

‘Keeping the axe workshop going’:

Australian manufacturing and the hidden maintenance of historical practices

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This working draft is being developed into a full-length article; feedback is welcome.

It is well established that manufacturing employment continues to decline in the developed capitalist nations, driven by profit-seeking in the globalised market, through offshoring and automation.¹ Some firms, however, have decided to maintain their operations in their country of origin. As this paper explores, the motivations of those who stay on-shore in high-cost manufacturing contexts are often social, privileging concepts of care, localism, maintenance and pride in maker tradition. Drawing on ethnographic fieldwork and archival research, we consider a private company still in family hands: Keech Castings Australia, an 83-year-old steel foundry in Bendigo, in regional Australia. Keech now specialises in ‘consumable’ parts for mining, construction and agriculture,² but it also has a history of manufacturing hand tools, such as axes. The foundry owners’ commitment to remaining in Australia is intertwined with the Keech family’s legacy as tool-makers.

Keech is an intriguing case because the company appears to be successfully balancing local steelmaking tradition with concurrent drives towards rationalisation and ‘innovation’.³ Such a contradiction is exemplified by Keech’s company slogan, ‘a tradition of innovation’, and by their decision to maintain an historical axe workshop,

despite the fact that the workshop operates at a loss. This discussion paper (and a longer article currently in development) explores how the Keech example can point towards possibilities for reimagining manufacturing practices in the Global North that are successful but nonetheless draw upon supposedly ‘traditional’ values of localism, care, pride in high-quality making, and respect for workers’ trade skills.

Metaphorically, this is the story of a company that privileges ‘maintenance’ over ‘replacement’, and survives not by discarding, but by utilising its traditional assets.⁴



Figure 1. Keech Foundry 1, photograph by Jesse Adams Stein

This research contributes to the broader project of extending our understanding of manufacturing beyond the standard frames of commercial success, capital and organised labour. We seek to account for some of the complexity of experience in deindustrialising contexts, and provide fresh perspectives on possibilities for future industrial and making activities.⁵ While axe-making is now a marginal part of Keech’s core business, this paper focuses on axe-making because of its significance in

activating community values and practices that transcend the limitations of neoliberal business approaches. The Keech example demonstrates that there are also internal dynamics at play, factors that are bound by locality, community and family.⁶

Highlighting these supposedly ‘softer’ concepts might seem irrational or nostalgic if interpreted solely through a frame of economic imperatives. But in the current political context and amid fears of an anticipated future of widespread unemployment and underemployment⁷ (where large groups of people feel disenfranchised by mainstream political systems), the concepts of care, localism, and maker tradition can help to avoid the further alienation of working class and lower middle class people.

This will be discussed in more detail in the concluding discussion.



Figure 2: Keech axes in display case in Keech foyer, photograph by Jesse Adams Stein

The centring of axe-making in this analysis has the effect of inverting dominant understandings of what counts. Operating from a framework that asserts that something as seemingly marginal as the Keech axe-workshop does indeed *matter*, opens up possibilities for appreciating long-standing and deeply imbricated cultural narratives about labour, making and production. This contributes to the broader project of providing alternatives to the widespread dogma of ‘disruptive innovation’, which, in its relentless push forward, abandons whole categories of jobs, identities and social structures.⁸

Background

Bendigo is a regional town in the Australian state of Victoria, where about 10.2 per cent of the population remain employed in manufacturing. The town was at its peak during the Victorian Gold Rush of the 1850s and 1860s, and Bendigo’s gold wealth financed the establishment of heavy manufacturing industries throughout the twentieth century. Although well past its heyday, Bendigo still supports a few remaining industrial enterprises, including Keech, which is a significant industrial employer in the region. With the increasing availability of cheaper steel imports from Asia and the effects of a high Australian dollar, steelmaking is declining sharply in Australia. The Australian steelmaking cities of Newcastle and Wollongong have suffered significant economic downturns and increasing unemployment, with the exit of large corporations such as BHP.⁹ Between 2006 and 2016, 62 Australian foundries (25 per cent) went bankrupt or shifted operations overseas.¹⁰

In this highly competitive context, Keech has stayed in business. They have recently grown an international customer base and are generating their own trademarked products, establishing additive manufacturing capability (3D printing), and employing approximately 100 people.¹¹ The current business strategy very much revolves around the notion of ‘innovation’, and although this has been explored by our research team, it falls outside the scope of this particular discussion.¹²



Figure 3 Keech family owner and Keech CEO, Photo from the *Bendigo Advertiser*

Keech has an unusual governance structure because it is a family company with an external CEO, and decision-making powers are shared between the CEO and the family owners. When the current CEO was appointed in 2008, the owners allowed him to make significant changes to company operations on two conditions: 1) Keech was to stay in Bendigo, and 2) the long-standing axe-making workshop was to be kept

in operation. While the CEO has made substantial transformations to the company structure, processes and outputs, Keech has remained operational in Bendigo, and the axe-workshop has been maintained.

