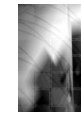

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‘Make do and mend’ after redundancy at Anglesey Aluminium: critiquing human capital approaches to unemployment

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Abstract

This article tracks workers’ responses to redundancy and impact on the local labour market and regional unemployment policy after the closure of a large employer, Anglesey Aluminium (AA), on Anglesey in North Wales. It questions human capital theory (HCT) and its influence on sustaining neo-liberal policy orthodoxy – focused on supplying skilled and employable workers in isolation from other necessary ingredients in the policy recipe. It is concluded that HCT and associated skills policy orthodoxy are problematic because supply of particular skills did not create demand from employers. Ex-AA workers faced a paradox of being highly skilled but underemployed. Some workers re-trained but there were insufficient (quality) job opportunities. In picking up the pieces after redundancy many workers found themselves part of a labour ‘precariat’ with little choice but to ‘make do and mend’.

Keywords

human capital theory, older workers, precariousness, redundancy, regional policy, restructuring, training, unemployment

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Introduction

The Holyhead-based Anglesey Aluminium (AA) plant closed in September 2009 with the loss of 400 jobs. AA was a large employer providing favourable pay and employment relative to other employers on Anglesey, a peripheral rural regional economy in North-West Wales. In a location that had experienced long-term economic problems and during a financial and economic crisis, the closure of such a major employer left a significant jobs vacuum and represented a challenge not just for the individuals affected and their community but also for regional economic policy.

This article presents findings from a pilot research project mapping ex-workers' experiences of redundancy at AA. The research explores individual narratives of transition through redundancy, including: accounts of training and skills provision; past versus present employment status; labour mobility; comparisons of job quality (past versus present jobs); and perceived gaps between the supply of skills and job opportunities. In discussing labour market implications the article draws on empirical findings to question human capital theory (HCT) and its influence on sustaining policy orthodoxy, especially the focus on re-skilling workers to improve their employability (Becker, 1976, 1993; Leitch, 2006). The case is made for a coordinated 'skills ecosystems approach' (Bryson, 2010; Finegold, 1999), in preference to a 'silo' focus on skills policy as an isolated response. Drawing on (ex-)worker accounts of redundancy at AA, two research questions are considered: does the supply of skills, of itself, improve employment prospects for (ex-)workers? What are the implications for human capital theory and related policy orthodoxy?

The next section reviews existing literature, exploring how deindustrialization has heightened labour precariousness and then considers the limitation of HCT approaches. The following section outlines the qualitative research methodology. Findings relating to regional policy responses to redundancy at AA and (ex-)worker experiences of redundancy are outlined in the section after that. The article finishes with a discussion and conclusion, highlighting the central contribution that supply-side skilling of workers, under the auspices of enhancing their employability post-redundancy, did not transmit on the demand side to viable employment by local employers. Rather, many ex-workers found themselves having to 'make do and mend' in poor quality jobs in difficult economic circumstances.

Labour precariousness and human capital theory

Deindustrialization and labour precariousness

Globalization has been associated with international competitive pressures and investment/divestment by multinational corporations in host countries (e.g. Anglesey Aluminium in Wales). As globalization gathered pace from the 1980s, international competition and associated factors have generated substantial restructuring of companies and, indeed, whole economies. In the UK, economic restructuring has resulted in a shift away from traditional heavy industry like mining and metal production (deindustrialization) to new service industries. Deindustrialization has fuelled high unemployment, labour precariousness and insecurity in regions of Wales and northern Britain that

formerly had large concentrations of traditional industry (Beynon et al., 2002). Standing (2011, 2012) identifies the growth of a 'precariat' class in the wake of economic restructuring, consisting of a multitude of insecure people, living bits-and-pieces lives, in and out of short-term jobs, without a narrative of upward occupational advancement. Worker experiences of redundancy at AA can be viewed against this big picture restructuring narrative. Downward pressure on the wages and working and living conditions of the 'precariat' intensified during the financial crisis and accompanying austerity post-2008 (O'Reilly et al., 2011).

There is a rich literature on the impact of redundancy, including in Wales specifically (Beynon et al., 2002; Blyton and Jenkins, 2012; Gardiner et al., 2009; McKay, 1992). Discussing closures where local labour markets are dominated by major employers, McKay (1992) identifies 'empty space' before the individual and in the local economy that follows from closure and separates people from opportunity. Research in the Welsh steel industry (Gardiner et al., 2009) identifies individual experience of redundancy as a 'critical life event', ranging across a spectrum from active career change planners to those 'at a crossroads' struggling to adapt to challenging circumstances. Gardiner et al. found that variation of worker experiences of redundancy depended on various enabling and constraining contextual factors, including individual biography and availability of local job opportunities and supports (e.g. finance).

