, 2018). Uber determines who drivers may give a ride to. It determines the route that should be taken. It does not permit drivers to subcontract their task to someone else. It has rules about the appearance of vehicles (they may not, for example, feature advertisements for other businesses). Additionally, despite its official rhetoric about drivers choosing their own work time, Uber pressures them

to get on the road when demand is high and punishes them for refusing jobs by preventing them from accepting another ride. It also has the right to fire drivers at will by “deactivating” them. The weight of the evidence supports employment status, it is really only the company’s unwillingness to cooperate that is preventing it.

There has been some discussion that the way to get out of this dilemma is to establish a third category of employment that is somewhere between that of an employee and an independent contractor, with different rights. So far, no jurisdiction has done this. The main objection is that many employers who currently pay their workforce as regular employees would seize on the opportunity to move workers into this third category and thus downgrade their workplace entitlements, so lawmakers are reluctant to codify it. However failing to regulate gig work is not making it go away so the issue remains unresolved. The authorities in New York and London decided to ignore the doctrinal question altogether and to focus directly on the substantive issues: regardless of the employment status of its drivers, New York now requires Uber to pay them the minimum wage and London requires them to put better safety procedures in place.

If the operating model followed by Uber and other similar platforms is here to stay, it remains an issue for employment relations to address: How to regulate gig work that is designed to avoid employment regulations? Gig employment arrangements are attractive to organisations who want to lower costs not just on wages but also on sick leave, holiday pay, pension contributions and even payroll taxes. The only trade-off is that gig employment does not lead to the kind of ‘buy-in’ or brand ambassadorship that most employers want from their workforce. Notwithstanding that, new

companies are increasingly adopting Uber's arms-length employment model, not just in industries where workers have little bargaining power, such as food delivery and home care, but even in highly paid fields such as accounting, law and medicine. Further complicating matters, a majority of Uber drivers when asked say they prefer the status of being a freelancer or independent contractor. It is an issue that regulators will have to grapple with sooner or later.

Summary

Uber provides convenient and affordable transport to millions of people around the world and employment to hundreds of thousands. It only achieved the scale it has by acting outside of regulatory frameworks. If its founding CEO had been more scrupulous, it might still be a novelty operating in a handful of cities. However the company cannot continue to operate this way indefinitely when its competitors have to play by rules. Bringing such a company into the scope of regulation has proven to be a delicate matter as, by the time it has achieved scale, Uber has substantial stakeholders in its drivers and customers. Legislators have mostly proven reluctant to defend the existing regulatory framework if it means refusing Uber permission to do business. As long as the status of these workers is left unresolved, a small but growing number of workers will find themselves excluded from employment law protections.

Notes on Paper Four

Here the implications of my thesis can be seen as an embrace of complexity. Around the world, lawmakers continue to battle Uber with a legal positivist mentality; they have not adapted to the reality of regulatory arbitrage in which corporate leaders aren't trying to balance interests but are actively seek to evade workplace laws. However it is possible to move beyond this mentality by regulating outcomes rather than actors, an example being health and safety laws (Howe et al., 2017).

Sadly this for the most part has not sunk in. As I was writing this, the California State Assembly was debating a Bill[1] that would force traditional employment status on Uber and other rideshare drivers. I completely expect the Bill to fail in its objective of putting the genie back into the bottle. The lawmakers and the lobbyists who have pushed for this legislation want the tidy world of employer-employee relations to prevail. A perusal of UberPeople.net reveals that actual drivers are by no means united in support for this Bill and are much more concerned, albeit fatalistic, about its unintended consequences.

Not only are the lawmakers locked in to an existing solution to a familiar problem, labour law scholars seem similarly paralysed in adapting to new realities. Proposals to regulate the platform economy do not seem to have gone much further than the idea of a half-way employment category (Aloisi and Cherry, 2016) which is unpopular as it is seen as a means employers may use to undermine the entitlements of regular employees.

[1] AB-5 *Worker status: employees and independent contractors* (2019-2020)

Looking back at my literature paper, this outcomes-oriented mindset could also be applied to the discussion of social media voice and its legal limits. A recent paper by Thompson et al. (2020) notes that, notwithstanding official prohibition and even disciplinary action, sizeable numbers of employees still use social media to express dissent and dissatisfaction. This is consistent with my suggestion at the end of Paper One that management may have to move as a result of social media voice that is not merely unsanctioned but maybe even illegal. My second suggested avenue of research was to explore to what extent company controlled social media channels are really as 'controlled' as they appear. Again, the system is one thing; reality is another.

