

## **Crisis and Change: Learning from the Past to Prepare for the Future of Work**

**Julianne Schultz**

Griffith Review, Griffith University, Brisbane, Australia

E-mail: [julianne.schultz@griffith.edu.au](mailto:julianne.schultz@griffith.edu.au)

### **Abstract**

Until the point of crisis in the discussion about the future of work, it is still rather abstract – but it is clear that technology and economic change will rapidly reconfigure the way we work, and we need to prepare. Part of that preparation involves learning from past crises as a result of economic restructuring. It also involves identifying future opportunities not just in the STEM areas, but the crucial skills and expertise that come from the humanities and cultural sector. Technology will not only obliterate many well-established jobs, but it is possible that the role of work in social and political organisation will change and preparing for that will test many established institutions.

### **Framing the Narrative**

The future of work will probably remain an abstract after dinner and conference discussion, until a crisis provokes us to think differently about what is at stake. Australia has been a rich and economically successful country for so long, our muscle for responding to disaster and crisis has not been well practiced in recent years.

Although there has been political talk about a declining economy and shrinking employment opportunities, the occasional mention of rising unemployment is more than offset by the repeated political declarations of new jobs created. I note that the outgoing Prime Minister's final tweet suggested he had created 300,000 jobs. I don't really know what these jobs are – is that a net figure, are they full time, where are they? No doubt this is all robust, but at the level of public discourse it is hard to know for sure, especially when the lived experience and anecdotal insights suggest that all is not quite

as it seems. Hopefully the new Prime Minister's emphasis on innovation will mean that we are on the cusp of new industries being created that play to the embedded strengths of this country.

It is not sufficient to wave our hands around and talk about reform of the expenditure side, there is an increasingly urgent need to get the settings right to enable new jobs to be created as a consequence of new businesses and industries being formed. When you look at the top companies on the Australian stock exchange and compare them with the top companies on the exchanges of other comparable countries the problem is clear. While our top companies have adapted and used technology to improve their businesses, there are none in the top group that are themselves a product of technological innovation in the way that the new top group in the US for instance are a product of technology, innovation and hard headed

determination to engage with the what is being called the new Creator Economy.

For sometime now we have been hearing about the disappearance of jobs thanks to automation and changing industry structures. Yet even as the figures point to a slight increase in the proportion of people in full time work, huge numbers of people work part-time often with precarious contracts. Some say that they like this arrangement, that the flexibility is what suits them, but in a society that is still largely organised around work this has costs and consequences that play out in many ways – not all of them positive.

It is human nature not to want to deal with worst-case scenarios, to not address issues until they have become pressing and urgent. And we in Australia have been insulated from many of the worst global crises in recent decades. But if the predictions are right and the economy is contracting, traditional industries are closing, and almost half of all jobs can be automated out of existence it could be that we have a looming crisis.

There are advantages in a crisis – it can provide the cover needed to change and innovate, to look harder, to find realistic and sustainable solutions, to reconsider the values that define an organisation, a society or a nation.

We are not yet at the point of crisis in this discussion about the future of work, it is still rather abstract, like a storm building on the horizon – but it is clear that the storm is brewing and we need to prepare. Part of that preparation involves learning from past crises.

### **Lessons from Wollongong**

It is exactly thirty years since my book, *Steel City Blues*, was published by Penguin. The

book, in the words of the subtitle documented the ‘human cost of industrial crisis’, explored what happens in a region when the economic foundations that had underpinned its growth imploded, what it meant for people, for business, for local government, for the political system.

When I look back on it now, it seems as though it was describing a different world.

In the early 1980s Wollongong and the Illawarra was a region in crisis. The steel and coal mining industries that had been its *raison d’être* were caught in a pincer movement of collapsing global trade and rapid technological change on one side, and on the other the consequences of underinvestment, old fashioned and counter productive methods of industrial relations and community relations and a lack of economic or industry policy clarity from Canberra.

As I put this list together, it strikes me that maybe at some meta level that world isn’t so different to the world we know now – but it is, and although the future is impossible to see the shadowy outlines can be made out and need to be taken seriously. The shadowy outlines before us now are more profoundly different than any that could have reasonably been imagined thirty years ago, it may be that we are on the cusp of a crisis that hasn’t yet taken form.