Human capital theory orthodoxy

Supply-side re-training and re-skilling as individuals adjust to challenging circumstances is core to many current policy prescriptions for regeneration and resilience in the face of redundancy. Increasing the supply of employee skills and training has been at the forefront of government policy in the UK (and in the Welsh Assembly Government) for boosting individual employability and economic competitiveness in a 'flexible' deregulated labour market (Leitch, 2006; Skills That Work for Wales, 2008). For example, the Leitch Review commissioned by the UK Treasury recommended ambitious skills and qualification targets as a key supply-side driver for a knowledge economy.

Yet increasing skills supply has incorrectly been portrayed as a stand-alone cure-all panacea for enhancing individual employability, reducing unemployment and boosting competitiveness, both at the level of the firm and the economy. Policy fixation with skill supply is influenced by interpretations of HCT (Becker, 1976, 1993; Florida, 2005; Mincer, 1995; Mincer and Ofek, 1982; Neal, 1995). A core idea underpinning HCT is that stocks of human capital are comparable to other means of production, whereby investments in learning capacities of workers (education and training) yield subsequent productive outputs for individuals, firms and economies (Becker, 1993). Individual decisions relating to supply of skills are based on a neo-classical utility maximizing model within what are assumed to be perfectly competitive labour markets. At firm level, investment in skills is seen as a rational win-win for employers and employees. Individuals undertake training and employers invest in training and create new jobs, on the basis of rational estimates of future returns. Employer demand for skilled workers is said to derive from expected productivity increases (through the effect of higher skills on work performance) while employees envisage access to job opportunities and/or increased wages from

training (Becker, 1976, 1993). From a HCT perspective, these supply-side forces are also assumed to be resonant at the macro-economic level. Increasing skills supply across the labour force is seen to play the vital role in enhancing demand from employers for skill capacities. Mincer (1995: 1) illustrates this HCT perspective:

> At the macroeconomic level the social stock of human capital and its growth are central to the process of economic growth; at the micro level differences in human capital stock and in their growth can explain much of the observed variation in the wage structure and in the wage distribution among individuals and groups.

For HCT advocates, therefore, supply-side educational investment offers a clear route to meritocratic advancement and economic competitiveness (Florida, 2005). The invisible hand of market forces is viewed as an efficient coordinator of this utility maximization. There is seen to be linear causal links between skills, productivity, access to jobs and economic growth. Becker (1976: 5) argues:

> The economic approach assumes the existence of markets that […] coordinate the actions of different participants – individuals, firms, even nations – so that their behavior becomes mutually consistent.

HCT has proved alluring to policy-makers on both sides of the Atlantic, who have extolled what Brown et al. (2011: 5) call an 'opportunity bargain'. This is where the state's role is restricted to creating supply-side opportunities for people through access to education and training and responsibility is then placed on the individual to improve their employability to advance in a global jobs auction.

But supply-side HCT interpretations of labour market functioning have attracted criticism (Bowles and Gintis, 1975; Bryson, 2010; Keep et al., 2010; Livingstone, 1997; Maurice et al., 1986). The work of Keep and colleagues (Keep and Mayhew, 2010; Keep et al., 2006, 2010) at the Centre on Skills, Knowledge and Organisational Performance (SKOPE) in critiquing the naivety of HCT approaches is noteworthy because of their fundamental argument that supply of particular skills does not automatically create its own demand from employers to utilize those skills:

> The belief that increasing the supply of skilled and educated labour will, of itself, encourage employers to upgrade their products and production strategies is at best optimistic. If this belief proves unjustified, then the additional skills will not be used. (Keep and Mayhew, 2010: 567)

HCT is problematic because social and economic structures and actions forming and constraining quantity and quality of labour are neglected (Maurice et al., 1986). HCT advocates fail to account for a growing gap in the UK between higher qualifications and skills and diminishing numbers of commensurate job opportunities to apply this greater knowledge base. While higher skill supply is important, ensuring there is actual demand for utilizing these skills (and in good quality jobs) is neglected (Keep et al., 2010). HCT advocates might counter that it is not surprising UK labour markets are not functioning as they should given the country was in the midst of the worst recession since the 1930s.

Yet it was also evident in the boom years before recession that there are limits to what a single supply-side set of skills policies can achieve if disconnected from demand-side policy levers related to the structure of the economy and job opportunities (Keep et al., 2006).