Thesis Conclusion

To recap the development of this thesis: it began with my intuition that the many employees who are not provided with formal channels of voice at work are, nonetheless, 'voicing' their concerns in some other way. What many are doing was essentially revealed in Paper Two: they are engaging in peer-to-peer conversations that are intended as mutual aid but which effectively constitute uncoordinated collective actions. That finding is the direct answer to my original research question: "What do nominally voiceless workers in nonstandard employment do when they are aggrieved about an issue at work?" Along the journey, there were other learnings.

The project sprang from my concern, as a union official, for the ever-growing number of workers who are not union members and not in standard employment. There are many workplaces with no voice mechanisms (Kochan et al., 2019; Baird et al., 2018) and workers in nonstandard employment are even less likely to be offered some form of voice at work (Colvin, 2013). Are they really just 'voiceless'? (Wanrooy et al., 2013)

I consulted the literature on employee voice, with a focus on social media voice since it seemed a natural option for a worker deprived of any means of having a say. I found the voice literature to be a problematic frame because the major strands of industrial relations all had reasons not to engage with social media voice: the unitarist strand (aligned with HRM) focuses on employer-approved channels only (Leonardi and Neeley, 2017), whereas I was looking for voice that was not channelled; the radical strand of IR dislike the valorisation of mere discourse (Thompson, 2016); finally the

pluralist strand of IR focuses on institutions and processes and has thus been sidetracked into discussion around the legality of social media (Thornthwaite, 2016; Barnes et al., 2018). I therefore argued in my literature review that industrial relations needs to take notice of studies in other disciplines that have shown employee-instigated social media to have overcome managerial power (Courpasson, 2016; 2017) and, expecting that I would find examples of social media or peer-to-peer online voice, I began my data collection on Uber drivers as they are a very large group of nonstandard workers.

The data revealed that, despite being physically disaggregated, drivers do speak to each other a great deal online. In some cases ideas that allow them to increase their earnings, at the expense of the company, become widely shared and acted on. The best example I saw was the invented term 'longhauling' that allowed drivers to increase their own earning per ride without making it any more expensive for their passengers. No one planned or coordinated this as a form of voice, it spread virally. As well as being the answer to my main research question, this finding also implied that the understanding of voice in industrial relations needed rethinking to account for the possibility of such uncoordinated swarming actions.

Nonetheless, I found the implication of Paper Two to be uncomfortably broad. Notwithstanding that they have this form of voice available, Uber drivers do not seem to be making great strides towards improving their working conditions. Something must be limiting its effectiveness. I went back and re-examined the data, this time looking for evidence of voice being blocked or thwarted. I discovered that, in the same way that the technology of social media has enabled a new form of voice, the

technology of algorithmic management has enabled new forms of managerial power. Algorithms through their impersonality foreclose options to appeal to the intervention of a human manager. As one interviewee succinctly put it: “You can’t pick up a phone and talk to someone”. Additionally, I discovered that this non-personhood caused grievances, which really ought to be directed at the company, to instead be directed by disgruntled drivers towards their less-jaded peers. By the end of Paper Three the picture of life in the gig economy is more nuanced and a lot darker than it was at the end of Paper Two. Additionally, the theoretical apparatus of industrial relations was really not up to the task of describing these dynamics, which I and my coauthors instead framed through the lens of Foucauldian biopower in Paper Three. By this stage I myself had realised that trying to force industrial relations logic onto the gig economy was like trying to put a square peg in a round hole. The company will fight with all its might to resist reclassification of its workers as employees entitled to the familiar benefits of employees, and crucially it has the political influence to make sure that they don’t. Liberated from the distracting need to figure out how to address that problem, I wrote a short chapter examining how the company might otherwise be compelled to increase wages and improve safety, by regulating outcomes.

So, going back to my chart of the ever increasing number of non-union workers (see p. xx), what do those people do when they have a grievance at work? In a lot of cases they jump on to Google and look up what other people say about the issue and chances are good that they might connect with some others in their situation. If they act together about a matter of common concern, it can even make their situation better. However, employers aren’t going to stand by and let this happen and they have

counter-strategies in place to limit the effectiveness of online chatter amongst their workforce, ranging from straight prohibition (Thornthwaite, 2016; Barnes et al., 2018) to more indirect forms of diversion discussed in Paper Three (Kärreman and Alvesson, 2009). The terrain is changing rapidly as worker advocates and tech entrepreneurs each seek to claim their share of 'eyeballs' on digital devices (Wood et al., 2018; Burns, 2019).

Contribution to Theory

At the broadest level, the contribution to theory of this thesis is that worker voice can achieve material outcomes even without being intentionally collective or, in other words, without coordination.