At the time it was the latest, and worst. iteration of the recessions that the country had been unable to shake since the OPEC crisis and its consequences began to ricochet around the globe in the early 1970s. Although it seems odd now, during the decades between the early 1970s and early 90s recessions were normal, sustained periods of growth were more unusual.

As a result of this perfect storm that began in late 1981–early 1982, tens of thousands of people lost their jobs and the future not only seemed dire, it was. There were few alternatives, the unemployment rate shot up into double digits and stayed there, people lost their houses, others were forced to move, families fractured under the pressure. It was hard to be optimistic.

Wollongong at the time was one of the industrial cities – Newcastle, Geelong, Ipswich, Elizabeth, Kwinana – that had grown up adjacent to the capital cities during the middle years of the last century. Places where the dirty work that needed space could be done. Places with cheap land, access to ports and transport. Places that it was easy to overlook or ignore from the gleaming office towers of the CBD, even as they generated healthy profits. Places that became home to the hundreds of thousands of migrants who were brought to this country to provide the muscle needed for industrial operations. Low tech, relatively low skill, jobs that did not demand fluency in English or a capacity for innovation – classic working class jobs that were not fundamentally dissimilar to the jobs that had formed the basis of economic activity since the industrial revolution.

So when BHP, which at the time liked to be known as The Big Australian, stopped hiring, and then terminated the completing apprentices, and then started making people redundant, the reaction was one of shock and anger. Within a year more than 4,000 jobs had gone from BHP's operations in steel and coal alone. When another 430 redundancies were announced in its Kemira mine, the men at the mine decided it was time for direct action. Thirty-one of the fittest men opted to stay underground to draw attention to the situation, and they stayed there for 16 days.

This became a catalyst for action locally and attracted national and international attention when thousands of locals travelled to Canberra demanding action from the Fraser Government. Memorably the pressure of the crowds on the doors of the Old Parliament House broke the glass and the protestors pushed in and took over Kings Hall.

The raw display of anger and passion terrified members of parliament – the fear was palpable. But it also put the plight of the region on the political map, and crystallised a crisis that required a serious response.

A few months later in his last big campaign event the Leader of the Opposition Bob Hawke helicoptered into the Bulli Showground and addressed a huge rally, promising that if he were elected there would be a new industrial policy within a hundred days, improved support, and opportunities for retraining and education so that sacked industrial workers would be able to transition to the service economy.

### **The Importance of Remembering**

I was reminded of this a couple of months ago when a reporter from a Wollongong radio station called and asked if I would be willing to do an interview. At the time BlueScope, which is what BHP's Australian Iron and Steel subsidiary became as part of the restructuring that followed this shock in the 1980s, was saying that unless it got rid of 500 jobs to save \$200 million it would close down and take 5000 jobs with it. At the same time the remaining coalmines had begun to announce closures and massive jobs cuts. Technology, global trade, productivity were up for grabs and jobs would have to go. History seemed to be repeating itself.

Which was why the reporter called me, 'It has happened before. No one knows the history

though,' he said, 'they have forgotten what happened before and there is hardly any reporting of what is going on now.'

I declined, it was so long ago, and I felt I hadn't kept up with what has happened well enough to speak publicly about it.

But it did make me think about what has changed. At the time the process of deindustrialization was working its way through well-established towns and enterprises all over the world – driven by technology, competition, consequences of underinvestment. The same thing was happening in Britain, in the industrial and coal mining regions of Britain. Companies in Australia, US, Britain were learning from the then ascendant Japan about other forms of employment and supply, just in time, outsourced and so on.