Further, because HCT approaches view skill as a universal panacea, they do not adequately disentangle the complexities and diversity of skill as a concept. As other scholars have noted, skill is difficult to define and has different dimensions and accredited qualifications and formal training are used as common proxies of skill that can be readily quantified, in contrast to less quantifiable informal on-the-job-training (see, for example, Grugulis and Stoyanova, 2011). Additionally, researchers have pointed to a supply-side problem with Britain's vocational education training system (VET), which encourages a narrow focus on (non-transferable) skills and qualifications, including National Vocational Qualifications (NVQs) needed to do a specific job; rather than a more expansive model of general vocational skills found in other developed economies that are more easily transferable in the wider labour market (Keep and James, 2012).

An expectation of HCT approaches would be that, when offered a more skilled labour force, utility maximizing firms will rationally respond to market signals by adjusting competitive strategies in the value-added direction, thereby increasing demand for quality jobs relative to routine low-wage ones. That this has not happened on a widespread basis constitutes a major flaw in the opportunity bargain espoused by policy-makers wedded to neo-liberal HCT orthodoxy. Research funded by the Russell Sage Foundation on low-wage work found that low-quality, low-skill and low-wage 'precariat' jobs are prevalent in many sectors in the UK, including retail, hospitality and food processing (Lloyd et al., 2008). The structure of the UK economy means most employers still compete on low cost given the contextual 'incentive' of a flexible deregulated labour market and this limits demand for higher skill workers and quality-oriented competitive strategies (Gallie, 2007; Warhurst et al., 2012). Low-quality 'precariat' jobs can have negative consequences reaching beyond the workplace, including: poor working conditions; family poverty; inequality; and reduced mobility (Goulden, 2010). There is evident mismatch then between skills supply and available (quality) job opportunities, creating a combination of 'overskilling' and 'underemployment' resulting in the broken promise of the neo-liberal opportunity bargain (Brown et al., 2011). Indeed, analysis of the 2006 Skills Survey revealed that over seven million jobs in the UK require no qualifications, while there are only two and a half million workers without qualifications. Furthermore, 40 per cent of UK employees hold certified qualifications higher than those required for their current job, up from 35 per cent in 2001 (Felstead et al., 2007).

In light of this critique of HCT, a body of research illustrates that while up-skilling employees is a vital supply-side policy lever for enhancing employability, it is only one piece in a broader holistic framework that policy-makers need to consider to address structural deficiencies on the demand side (Bryson, 2010; Finegold, 1999; Gallie, 2007; Keep and Mayhew, 2010; Keep et al., 2010). This holistic framework has been called a 'skills eco-systems approach' (Finegold, 1999). A 'skills eco-systems' approach recognizes broader institutional context and interdependency of multi-level policy interventions needed to rectify 'structurally rooted causes of economic and social problems' (Keep and Mayhew, 2010: 570). These inter-linking interventions include innovation in

product markets, corporate governance reform, investment in infrastructure and research and development, appropriate industry-level/regional institutions and democratic work design and governance. The varieties of capitalism literature inform us that structural conditions supporting multi-level policy integration of investment in skills are more prevalent in coordinated market economies than in liberal market economies like the UK (Goergen et al., 2012; Hall and Soskice, 2001).

Research methodology

Anglesey Aluminium Metal Ltd, which closed in September 2009, was a joint venture between parent multinationals Rio Tinto Group and Kaiser Aluminium. The aluminium smelter was located near Holyhead on the isle of Anglesey. It was formerly one of the largest employers in North Wales, employing 540 people. Aluminium production commenced in 1971, with up to 142,000 tonnes of aluminium produced every year. The end of smelting resulted in over 400 redundancies. The smelting works was decommissioned and the re-smelting operation, which continued to employ about 90 people, is at the time of writing being wound down with the loss of these remaining jobs. Reasons cited for redundancies were production costs and that the plant could not source cheap electricity due to the scheduled closure of the local Wylfa nuclear power station by 2015.

This research arose from the WISERD (Wales Institute of Social and Economic Research, Data and Methods) localities research programme. The closure of Anglesey Aluminium was identified as a significant event in the locality; consequently a pilot research project was initiated to identify impacts of the closure in a peripheral semi-rural region from the perspectives of redundant workers. The primary research methods were qualitative. A strong methodological contribution of the research is that it drew on (ex-) workers' real-life accounts by using context sensitive qualitative research tools to provide deeper insights into local labour market dynamics than is possible using econometric modelling favoured by human capital theorists.

Qualitative data were mainly collated between January 2010 and March 2012 (with nine interviews/meetings occurring between January 2010 and July 2011 with a total of 12 individuals), as follows: two meetings/group discussions with five UNITE trade union officials and plant representatives; five interviews with ex-AA workers; two interviews with key stakeholders – one support organization, the Citizens Advice Bureau (CAB) and one member of Anglesey County Council Economic Development Unit; a workshop in March 2012 to provide feedback on findings to research participants; and email correspondence.

