



Unresolved tensions in green transitions: retraining and the question of 'how'?

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Jesse Adams Stein

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Keywords:

retraining, just transitions, technical skill, work, climate change, decarbonisation

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For Peer Review

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Jesse Adams Stein

Introduction

In this commentary I take up one element of Chantel Carr's call for a "deeply pragmatic and inclusive environmental politics and scholarship" (2022: 1) by focusing on the vexed and often highly simplified concept of worker *retraining* in the Australian context. Specifically, I engage with retraining as it emerges in the context of carbon-intensive workers' potential employment shifts within a low- or post-carbon economy (generated through versions of *just transitions* or a *Green New Deal*). Carr states:

re-training and re-skilling are cited as a panacea for socially just transitions, requiring carbon-intensive regions to redirect their working populations to more 'in-demand' knowledge-based skills. The risk in taking this path prematurely is in overlooking work practices and dispositions that may already have much to offer (2022: 4)

I concur with this statement; workers must be able to access a variety of forms of training so as to be brought along – not left behind – in the decarbonisation process. Importantly, the onus should not be on individuals alone to 'save themselves' amid this mess. But the tensions

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4 between corporate interests, risk-averse politics, worker organising, informal community
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7 organising, and those choosing to act independently, has made green-job transitions a live-
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10 wire issue in Australia.

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17 Carr rightly notes that many interpretations of green industry transitions tend to ignore
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20 *existing* technical knowledge, skillsets, capacities and networks that may in fact be incredibly
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23 valuable in the challenging times ahead (2022). Much of my own empirical work has led me
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25
26 to similar conclusions about the diverse range and applicability of existing technical skills,
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29 to similar conclusions about the diverse range and applicability of existing technical skills,
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31 well beyond original workplace applications. As Carr has argued elsewhere (2017), and as I
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34 have witnessed in my own research (Stein 2016, 2021), industrial workers bring their skills,
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37 technical and social knowledge, material literacies and spatial understandings with them
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40 beyond the workplace, and they use these capacities in their homes and communities. For
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43 example, research participants have spoken to me of having particular *ways of seeing*, that is,
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46 technically-informed ways of interpreting the world around them: be it spatially,
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50 geometrically, in terms of materials, machinery or production methods, and in terms of
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53 maintenance and repairability. These practical orientations will come to be vital in a world
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57 that is simultaneously reconfiguring and falling apart.
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7 Political and mediatised engagements with the question of worker 'retraining' have
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10 historically tended to oversimplify the matter of moving from one workplace or profession to
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13 another. Too often, workers are imagined to be isolated and movable pawns, without
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16 established ties to family, community and place. Discussions of this sort often occur without
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19 heed for Australian housing (un)affordability, and without planning for other logistical and
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22 place-based factors. Indeed, it has been argued that in some contexts the techno-managerial
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25 language of *just transitions* may serve to replicate rather than break down neoliberalised
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28 structures of worker exploitation, individualisation and precarity (Bouzarovski 2022), an
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31 insidious pattern we must recognise and guard against. Others have argued that the most
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34 effective strategy in relation to 'greening work' requires a coherent *combination* of strategies,
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37 including industry policy change, environmental labour law, a jobs guarantee, sustained and
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40 meaningful worker representation, plant conversion, alongside vocational guidance and
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43 retraining; in other words, a multi-pronged approach (Bohnenberger 2022). It is clear we
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46 cannot plan worker retraining in an isolated state, separate from other factors.
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Empirical reflections: manufacturing workers face retraining

Engaging closely with Carr's work has also led me to reflect on the past 11 years of my own fieldwork and interviews with current and former manufacturing workers, tradespeople, technicians and makers. My research has charted another industrial transition: Australian economic restructuring in the 1980s and the loss of trade protections, which led to the long-term contraction of Australian manufacturing. Since 2011 I have conducted oral history interviews (a 'life history' form of interviewing) with workers from the Australian printing industry (Stein 2016), from steel and plastics sectors (Stein 2021), as well as with tradespeople and makers who have shifted between industrial trades, vocational education and the creative industries (current project).

Oral history has been subject to decades of debate and analysis, which I will not dwell on here (but see: Thomson 2007). For the purposes of this commentary, however, it is important to note that because oral history interviews tend to take a biographical form, there is the capacity to go into temporal depth about life transitions, stage by stage. This allows for an extended dialogue that engages with *how* these participants navigated educational and