Nonetheless while the notion that industrial jobs would give way to service jobs made sense in theory, for the people who would have to make the transition it seemed almost absurdly fanciful. The idea that Wollongong could be a tourist and lifestyle destination known for its spectacular environment was regarded as a joke – quite literally, remember Aunty Jack. The promise that the university could become not only the largest employer, but the generator of real economic wealth and innovation seemed unlikely. As were the ideas that the technology and labour relations of steel making could be restructured with higher producing blast furnaces and networks of distributed sub contracting firms and genuine global markets rather than international markets sopping up local overproduction; or that mining would be transformed with open cut mining becoming the norm; or the suggestion that the level of unionization would drop from 80 percent to 20 percent. Or that the local newspaper

would make do with a dozen journalists, where once there were six times that many, who inevitably could not cover what was happening closely enough to make sense of it, or galvanise action by the power of story.

But all of these things have happened. The move to a service economy has left some behind, but it has also created new opportunities and new jobs for more people, especially for women. Now we are on the cusp of a much bigger change – the next forty percent of jobs that go will not be the relatively easy pickings of the past, the next round of automation, and globalization will shake established patterns of working and living to the core.

Service will not be a saviour in the way that it was as manufacturing contracted. The service economy will itself be transformed, much of it done by automation or by highly educated and cheaper employees off shore. Unless the service is something that must be done personally and by hand, it will evaporate.

I mention the huge cuts to the local Wollongong newspaper – business models have collapsed in the media, the jobs lost there have not been automated away, although many have been sent off shore. What has happened in the newspaper business is part of a pattern which has been the number of journalists in Australia reduced from 12,000 to about 6,000 over the past decade, but the next step is already taking shape, the automation of basic news reporting, by systems that use data and algorithms to produce an unlimited number of stories with little human intervention. Such a thought would have been unimaginable thirty years ago, when the target was to reduce the number of people manning the printing machines, now the journalism trade press is full of articles comparing the

merits of different systems and modes of automation.

### **The Emerging Precariat**

Over the next thirty years the automation of work will I expect challenge the political and economic framework. As the Oxford Martin Commission for Future Generations noted: ‘Economic models and political systems based on desire for full time work may have to be changed.’

I will come back to this profound observation later. Work has been a useful proxy for allocating income, but in future it may not be relevant. It has not been perfect, there are obvious disparities, like the way women are paid a fraction of what men are paid for doing the same job, or the way people working in the finance sector hang onto the money and don’t make it available to those working in the social sector, or the way that the owners of football teams can make millions themselves, and spend billions on TV rights but pay the players \$20k a year.

Work and money have not been precisely paired.

But in an increasingly automated future this nexus will be challenged even more, especially if once expensive information based services can be provided for marginal cost as many are predicting. This could be really profound, much more so than the changes we have seen to date – such as the deindustrialisation of Wollongong – even if the CEDA prediction of the abolition of 40 percent of jobs in Australia, or 48 percent of all global jobs is not fully realized.

In the meantime there are some pointers to what is happening and this is what I addressed in the *Griffith Review 45: The Way We Work*, which we published this time last year.

It documented the on the ground way that work has changed from up close. Some of the profound changes are happening, almost in front of our noses and certainly universities are at the forefront of this. Our universities are great places of scholarship and innovation, and for those with secure jobs a great place to work. However increasingly, considerable amounts of the work done in universities is done by people who do not have security – members of what has been called the ‘Precariat’.

### **Evolving the Way we Work**

Australia was once known as the land of the long weekend. It was a snappy catchphrase that, like all the best clichés, embodied enough truth and ambiguity to endure and inspire a book, a film, countless newspaper headings and a few European websites imagining the land down under as a new utopia.

It was, however, not an affirmation, nor praise for a place where the work and life were balanced and certainly not an aspiration. It was not even an ironic dig, like Donald Horne’s conjuring of a lucky country. It was critical of a people and place where things were taken too easily in their stride, where work was constrained by regulation and limited aspiration. A place where when people knocked off work they went home or to the beach or to football or the pub and got on with their lives. In 1978 when Ronald Conway’s book was written, you couldn’t even go shopping when you finished work, because with the exception of one night of late night shopping a week, the doors closed at five on weekdays and noon on Saturday.

What an odd notion, like the chimera of an old dream that can be dimly recalled, a trick of the imagination, was there really such a place...

Across a couple of generations, and in the living memory of anyone over forty-five, the nature, place, regulation and experience of work has profoundly changed.