Semi-structured interviews with ex-workers averaged one hour. The interview sample did not aim to be representative of all redundant workers. Rather it was a 'pinch sample', making use of a 'snowball' sampling method by drawing on established relationships with UNITE union representatives to access other interviewees. Details of ex-worker respondents are as follows: they were aged between 40 and 60 at the time of interview; all were male; all were local; all had worked for AA most of their working lives; interviews were mostly conducted over 12 months after redundancy. At the time of interview one ex-worker had taken early retirement, two were in new jobs and two were actively seeking employment. All were married, only one did not have children. In two cases,

interviews were conducted with wives of the interviewees present and occasionally participating.

The research built in a longitudinal element. Informal discussions and meetings with Anglesey Council, CAB and trade union stakeholders and the workshop in March 2012 to provide feedback on findings to research participants provided another layer of rich qualitative data. To supplement this dataset longitudinally, more qualitative fieldwork was undertaken in Autumn 2012, consisting of conversations with four ex-AA workers (three male and one female), who had subsequently found work at Wylfa (itself scheduled for closure by 2015) and Trawsfynedd (in the final stages of decommissioning) nuclear power stations in North Wales.

The overall richness of the dataset is a methodological strength. Using 'snowballing' techniques, the article relies on stakeholder accounts from those with professional expertise (Iestyn from Anglesey Council Economic Development Unit and Sarah from the Citizens Advice Bureau) and the 'local knowledge' of ex-workers, to construct a comprehensive picture of what happened to the wider pool of ex-workers following redundancy. In the end most ex-workers had stayed local and were having to 'make do and mend'. These accounts provided a credible evidence base in the absence of official data on these complex labour market dynamics. All respondent names were changed.

The primary qualitative data were supported by quantitative secondary data analysis (SDA), against which ex-workers' accounts of redundancy were situated. SDA was undertaken to set the scene, providing a socio-economic profile of Anglesey, where a significant percentage of the AA workforce lived.

Findings

The findings below are outlined under the headings of socio-economic context, supply-side policy responses and worker experiences of redundancy.

Socio-economic context of Anglesey Aluminium

Statistical analysis revealed Anglesey's socio-economic profile to be fairly complex. In December 2012, the percentage of working age people who were economically active on Anglesey was 76.2 per cent compared to the Wales average of 73.5 per cent (ONS, 2013). But this relatively high employment count would appear to be skewed by the frequent turnover of short-term jobs. There has been a significant increase in self-employment on Anglesey, since the recession began in 2008; much of this in precarious jobs like taxi driving and various manual trades. As of December 2012, Anglesey had a higher incidence of self-employment (11.2%) compared to the Wales average (8.7%) and the UK average (9.6%) (ONS, 2013). While employment levels remained relatively high, the economic crisis had hit Anglesey very hard, Holyhead in particular. Rises in job seekers allowance (JSA) claimants outpaced increases in the rest of the country. Ex-AA worker Emrys described this as a 'double whammy':

> Well it has been a double whammy really for the lads because there is this recession now as well at the same time so it is even harder for them to find … work … locally … and throughout the country as well. (Emrys)

This has to be considered with the deindustrialization of Anglesey as both Wylfa nuclear power station and AA closed, leaving the main employment sectors (agriculture, food, tourism, retail), which were relatively low paid and often precarious, seasonal and short-term. For example, six per cent of employment on Anglesey was in agriculture/forestry, compared to one per cent for the UK (Statistics for Wales, 2012: 8). Higher-wage employment on the island had been spiked by the presence of the 'big two': Wylfa and AA. The closure of AA was a contributing factor in average wages being forced downward by 2010. In 2011 average full-time gross weekly earnings on Anglesey were £465.30, compared with the Wales average of £519.40 and a UK average of £605.50 (wages on Anglesey were 76.8% of the UK average) (Statistics for Wales, 2012: 19). Interviews support evidence that high wages at AA relative to the average wage on Anglesey heightened the impact of closure locally:

> The key issue with Anglesey Aluminium, for us, was not just the number of jobs but the quality of the jobs that were there and the salaries, for example the average wage of Anglesey Aluminium was about £35,000 and the average wage on Anglesey is £21,000 … one job in Anglesey Aluminium is roughly equivalent to losing two anywhere else on the Island. (Iestyn, Anglesey County Council Economic Development Service)

The closure of AA also transmitted a negative 'multiplier effect' on suppliers and small businesses down the local labour market chain. Therefore, the socio-economic makeup of this locality – relatively high (but often insecure) employment and low wages concentrated in sectors like agriculture, tourism and retail – is important for understanding the impact of AA's closure on what is a designated area of multiple deprivation:

> The majority of the Communities First areas for Anglesey are in Holyhead. Which is where the majority of the workers were located. (Iestyn)

Given this contextual background, the qualitative research identified worker responses to redundancy by providing information on their current employment status, narratives of transition through redundancy and perceptions of their own and other ex-workers' opportunities in the current climate. First, supply-side policy responses to redundancy at AA are summarized.