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4 occupational challenges over time, how they moved between sectors, and how they made
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7 decisions in the context of declining industrial sectors and precarious work. That is what I
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10 want to emphasise here: the *how* of transition.
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17 *How* does a worker move from one employment sector to another? How do they actually
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20 retrain, in practice? How might this reshape their sense of self, their gender identity, their
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23 class position? How do people make decisions to move regions? How might this balance with
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26 other family members' occupational and educational obligations? Workers must decide
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29 whether they can afford to pay for university, TAFE or private courses, and then – which one
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32 to choose? The cost of retraining competes with other expenses: childcare, healthcare,
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35 housing, etc. These processes of change are made much more challenging for those without
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38 means, without structural advantage, and without direct government funding or union
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41 support. Such decisions now occur amid deteriorating social and physical infrastructure, and
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44 in the context of regular climate-related weather disasters, particularly in Australia.
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54 As Carr notes, carbon workers are “largely men in regional areas” (2022: 5). Accordingly,
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57 one key question becomes: how might dominant constructions of Australian masculinity
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3 hamper or prevent green transition agendas, given the highly masculinised environment of
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7 much Australian heavy industry? The link between skilled industrial labour and hegemonic
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10 masculinity runs deep, and this presents a genuine dilemma for men who have spent their
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13 formative years understanding their identities as being almost exclusively tied to industries
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16 such as coal or forestry (Waling 2019; Connell 1995). In other words, resistance to change is
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19 not merely a question of jobs or inconvenience, it is core to workers' gendered identities.
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27 Reflecting on my own research on the Australian printing industry, the compositors and
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30 letterpress press-operators I interviewed (about their experience of automation in printing in
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33 the 1970s and 1980s) were retrained. They re-learned to type on QWERTY keyboards, and to
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36 use computerised typesetters and lithographic presses, but they did so largely *with* union and
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39 government support (Stein 2016). To be fair, my research focused on a government-run
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42 enterprise (the NSW Government Printing Office), not a Murdoch newspaper, for example,
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45 and so this example is less cut-throat than other printing histories, but the story is still one of
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48 transition and retraining. Although many print-workers did not relish the shift, they were
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51 taken through this process as a collective. It was only after 1989, with the abrupt closure of
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4 the NSW Government Printing Office, that the print-workers' stories diverged and became
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7 far more isolated.¹
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13 The more recent manufacturing stories I uncover are very much individualised pathways –
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16 where workers speak of 'jumping ship before it's too late', with many undertaking self-
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19 funded retraining in the form of night courses (while working during the day). The perennial
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22 juggle of searching for work, supporting family, finding affordable housing, and developing
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25 further education is extremely wearing. Many spoke to me of the anxiety of short-term
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28 contracts, and of recent years spent where their annual household income was under
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31 \$40,000AUD (while undertaking study). For many families, this is the reality of 'retraining'.
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41 **Macro-transitions and individualised needs: an unresolved problem**

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47 All this leads me to draw attention to an unresolved, broader problem percolating alongside
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50 the specific issue of worker retraining. There is an underlying contradiction between the
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53 individual complexities of workers' lives, and the need for ambitious, state-led programs of
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56 industrial transformation and labour redistribution. This is an issue that presents a challenge
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4 for academics (such as myself), who sometimes write about the need to appreciate
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7 *complexities*, while at the same time calling on policy-makers to institute large-scale state-led
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10 programs (rather than relying on the market or technological solutionism for climate-change
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13 mitigation). How can we achieve this fine-grained sensitivity to labour complexity, while also
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16 swiftly changing industrial gears on a macro-scale? Or is it too late, must we now be ruthless,
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19 and do whatever it takes?
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27 I do not have the answer to this, but I do know that it helps to pay heed to what we already
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30 have: an industrial workforce.² Carr encourages us to think broadly about what skill entails,
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33 to remember existing technical capacities amid the calls for change (2022). What might this
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36 disposition mean in practical terms? It may mean listening to technicians, shop-floor workers
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39 or maintenance crew for advice, rather than making decisions purely at a managerial level. It
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42 may mean taking heed of on-the-ground experience and observation, not just software
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45 programs. It might mean contributing to an inclusive politics of environmental reform, one
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48 that does not blame individualised consumption or workers themselves, but lays the
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51 responsibility for climate action at the feet of the corporations and owners of capital that are
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54 responsible for the vast majority of global carbon emissions (Huber 2019). It may also mean
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3 a societal shift at the level of wartime restructuring, one that generates a broad social
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7 consensus that change must occur (Flanagan 2017). Crucial to a fair transition process is the
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10 development of much higher levels of worker representation in workplace decision-making,
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13 enabling worker perspectives in the process of transforming plants, changing products and
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16 processes, and re-skilling. In this way, workers' existing knowledge and skills can be brought
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20 more cohesively into the process. Realistically, this is far more likely to occur in contexts
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24 where there is a high level of worker democracy (Bohnenberger 2022).³
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30 This tension – between the complexity of human needs, and the urgent need for macro-scale
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33 change – is at the heart of democracy's dilemma in the context of climate change. We have
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36 seen how market-led endeavours to transform into green economies are beset by problems,
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39 chiefly because it is profits, not the environment, that become the end-goal. We have also
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43 seen how an environmental politics that focuses on individual consumption – on carbon
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46 footprints and middle-class green virtue-signalling – can be divisive and push the working
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49 class away from joining the cause (Huber 2019). The climate situation is now so desperate
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53 that the state *must* take a much larger and more interventionist role in decarbonisation, and it
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57 must push those responsible for the majority of emissions – fossil fuel corporations – to pay
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3 for the change. But to do this effectively the state must also bring along with it the voices of
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7 workers, their knowledge, skills, and existing commitment to sustaining their communities.
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10 And for the ‘impractical’ academics among us (myself included), it is imperative that we
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13 reflect upon the ways in which our calls for more ‘complexity’ might unwittingly serve to
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17 slow down what now needs to be a rapid global transition.
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49

50
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6 **Notes**
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11 ¹ The NSW Government Printing Office was closed in 1989, with four weeks' notice. It was one of a string of
12 closures and privatisations of government-run industries and organisations in this period, an outcome of former
13 NSW premier Nick Greiner's neoliberal program of austerity and asset sell-offs.
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15 ² Although it is worth noting that with current low rates of technical education, we will likely *not* have the
16 same diverse technical skillsets in the working population in 20-30 years' time. But for now, we still do.
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18 ³ This is a problem for Australia, which has comparatively low union density, of around 14.3% of workers (ABS
19 2020).
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