Australians are now near the top of the list of working hours for those, in developed countries; a substantial and growing proportion of people work part-time – not all by choice; unpaid internships are the normal entry path for young people; women are no longer forced to resign when they marry or become pregnant, but the wage gap remains; manufacturing and agricultural jobs have given way to working in services, and now those jobs that don't actually demand hands on contact are also moving offshore.

When Conway wrote his book, well over half the workforce was in a union, now it is less than a fifth, increasingly low paid women; the expectation that you could start working with one organisation and after moving through a number of different occupations still be there forty or fifty years was not without foundation; the demarcation between white and blue collar jobs, between those who earned salaries and those on wages, was clear and embedded.

Now the proletariat is giving way to what has been called, the precariat, a new class who lack the stability and certainty of regular work or predictable social welfare. Guy Standing has done a Ronald Conway and used this for the title of his new book, and an accompanying volume *A Precariat Manifesto* (Bloomsbury, 2014).

### **Change, Recession & Predictability**

Technology and globalisation are contributing factors to the profound changes to the way people are working here and elsewhere and now new forms of automation are

threatening to disrupt well established principles of politics, economics and social relations. The opportunities in the always-on always-connected world are exciting, the ability to move ideas, goods and people around the globe with unprecedented ease transformative, but there are costs.

We are now living through a period of change as great as any in human history – like the move from agriculture to industry, from manufacturing to services and beyond, it will play out in ways we can only guess at.

The great transformation of the Australian economy that has unfolded since the 1980s, as a result of deregulation, the agreements between unions, employers and government, the targeted delivery of social benefits, has produced a rich and stable society.

The next stage of this development will be somewhat less predictable, the economic modeling has not reached a consensus, and the impact of automation will depend on decisions by countless companies and countries.

After an unprecedented period of growth, of rising incomes and standard of living, of unemployment at historic lows, it is easy to forget that this is the exception not the norm. Most transitions are lumpy, the future is rarely reached by travelling down a well lit path. Those over forty-five remember what it was like to live in a country which had periodic spikes of unemployment, even billionaire MP Clive Palmer recalled being unemployed for six months after university. There was a period of high unemployment in the mid to late 1970s, in the early 1980s it reached higher highs, then again in the late 1980s and during the recession we had to have in the early 1990s. There was a sense that unemployment, insecurity, closing and

collapsing businesses, were normal and the periods of growth and good times were the exception.

### **Inequality and the Role of Work**

The new normal at least in the short term might be more like the old normal, but with a bigger dollop of inequality. Inequality is the new buzzword, between countries and between people. French economist Thomas Picketty galvanised international discussion about this, and how the way we work and are paid for that work can foster inequality. His book *Capital in the Twenty-first Century* broke all records for publication by Harvard University Press, topping the Amazon best selling chart for several weeks. The former academic and now Labor MP for Canberra, Andrew Leigh used a different frame but reached similar conclusions about the rising levels of inequality in his book *Battlers and Billionaires* (Black Inc, 2013), and George Packer's masterful book *The Unwinding* (Farrar Strauss Giroux 2013) documented with heartbreaking detail what it feels like to live without a reliable, reasonably paid job, and the consequences for families and cities.

Australia is not America, where millions struggle to make ends meet with inadequate jobs and social support, or one of those European countries where unemployment rates have reached well into double digits and remained there for years, or one of the many countries where work itself may be life threatening. But even here work is changing. It is less secure and less predictable, forcing us to adapt.

One thing has remained constant, work is essential to economic well-being and meaning, so getting it right is important.

But it may be that at core it will be this nexus that has to break. If automated systems can

do the work of journalists and medical specialists and judges as well as the work of account clerks and storemen. What will the new jobs be, will we all need to work, or will we have to find new modes of organizing societies if half of us can't or don't need to work.

This is a big question and one that has not yet made the public agenda, but it is the logical end point of a profoundly different workplace and economy.

### **Humanities Skills and STEM**

As the Oxford researchers who have analysed the jobs that are likely to go found there are nine characteristics that mark whether a job is likely to be automated. The three that point to less automation, do you need to come up with clever solutions, are you required to personally help others and does your job require negotiation, are all characteristics of the humanities.