Supply-side policy responses to redundancy at AA

There was little anticipatory in-house provision by the employer to prepare workers for the critical life event of redundancy, apart from a 'one stop shop' to provide one-to-one support to develop CVs and so forth. Interviews with policy (Anglesey Council) and Citizens Advice Bureau stakeholders indicated that supply-side human capital approaches played a dominant role in policy responses to mass redundancy at AA, with emphasis on individual re-skilling and re-training. Sarah, from the CAB, described re-training support for workers:

> We have had people coming here to us as volunteers with … very specialist skills that they had in Anglesey Aluminium but not necessarily the skills wanted out there right now and they were

> struggling … coming into an office environment, learning to do typing and the admin skills side … You need to be able to have good customer service skills and for some of the volunteers from Anglesey Aluminium, they struggled for a while, but once you gave them the training and support, they were getting there. (Sarah)

Policy responses were coordinated via a redundancy response group involving multiple stakeholders:

> Once we were aware that the closure were going to happen the County Council was responsible for setting up a redundancy response group with all the key stakeholder organizations, which is the Job Centre, Careers Wales, the company, the trades union etc. And we facilitated that group prior and after the event to try and ensure that individuals working there were actually given access to opportunities and assistance available through the Welsh Assembly or through different organizations … So our role was to try and bring it all together and coordinate it rather than having the people affected by it going to different organizations and getting different answers and advice. (Iestyn)

Evidently there was a skills gap in cases where ex-AA workers wanted to start their own businesses, because skills required for this were different to those they had acquired on the job:

> In terms of skills, the big gap we found was that a number of individuals were eager to establish their own company. These people had years of engineering experience, but the experience and abilities you need to run a business are completely different to actually on the job. (Iestyn)

Supply-side policy responses reflected emphasis on human capital approaches to regional regeneration as set out in the Welsh Assembly Government (2007) strategy document *One Wales*. In *One Wales* emphasis was placed on 'enhancing skills for jobs' and 'equipping people with the skills they need' (2007: 13). Section 6 of the document, 'Learning for Life', envisaged a 'learning culture', a commitment to tackle 'poverty and disadvantage' through 'widen[ing] participation for all ages in further and higher education, promoting adult and community learning both in relation to employability and the wider benefits which education brings' (2007: 24).

This emphasis on skills and training was at the heart of Welsh Assembly Government initiatives and resource provision for redundancy. Funded through the Wales European Funding Office, the Redundancy Reaction Scheme (REACT) is a training programme to assist individuals experiencing redundancy by increasing their skills and removing barriers to returning to work (providing up to £1500 worth of training); for instance by providing accredited NVQ qualifications. By 31 March 2011 REACT committed expenditure for Anglesey was £635,919 according to Anglesey County Council. REACT was a core aspect of the redundancy 'package' for AA workers.

Less attention was paid to demand-side responses:

> I don't think we did any mapping exercise in terms of supply and demand in the local labour market. (Iestyn)

Worker experiences of redundancy at AA

'Make do and mend' precariousness. Mirroring Gardiner et al. (2009), the qualitative data pointed to variable worker experiences of redundancy at AA. Some out-migrated, taking globalized opportunities provided by AA's parent company Rio Tinto Zinc in New Zealand and Australia and at other aluminium sites in Abu Dhabi (UAE), Qatar and India. Others travelled relatively long distances off the island for work. Some chose self-employment with mixed results; while some ventures were unsuccessful, there were accounts of 'success stories'. Some remained unemployed and others had retired, including taking early retirement. Importantly, the research identified a 'make do and mend' category of workers who decided to stay local (for example, because of family ties) and were thus prepared to take up whatever jobs became available in the local labour market. Interviewees Geraint, age 40, Dave, age 51 and Dewi, age 49, fell into this 'make do and mend' category.

Supplementary conversations with ex-AA workers who had subsequently found employment at Wylfa and Trawsfynedd nuclear power stations also confirmed accounts of the predominance of short-term contract work in the local labour market. One ex-worker, Gwilym, now working at Wylfa, said he had spent nine months in short-term contract work, which he had found 'stressful'. He was again worried about his job prospects given that he faced an uncertain future as Wylfa geared up for decommissioning.