Within that, there are six distinct theoretical contributions:

1. **Industrial relations scholarship needs to account for successful social media resistance** (Paper One): Industrial relations scholarship has presumed social media to be purely discursive activity that can't influence events on the ground. We know however from Courpasson's empirical study of bankers (Courpasson, 2017) that blogging alone was enough to force concessions from management, a possibility that had not previously been countenanced in the field.

2. **Voice without coordination** (Paper Two): Worker voice does not have to be orchestrated and the people engaging in it do not necessarily even have to realise that they are acting collectively, as noted in a political context by Soon and Kluver (2014) and by Wilhoit and Kisselburgh (2015). This means that

collective action is a broader concept than it has been understood in industrial relations. I propose it would be better to refer to the more familiar forms of collective action such as strikes and collective bargaining campaigns as *coordinated* actions. Collective action can take forms that are more nebulous and seemingly inconsequential such as meme-sharing.

3. **Uncoordinated e-voice can achieve material results** (Paper Two): The discovery of uncoordinated online voice actions would be of far less interest if it wasn't for the attendant finding that these can lead to material change or, to use Budd's term, that these are instrumental and not just intrinsic activities (Budd, 2014). This means uncoordinated voice is not just an alternative but actually a competitor to unions and other more familiar forms of collective action.

4. **Algorithmic management is a form of biopower that limits the possibility of negotiating over one's working conditions** (Paper Three): The increasing adoption of artificial intelligence technology in place of human decision-makers has a fragmenting and isolating effect on the affected workers who have 'no one to go to'.

5. **Algorithmic management deflects worker grievances** (Paper Three): The impersonal nature of algorithmic management is something that workers struggle to direct their grievances at and it appears that they will instead direct their ire towards the nearest human target that will 'hear' them. This largely

neuters it and renders it impotent. As algorithmic forms of management become more common, formal and informal means of appeal against workplace injustices will become more difficult.

6. **Successful attempts to regulate the gig economy have not relied on re-establishing employment status** (Paper Four): Many attempts to improve working conditions in the gig economy have stumbled at the hurdle of reclassifying gig workers as employees. Lasting results have only been won when reclassification is ignored as a proximate goal and the goals of minimum pay or safety are pursued directly.

Contribution to Practice

The practical implications of the thesis are of particular importance to me as a union organiser. Digital voice is an ever-present option when formal voice channels including unions are either missing or not trusted or ineffective (Kochan et al., 2019; Peirce et al., 1998). The fate of the union movement could hang on whether it can adapt to this shift or whether others will fill the space first (Visser, 2019).

The nature of gig employment is also a concern shared by many practitioners in employment relations. It is concerning that workers can be so easily deprived of the benefits of employment status, and that the gig economy business model disrupts businesses that do pay full benefits (Cant, 2019: 14-15), making it more important than it would otherwise seem based on the relatively small number of workers engaged in it.

The implications with respect to practice are fourfold:

1. **Social media alone can achieve results** (Paper One): This means that union campaigns may not need to use the traditional 'weaponry' of a real-world campaign that relies on strikes or collective bargaining.

2. **Forum managers can be employment relations actors** (Paper Two): With their capacity to 'steer' worker conversations and promote certain posts, forum managers could act in a way analogous to union organisers. It's also possible that hybrid figures might emerge like the interviewee in this study who started out as the administrator of a number of WhatsApp groups and then, after making a name for herself online, was elected to a formal leadership position in the Rideshare Drivers Association of Australia.

3. **On-demand work platforms exercise huge power over the lives of their workers** (Paper Three): The claims of flexibility and freedom ring hollow for gig employment workers who compete against each other and who put their spare time and their own possessions at the service of the platform they work for.

4. **Successful attempts to regulate the gig economy have not relied on re-establishing employment status** (Paper Four): While theoretically significant, this finding also has implications for praxis. Unions have a lot of reasons to seek reclassification of gig workers. At the very least it would create a level playing field between platforms and the companies their members work for. In some

> cases it is also a requirement that workers be classed as employees before they can join a union. However from a strategic point of view it may be more achievable to pursue platforms over minimum wages or safety standards.

E-voice means that Unions cannot assume that they have a market monopoly. They have a monopoly on 'being unions' but workers have other options to improve their situations, and these options are as close as their smartphones. Talking and building solidarity with other workers can be a path to unionisation (Aslam and Woodcock, 2020: 415; Cant, 2019: 29) and it can also be an end in itself: an alternative to union membership. It's not as effective as union membership in a traditional company but for the drivers in Uber it may well accomplish more than joining a union. At time of writing, it is difficult to point to any significant blows that traditional labour unions have managed to land on gig employers like Uber through high membership.