National Public Radio in the US developed [a website](#) where you can enter your job and find the chances of automation: I commend it as a scary game to play with your children. Jobs that are still highly paid and regarded are likely to disappear.

From where I sit in the humanities and social sciences I take some heart from this. It seems that the skills that will be needed in the future, as well as the technological skills to create and drive these automated systems, will be the skills of the humanities – of public sense making, of networking, of empathizing, of learning from history, of creating things and experiences of beauty and cultural meaning. These are the tasks that speak to our humanity and which will be needed.

I have written elsewhere about the possibilities that exist in the cultural sector,

and there is nothing I have read in terms of the future of work discussions, which contradicts this. Sure there are issues relating to protection of intellectual property and the sustainability of the cultural sector, but the evidence is that despite the changes in technology and platforms, that jobs continue to grow in these sectors. The cultural sector is another powerhouse of innovation, full of start ups and micro businesses with the potential to thrive in this environment.

A United Nations Conference of Trade and Development report in 2010 showed that even when global trade was declining by 12 percent a year, the cultural sector had had a global growth rate of 14 percent a year between 2002- 2008 and at that time accounted for \$592 billion. Not only is it one of the most rapidly growing sectors, but it is as UN, EU, UNESCO and other reports have shown, a sector that now accounts for about a fifth of GDP in most developed countries and is rapidly growing in others.

It is also one in which Australia has distinctive advantages, a subset of the services sector which satisfies the requirements of enduring jobs. Regrettably it is a sector in which we are in danger of falling short. The cultural economy is one of the great new engines of influence and economic growth, one which plays to many of Australia's strengths as an educated, globally engaged, outward-looking, multi-lingual democratic state, in the same time zone as the world's most populous and increasingly middle class regions.

The cultural sector has the potential to create high value jobs and reward innovation and to enhance the qualities of citizenship. It accounted in 2008-09 for the employment of between 6 and 9 percent of the workforce, generated between \$35 and \$67 billion of Gross Value Add, according to a report by

the 2013 UTS based Creative Industries Innovation Centre, *Valuing Australia's Creative Industries*.

I mention this because in the chase to boost the STEM skills base, which is important, the chances are that in a rapidly reformed world of work some of the best jobs, the most affirming jobs, the jobs that can't be reduced to data and algorithms will come from the cultural sector, which would be handy because the chances are that there will be a lot of people with a lot of time on their hands.

## Conclusion

As Dr Fiona McKenzie is the Policy Director for the Australian Futures Project, wrote in the CEDA study, 'Australia is facing a range of megatrends that will change the way we live and work in coming years. We need to start thinking creatively about the opportunities and challenges on the horizon. This goes beyond debating minor reforms or making a few policy tweaks. The world is changing and with it our society, our economy, our democracy and the environment around us. How do we thrive in this brave new world? In a time of increasingly complex and interconnected systems, what skills do we need to navigate our way?

'For those that learn how to thrive in an unpredictable and uncertain world, rapid change and complexity need not be a liability. They can be an advantage. We need to be proactive in building our capacity to make decisions for the long-term while having the ability to successful react and adapt in real time to curve balls thrown our way. We need organisations that can cope with complexity by being able to learn and adapt to changing circumstances. We need leaders with humility, willing to draw upon the emergent and self-organising nature of complex



adaptive systems through empowering others and continuous re-calibration. This requires taking risks, experimentation, and accepting failures. We need governments that are willing to do all these things. And we need citizens that will encourage them doing so. We might be getting older, we can also get wiser. The 21st century is still young.’

As President Obama’s former adviser Rahm Emmanuel famously said, ‘Never let a crisis go to waste.’ A crisis is building, but it is hard to predict when it will hit these shores. We now have the time to prepare for it, the exercise the muscle of innovation and imagination to create a new future. The question is whether we have the willingness to do so.

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Professor Julianne Schultz AM FAHA is the founding editor of Griffith Review, the quarterly of ideas and culture published by Griffith University in conjunction with Text Publishing. She is a widely published author including *Steel City Blues* (Penguin) and *Reviving the Fourth Estate* (Cambridge).

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