Thus, based on the qualitative accounts, many workers seeking work had found something. However, some had struggled to find any form of work. There was clear evidence that redundant workers staying locally were having to take low paid short-term jobs well below their skill level. Significantly, therefore, backing up critiques of supply-side human capital approaches, there is an underlying structural demand-side issue on Anglesey relating to the lack of quality job opportunities attracting good wages. While workers had access to a range of training resources and re-skilling initiatives and there was evidence of uptake of re-skilling, there was a gap between training provision and the quality of available work opportunities. This gap meant that redundant workers were forced to 'make do and mend' and pragmatically accept whatever work was available locally.

Differences in the interviewees' 'biographical availability' (McAdam, 1986), such as age and family, were a factor in the spectrum of responses. Biographical availability was used as a means of identifying and unpacking the sorts of factors which might have an impact on workers' capacity or desire to re-enter the labour market after redundancy. Age and family ties and other biographical factors are shown to constrain or facilitate workers' mobility opportunities and outlook. Age was a factor in interviewees' own perception of their prospects, status and future plans, affecting, for example, whether they felt redundancy 'came at the right time':

> If you had 20 years' service then you walked away with a lump sum and a pension so … for me personally it came at a good time … for anybody … over 20 years' service who were in their late 50s or early 60s it was an ideal time … Redundancy is scaled on your age as well … So if you were younger you got less redundancy. (Emrys, age 60)

Others found themselves 'at a crossroads' (Gardiner et al., 2009), struggling to find work and a new direction after a lifetime's employment with a single employer. Dave, age 51 and unemployed at the time of interview, was markedly more downbeat about his prospects than either Dewi (also unemployed) or Geraint.

Re-training/re-skilling opportunities. Many ex-workers had undertaken re-training opportunities to enhance their employability after redundancy. Ex-AA workers were highly skilled, primarily through specialist knowledge derived on the job. But these industry specific skills were not readily transferable in the wider labour market and many workers left AA without accredited qualifications. Nevertheless, many workers then availed themselves of re-training support in areas like office skills, customer service, health and safety, IT and volunteering. Some of this retraining came with NVQ accreditation. Yet the new qualifications accrued were often at a relatively low level (NVQ 1 and 2) and were not matched with targeted job opportunities on the demand side.

This is illustrated by comments from Dewi and Geraint. Dewi had been unemployed for a year and his narrative of transition through redundancy was one of taking up all available training opportunities, particularly through REACT:

> Anglesey Aluminium was very health and safety conscious and the training was good there but I had nothing in black and white to show that I had done it. So I thought right, I had seen it in the local paper – Premier First Aid on Ty Croes Camp – the race circuit … They do … health and safety training and first aid training. I set up a few courses with them and they sent the paperwork back to REACT. Because health and safety is handy for any job really. So I did all them courses, food hygiene, risk assessments, first aid in the workplace, fire safety. I think that I had nine certificates in the end, so that was good. (Dewi)

Dewi had also done volunteering work to develop new skills and get qualifications:

> (Interviewer) – How did you end up doing the CAB [Citizens Advice Bureau] volunteering?
>
> They said if you do some volunteering work, and I had never done any office type jobs, so I thought well, and with being a [shop] steward in work I have done similar work like helping people with different things like that, and it is very good training as well, it's like NVQ-based and you get a certificate at the end … So, it is interesting and I have done a couple of courses with them as well and I have tried for a job with them … as a trainer. (Dewi)

Despite undertaking training courses and having committed significant time to enhancing his skills and employability profile, Dewi had not found work related to these courses, but nevertheless kept applying for jobs.

Geraint, who had found work by the time of interview, made a similar point to Dewi's observation that he had 'nothing in black and white' on leaving AA:

> There was quite a lot of training [but] the kind of training that they did, like the fork lift, wouldn't help you if you left the actual building, it was on-site training … and then obviously you couldn't use them skills without a ticket outside. (Geraint)

Geraint had initially decided to go self-employed (a fishing business) but this had been unsuccessful. Geraint confirmed he was not alone in having invested his redundancy money in a failed venture, which links back to the comment above by Iestyn about deficits among ex-AA workers in skills required to own and run a business. Sarah provided further corroboration of unsuccessful self-employment ventures, raising concerns about the investment of redundancy packages in such ventures without recourse to independent financial advice.