As I set out in the Preface, unions have been accustomed to digital disruption impacting their work as a perennial fact of life. Predominantly, technological change and development has had an indirect impact on unions either at a micro level by displacing the roles their members performed (e.g. assembly line automation, the disappearance of bank clerks, the printer downsizing that led to the famous Wapping dispute, and so on), or at a macro level by driving industry change that leads to death of entire organisations that fail to adapt, e.g. the bookshops such as Borders that were put out of business by the arrival of Amazon.com. Additionally, unions have always been presented with the micro level choice of adopting new technologies which they have done over time, with the role of union officials being changed by telephones,

then mobile telephones, then websites and most recently by social media as unions adopt these technologies (Hodder and Houghton, 2015; 2019).

What was observed in this study was something more fundamental than a technology that could be adopted. The advent of online-only collective action marks a significant change in the landscape, meaning that unorganized workers have other options that don't involve the union at all. In Table 2, below, I set out four ways in which digital disrupts unions. The first three I was aware of at the beginning of my PhD (Walker, 2013), as set out in the thesis Preface (pp. xvii-xviii). The fourth, shaded, is the one that I discovered in the research process.

This is a fundamental change in the way workers can achieve objectives, one that doesn't sit comfortably with the mechanistic union model that was built in the twentieth century (Castells, 2004; Pasquier et al., 2019).

How Digital Disruptions Impact Unions		
	Micro	**Macro**
Impact on workers	Changes to roles	Employers put out of business
Impact on unions	New tools, changes to roles	**Online-only collectivism (new)**

Table 2 Impact of digital on unions

The issue runs deeper than changing tactics, it requires unions to consider doing what they do quite differently (Wood, 2015; Pasquier et al., 2019; Visser, 2019). Unions

have to make a strategic choice: they can ignore online collectives and hope that their business model can persist without the need to move into the online space; they can attempt to compete with online collectives without leaving their familiar turf, by attacking their legitimacy or even aiding employers in their attempts to silence online dissent; they can co-opt existing online collectives and seek to work with them, as happened in Bologna where the union peak body cooperated with the Facebook Group 'Riders Union of Bologna' (https://www.facebook.com/ridersunionbologna/) to negotiate a citywide collective agreement for gig workers (Martelloni, 2018); or, lastly, they can seek to supplant online collectives by setting up their own, as the giant Swedish union Unionen are doing (Burns, 2019).

We appear to be right at the historical moment where these choices need to be made. As someone working in this field, I have been fortunate enough to have the opportunity to use this observation to re-think my own union's approach to the digital space. We have put resources into digital organising and a few months before submitting this thesis, I took up a new position as 'digital organiser'.

Limitations

Three major limitations of the study come from the atypical nature of Uber. It is a gigantic organisation with upwards of a million drivers. Also the spatial disaggregation of the drivers is not typical of today's workplaces. For both these reasons it was not surprising at all to find that an online forum catering to Uber drivers would be so vibrant and populous. Most people, however, don't work for giant companies, they work for small and medium size enterprises. It seems to me quite likely that in these

situations, workers setting up online spaces or communities might struggle to achieve the necessary critical mass to give such sites the liveliness that makes people keep returning to visit them. Similarly, since most workers are geographically co-located, it might not be such a compelling option to go online to talk about problems at work when one's living breathing co-workers are just a few yards away (then again, I do hear anecdotally of frustration at workers using email and instant messaging to speak to co-workers instead of getting up and walking across the office). Additionally, there is less safety in numbers in a small online collective. A management directive to not participate in an online site may have more of a chilling effect in a company with just 50 employees than somewhere like Uber or Walmart. Finally, Uber's 'gig' employment model is still not widely adopted (Fleming et al., 2019) and more traditional forms of employee voice remain more prevalent in workplaces where workers are engaged as employees. The very factors that made Uber such a good object for this study also make it unrepresentative of the workforce at large. This is not to say that e-voice *couldn't* work in smaller organisations; just to acknowledge that caution should be exercised before extrapolating these findings to the broader workforce.

