_Remaking the Pilbara: Automation and New Geographies of Work_

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At work in the Pilbara
Does geography matter?

Where does work ‘take place’?

1. Thinking about the geography of industrial relations is as important as its economics, sociology, law and history.

2. Much of the way we talk about work recognises this through discourses of globalisation.

3. All work is – whatever else it is is – a geographical phenomenon.

4. Mining is a distinctive example: at once local, global national; at once, core and isolated; at once, shaped by other sites in Australia and shaping those other sites.

5. So, geography matters – and so of course does the Pilbara.
1. Mining companies have a problem – they can’t change geology, so they are less ‘mobile’ than say IT firms, call centres, manufacturing ...

2. ... but the geography of mining is not fixed – FIFO being the most obvious example ... the complex global production networks in which they are located being another ... and rail automation still another.

3. All this affects IR/HR: for workers, the question of community has long been important and has long been changed by FIFO – and is about to change again.

4. So, in this presentation I want to concentrate on just one set of questions: about the nature and implications of Rio Tinto’s automation of the mainline train system.
My research methods

• Part of a long-term project examining the Pilbara’s iron ore industry: scores of interviews, focus groups, meetings in 17 visits to the Pilbara since 2001.

• Analysis of publicly available company material and media coverage, 2008-12.

• Internal union material by way of general context

• Public union documents: Common Cause; Karratha Lodge Newsletter; Pilbara United News.

• Interviews: union officials, rail workers and their families.

• Attendance at formal and informal union meetings.

• Observation of a twelve-hour shift on a mainline train, May 2012.
Rio Tinto’s rail network
The changing geography of work in the Pilbara

- February 2012: Rio announced a plan for ‘autonomous train operations’, US$518 million; in the context of expansion of export tonnage to 353MT yearly (from 230MT currently); the first automated trains to run in 2014.

- Where’s the geography in all this? It could not be clearer: the place of work and control of the train is shifted from the loco cabin to the Remote Operations Centre in Perth.

- This should be seen as the latest attempt in 50 years of history of mining the Pilbara to deal with the geographical and logistical challenges that these companies face.

- ... from working within the existing IR system (1966-86) and traditional mining processes through complete re-workings of that and now to Rio Tinto’s ‘Mine of the Future’. 
The geography of control: the company

- **Rio Tinto CEO Sam Walsh**: ‘my iron ore business is a logistics business’.

- **Greg Lilleyman, President Pilbara Operations, RTIO**: ‘[w]e can plan ahead and schedule with much greater certainty with an automated system, than you can with the inherent issues that come along with people being involved’.

- **Peter Strachan, financial analyst**: ‘You’re using the same sort of people, different skill set, different cost base. You don’t have to accommodate them, you don’t have to fly them in and out ... and it’s a matter of saying, “well instead of having someone we have to pay $300,000 a year, say, to be on-site ... all the extra cost of fly in/fly out, we can get a skilled person for $75,000 or $80,000 a year to do that same job”’. 
Driver at work
• 330 train drivers and 70 car examiners, mostly men, covered by a union agreement.

• Three locomotives and 234 ore cars make up the normal set between mines and ports: 23,000 tonnes or iron ore when fully laden. In recent times, the driver is conveying over $3 million worth of ore per journey.

• What’s the work, the skill?
  ➢ Driving ‘without tormenting the train’ – but already marked by spatial and technical changes.
  ➢ ‘They take away a lot of job pride when they over-regulate; they dumb it down’.
  ➢ Understanding geography: maps, the lie of the land, defining the Pilbara.

• If FIFO labour has divided the workforce, then automation does the same although in new ways. This is clearest in shifting the work from the mining sites themselves, changing the geography, the nature and arguably the gender of the work.
Driver’s console
The geography of control: the union, the conflict

• By 2008, most of Rio’s railworkers had joined the union but they still did not have a collective agreement:

  ➢ If we are still on individual agreements at the time that ATO is introduced and the company decides that redundancies are necessary, we will have no means by which to protect ourselves from forced redundancies or to protect our wages and conditions (Karratha Lodge Newsletter, 2008).

• Faced with company and media excitement about the change, there was some scepticism:

  ➢ ‘Want an exciting career as a train driver? Well you’ve come to the wrong place’.

• The union response was moderate:

  ➢ The overall aim was to ‘get back into Rio’ … which they did, in 2011.

• The union secured a consultation clause over change – but at the cost of geographical separation – the train controllers, that is, the Perth-based workers, are not covered by the agreement.
Conclusions

We end up with as many puzzles and questions as we began:

1. **What does this mean for how we understand globalisation?** If work may take place anywhere, it still must take place somewhere ... but is that ‘somewhere’ ever more fluid?

2. **Workers lose this job – and the existing workplace – if not a job; a threat both to ‘the craft’ of railway work and the place.**

3. **As has happened since the very beginnings of industrialisation, we can ask if there are changes in the gender division of labour as cause, effect or implication of this round of automation?**

4. **What does it mean to have a mining workforce working in a metro area?**

5. **What might all this mean for other companies and workers distinct from, but affected by, the oddly powerful thing that is the Australian mining industry?**

6. **How are other mining regions addressing these sorts of changes?**
Work in the Pilbara
... and in Perth