Present employment status. There was a broad spread of accounts of the interviewees' own post-redundancy employment status: unemployment, early retirement, a failed self-employment enterprise and accounts of work of a lower skills base and with lower wages than at AA. Out-migration is the one route not taken by any of the interviewees themselves, several of whom had mobility constraints due to their 'biographical availability':

> I want a job close by … I was thinking of moving away … but … my parents live locally.
>
> (Interviewer) – So, you decided to stay and look for work?
>
> Yeah locally, yeah. (Dewi)

While some had out-migrated for work, local ties and family commitments as a rationale for not out-migrating were also attributed to many ex-workers:

> Some people have gone to Qatar. I think that has a hell of an impact on young families. Do you want to go to a hot climate with totally different rules for women? It is a big step. (Dewi)

Thus many ex-workers decided not to move or had mobility constraints and fell back on whatever the local labour market provided. Reflecting the statistical profile, it was clear from interviewees' accounts of their own experience and that of others that there was work available on Anglesey but it was predominantly low paid, low skilled, short-term and precarious:

> They haven't found proper jobs, they have been jumping from … I wouldn't even call it seasonal work but they are lurching from one short-term contract to another and that's causing problems within the home. (Sarah)

Ex-AA workers who stayed locally were therefore forced to take less skilled work. It was a case of 'make do and mend':

> [A] few have found work [locally] but everyone I spoke to, they are not happy in the job … I will do anything, you know, I just want to work … I can tell you now, I will try for any kind of work. (Dewi)

Geraint provided a stark comparison between his current and previous jobs. He explained his new job:

> When the chicks come in onto the farm I put the chicks into the sheds and then you go round each farm helping the manager and the foreman out. And then you pick the dead up that have died overnight and do a bit of general maintenance. (Geraint)

This can be compared with the description of his old higher skilled job at AA:

> We used to make the metal in the Pot Lines and then you cast it. I was a mechanical equipment operator but then I was mostly casting then as a caster. So that was my job, doing the casting of the metal. (Geraint)

Sheer pragmatism was characteristic of people in this 'make do and mend' category:

> I think that if you want to work there is work there. It might be crap but a job is a job these days … All it is, is paying the mortgage and that is it … I can turn my hand to anything. (Geraint)

Therefore, even after the AA workforce availed of re-training there was simply not the local job availability, as ex-workers (and their families) were only too aware:

> (Interviewer) – So, when you got told personally that you were going to be made redundant can you tell me how did you feel?
>
> Geraint – To be honest, obviously I was devastated that I was leaving, knowing that there was nothing else out there … Obviously then I used to go for training [sic] and try and learn a skill to try and do something else.
>
> Emma (wife) – There is nothing here, there is no building work going on is there, so you're skilled but there is nothing going on is there?
>
> Geraint – There is no point training as a plumber if there is no plumbing work … There is just nothing here to train for.

Dave also felt that it was a 'buyer's market' in terms of the island's labour market supply:

> There's so many people on the island now who are tradesmen, electricians and maintenance fitters with ONCs, HNCs, they [employers] can get them now for the same price because they don't want to go on the dole and they will not say no. So the person like me who hasn't got HNCs, ONCs, doesn't stand a chance. (Dave)

The findings illustrate that, in this regional labour market, supply of particular kinds of skills did not create its own demand from employers and new skills were often underutilized. Many workers found themselves part of an insecure 'make do and mend' precariat.

Discussion

'Make do and mend' precariousness

Structural forces unleashed by globalization, footloose employers and neo-liberal political choices have contributed to the human costs of deindustrialization in Wales. Existing

research identifies damaging effects on local labour markets when employers close large workplaces in vulnerable regions like Wales, leaving an empty space (Beynon et al., 2002; Blyton and Jenkins, 2012; Gardiner et al., 2009; McKay, 1992). Focusing on the impact of redundancy at Anglesey Aluminium, the first research question asked: does supply of skills, of itself, improve employment prospects for (ex-)workers?

This study concurs with Gardiner et al. (2009) that the variability of worker experiences of redundancy was shaped by the conjuncture of enabling and constraining contextual factors. For example, family ties and age were important variables affecting the 'biographical availability' (McAdam, 1986) of ex-AA workers in relation to perceptions of their job prospects: whether they moved away or stayed locally, whether redundancy 'came at the right time' or left them in limbo with high skill levels in a weak local labour market after a lifetime's employment with a single employer.

Expanding on this and supporting existing research (Keep and Mayhew, 2010; Keep et al., 2010), the AA story also suggests that, while there was evidence of worker uptake of training and regional policy support (particularly from REACT), there was an identifiable supply–demand deficit between training programmes and real work opportunities related to this re-training. There were question marks about the relevance and quality of some of the vocational training (NVQ 1 and 2). The situation facing ex-workers was starkly illustrated by the quote from Geraint and his wife Emma that 'there is nothing there to train for'. Working conditions and living standards were eroded as people moved to insecure jobs where their skills (old and new) were not utilized. The qualitative and quantitative data show that there were jobs available on Anglesey, but they were now mostly low paid and low skilled. Precarious short-term contracts, part-time work and self-employment were now core components of Anglesey's employment landscape. Therefore, redundant workers were often taking lower-quality, less well paid jobs locally below their skill level (equating to a pragmatic 'make do and mend' agency response to redundancy in difficult circumstances). Those who 'make do and mend' joined what Standing (2011, 2012) calls the 'precariat', comprising an expanding cohort of insecure people, living bits-and-pieces lives, in and out of short-term jobs, without a narrative of occupational stability and/or progression.