Areas for future research

This thesis only explored one of the six directions for research scoped out in Paper One. All of the other five still stand:

1. Social media voice may be able to move management even in situations where it is legally unprotected.

2. Company controlled social media channels – introduced in an attempt to contain the unpredictable public kind – might not be as controlled as they seem. Decades of research suggest that workers will subvert these kinds of attempts at domination (Ackroyd and Thompson, 1999; Sewell and Barker, 2006), but we don't know for sure in this new context.
3. Social media could act as a trigger or catalyst for larger social protest campaigns – not just as a battle front in campaigns that took shape offline (Hodder and Houghton, 2015; Wood, 2015)
4. A lot more could be said about how e-voice differs from the more familiar form of 'sideways' voice: that which takes the form of spoken conversation literally at the water cooler inside a workplace, which is the variety of unsanctioned voice that I chose not to try to study because of difficulties obtaining data. The option remains open for more intrepid researchers.
5. Finally the question around identity-based mobilisation versus demobilisation is still a live one. Recent events, in which workers in tech are mobilising around issues of gender (see Reflection Three), suggest to me that the mobilisation thesis may be correct.

Separately to these issues which arise from the pre-existing literature alone, Papers Two and Three also raise additional questions.

One question not considered in Paper One is to what extent workers use e-voice even when there *is* a traditional channel available to them. Due to the 'deaf ears' phenomenon, workers might not bother to raise grievances with their employer but might go online to talk to their peers about it instead. There is no available data on

how often this might happen, except in a negative sense in Thompson et al. (2020), who note that fairly large numbers of employees engage in social media voice even when it is banned. What we don't know is how often they do so out of exasperation at a lack of genuine alternatives.

One very important open question is whether the amorphous kind of e-voice that I observed and which is, apparently, happening all around us is going to remain in its current chaotic form or whether it will to some extent evolve into something more focused and directional. This is an absolutely pressing question for people, like me, working in the union movement. If e-voice is a comparable option to union membership, but free, people are going to opt for it. How will this play out, will it displace unions or will they learn to work with it? The answer seems to be to depend on who presents the best offering the soonest. There is an app for workers in the tech sector called Blind (https://www.teamblind.com/) which is not union affiliated and which seems to be enabling far more worker voice than any unions that nominally speak for these workers.

This leads to a second question which is about the future direction of the union movement. As Franck Hendrickx (2019: n.p.), in a blog post on union strategies in a digitalized world, comments:

> Either traditional unionism takes new forms of work on board and deal with new structures to address them, or new ways of organizing start to arise, based on experiences of the internet, and the use of apps, social media and the like.

This view is echoed by Cianferoni and Perrig (2019) who argue that it's not at all obvious for gig workers that traditional unions are a better option than grassroots organisation.

Here there are extensive opportunities for applied research. Unions are being forced to consider 'connectivist' strategies that make use of new technologies. Embedded research to evaluate the success or otherwise of these initiatives would be of great help. Studies could also be made of other digital communities that are not unions but which are starting to act like them in some respects, such as the community running the Blind app or the WorkIt app (https://www.workitapp.org/).

Final comments

It turns out that workers are nowhere near as silent as the measures of employee voice suggested. Online worker voice is widespread. It is potentially capable of generating real change and improvement in workers' lives, but in order to achieve that it faces many headwinds. For a start, there must be enough actors to want to connect online. And their online communications must take a certain form to achieve a goal. In this study, grievance raising of the kind that might be heard in a traditional workplace proved completely impotent in the face of algorithmic management. E-voice doesn't typically enable the kind of demand and response communication that traditional means of voice do. It does however allow for collectivised 'hive mind' communication that can improve workers' situation without the need for a response. For that reason it is an important phenomenon that is likely to permanently change what it means to take collective action.

Unions may be able to adapt to work within this new paradigm. I see signs of this, e.g. the decision by Swedish union Unionen to build an online network for gig workers upon realising that the workers are already doing it by themselves (Burns, 2019). However it's by no means clear whether unions are going to co-opt and channel the widespread digital disgruntlement amongst gig workers. Another possibility is that e-voice might evolve to take on a form that more closely resembles a traditional union that can win significant change, for example the tech backlash that led to changes in policy at Google and other companies (Reflection Two). Or it might be a combination of both, as happened in Bologna where an online collective, with the assistance of the union peak body, negotiated a charter with the city's gig employers (Martelloni, 2018). The next few years will prove crucial in determining the fate of the union movement in the digital era and with my knowledge of the terrain garnered throughout this research project and my new role as a digital union organiser all I can say is: watch this space.

Appendix

The interview dataset

The interviews for Papers Two and Three are retained in CloudStor and registered as a creative commons dataset with Research Data Australia.

The Research Data Australia record can be found at https://researchdata.ands.org.au/working-disrupted-economy-transcripts/1355373 and the DOI link is https://dx.doi.org/10.26195/5bbed3090abea

The citation for the dataset is:

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