There was clearly an underlying demand-side structural problem on Anglesey relating to low-quality jobs and low wages, a problem which was thrown into sharp focus by the closure of AA. Without better paid, higher (or middling) skilled job opportunities for people to put their skills and training to use (and targeted demand-side policies to achieve this), a drift towards out-migration and brain drain could continue leaving peripheral regions like Anglesey comparatively ill-equipped to deal with the shockwaves from economic 'liberalization'. Yet even for those who might consider leaving the local labour market, what is the incentive and practicality for skilled workers like ex-AA people to relocate away from North Wales if what is on offer elsewhere also amounts to insecure low paid work? There is considerable resonance here with the excellent point made by Blyton and Jenkins (2012) in their study of Burberry in South Wales that workers made redundant there also found it impractical to relocate for what might often be low-wage insecure work elsewhere. The alternative option is for people to 'make do and mend' locally, join an expanding precariat and compete for a dwindling supply of decent jobs. But in what constitutes a zero sum game, not everyone can achieve upward mobility if

there is fierce competition for a finite number of good jobs (Goldthorpe and Jackson, 2007; Keep and Mayhew, 2010).

Problems with human capital theory orthodoxy

Turning to the second research issue, the finding that worker efforts to re-skill and enhance their employability did not attract increased demand for their labour from employers raises questions about human capital theory and related policy orthodoxy. The make do and mend reality in Anglesey contrasts starkly with the win-win upward mobility trajectory envisaged by HCT orthodoxy if workers enhance their 'employability' by re-training. One problem with HCT is apparent in this article: many ex-AA workers faced a paradox of overskilling and underemployment. This paradox cannot be adequately accounted for by HCT (Becker, 1976, 1993; Mincer, 1995) and associated neoliberal policy orthodoxy with its expectation that enhancing skills supply will improve individual employability, incentivized by a flexible deregulated labour market.

The findings at AA contribute to knowledge by indicating that supply-side skill policy orthodoxy informed by HCT cannot work in a 'silo' disconnected from a wider coordinated skills eco-system approach (Bryson, 2010; Finegold, 1999; Keep and Mayhew, 2010; Keep et al., 2010). Following HCT orthodoxy in cases like AA has not worked: fuelling a paradox of overskilling and underemployment. The fulcrum of a skills ecosystem would require a coordinated interventionist industrial policy as a corrective to problems associated with market-led HCT approaches. One possibility is to strategically focus on spurring demand for innovation and job quality in high-value added sectors like the green economy, broadly defined. There are signs that Anglesey Council may be thinking along similar interventionist policy lines with its 'Energy Island' concept, which has a strategic vision for Anglesey as providing a mix of renewable and non-renewable energy sources, including wind and wave, a second nuclear power plant and biomass. Interventions addressing demand-side labour market weaknesses are a necessary antidote to the deindustrialization and precariousness experienced by ex-AA workers and others in regional economies like Anglesey. Supply-side re-skilling 'coordinated' by the market is insufficient in isolation.

Conclusion

This article makes a number of contributions to knowledge, notably greater in-depth understanding of the complexities of workers' experience of redundancy in a peripheral regional economic context. Supply-side re-skilling and re-training to enhance employability in the wake of job losses at AA did not create demand by employers for these skills. Put simply, demand did not automatically take care of itself subject to market forces being allowed to operate freely on the supply side. Having spent all or most of their working lives at AA, ex-workers experienced redundancy as a critical life event. For many workers post-redundancy it was a case of pragmatic 'make do and mend' in difficult economic circumstances and taking whatever work became available (invariably 'bad jobs'). Worker experiences were also affected by a supply-side problem pertaining to broader systemic weaknesses with Britain's VET system, in that the type of training

available to ex-AA workers tended to be job specific and not easily transferable to the wider labour market, constituting a barrier to employment.

Overall, there is a resonance with Keep and James's (2012: 251) argument that 'official obsession with upskilling as an answer to bad jobs' is 'a form of displacement'. This has meant that successive governments have not confronted bigger structural problems in the labour market associated with the need to create more good jobs. The disjuncture between skill supply and quality job opportunities points to problems with human capital theory interpretations of labour market efficiency (Becker, 1976, 1993; Mincer, 1995). Simplistic HCT interpretations identifying direct causal links between supply of skills and subsequent employment outcomes are inadequate for understanding the complex realities of local labour market contextual dynamics. Further in-depth qualitative studies of workers' life experiences in the aftermath of redundancy are necessary to see how regional labour markets really operate.

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