Maintaining the Axe Workshop

Keech was established in 1934 as a three-person iron and steel casting foundry. By 1939 they switched their manufacturing focus to munitions. As often happens after the investment of wartime production, the immediate post-war period featured an abundance of new products,¹³ with Keech producing a range of hand and sharp-edge tools (such as axes) under the *Keesteel* trademark.¹⁴ This period of rapid development is often described – in current marketing material and the owners’ own words – as an historical period of intensive ‘innovation’,¹⁵ which is emphasised so as to give weight to Keech’s company slogan, ‘a tradition of innovation’.



Figure 4 - Photograph provided by Keech, no date (c. late 1940s).

The Keech family have a generational history as tool-makers, and feel a strong responsibility to maintain and respect this history. Added to this, Keech axes have a long-standing reputation in the niche world of competition woodchopping.¹⁶

Competition woodchopping is an international sport, but particularly popular in regions with a forestry industry, and it is a sport that has emerged out of labour practices.¹⁷ When interviewed, one of the Keech owners said,

We make the best axes in the world, we always have, and people in Spain and America and Canada, all of the championship woodchoppers are using our axes. And I think that's something we can be proud of, and it's a heritage I don't want to lose. I mean, it's good to be able to turn around and say, we do make great steel: here's the proof. [...] I spent my youth making axes.¹⁸

The axes therefore operate as *proof* of manufacturing success – a form of physical evidence that is becoming harder to access within the relatively clean, sparsely peopled and highly automated world of twenty-first-century steelmaking.¹⁹ Designers and engineers who use prototypes know this well: the ability to physically hold a piece of evidence in your hands goes a long way to convincing someone of the merits of a particular idea.



Figure 5 Competition woodchopping with Keech axes

Pride in making the ‘best in the world’ has been an element of Keech’s practice since the 1940s.²⁰ It also finds echoes in contemporary calls for countries such as Australia to become a manufacturing expert in specific, high-quality products (e.g. hearing aids, microphones), rather than attempting to compete with the mass-manufacturing giants of China and South-East Asia.²¹ We thereby see a coalescence of traditional values (associated with the maintenance of manufacturing tradition), with progressive ideas about how manufacturing could evolve in the Global North.



Figure 6 Keesteel axe

The Keech (Keesteel) axe is manufactured in an unusual way. Most axes are forged, while Keech axes are cast in sand moulds. The axes are razor-sharp and very thin but designed to withstand hitting knots in Australian hardwood. In the period immediately following World War II, Keech developed a process whereby tools could be efficiently produced using a casting method, rather than forging.²² The NSW Axemen’s Association²³ waxes lyrical about this manufacturing breakthrough, and the quote is worth sharing at length for its hyperbolic richness:

An axe? Surely a very practical, workaday article, you think. With its beginnings in the stone age it has been the most familiar aid of man for so long that one is apt to accept it without further thought. ... Today it flashes with

unerring precision in the hands of a champion axeman; it is but a short while since, in a fiery cauldron, it glowed as a shining orange light of delicate, shimmering beauty. ... Heretofore, edged tools had always been forged, a process having its limitations and necessitating much cumbersome machinery ... A period of intensive research ... brought success in the production of a steel so improved in character that, for the first time in history, edged casting. ... This is the story of the cast axe; ... an axe which by reason of its use, requires stronger steel than does any other known type of tool; so strong that it will cut steel and is, to all intents and purposes, unbreakable; an axe in truth to satisfy the demands of the Australian timberman whose work lies amongst the world's hardest timbers.²⁴

Here we can see that the axe is very clearly connected to Australian nationalistic construct of the heroic agrarian pioneer who is stoic, hegemonically masculine and white, a 'master' of the land.²⁵ This is, of course, a very outmoded and problematic construct, particularly concerning gender, race, and the environment. We do not seek to excuse those biases or prejudices, but to understand how they operate in the contemporary maintenance of particular making traditions. We will return to this issue further on.

While international technology for forging axes is now much more efficient and has surpassed the casting technique, Keech continues casting and hand-finishing their axes. The process takes time and care. It is a skilled practice that is socially understood to be a secretive and protected trade, with well-guarded knowledge that is passed down generationally, along patrilineal lines.²⁶ The patriarchal idea of inherited family skill is present in both the Keech family's history as tool-makers, but also in the world of competition woodchopping. Keech axes are hand-sharpened, often specifically by a man named Martin O'Toole. The O'Toole family is one of the main 'dynasties' of Australian woodchopping.²⁷ The hand-sharpening process is explained by a Keech employee:

To make a racing axe, I think there's about a 50 per cent reject rate. It [has] got to be perfect or they won't use it. By the time they sharpen it, you can

shave yourself with it, it's that sharp! It's not something to be messed with, but it takes [Martin O'Toole] about eight hours to sharpen to that level. You use it once, then you've got to re-sharpen it back to that level.²⁸

The direct involvement of O'Toole in the production of the Keech axes indicates that Keech has a responsibility not just to their customers and their employees, but also to the close-knit community of competition woodchopping.²⁹

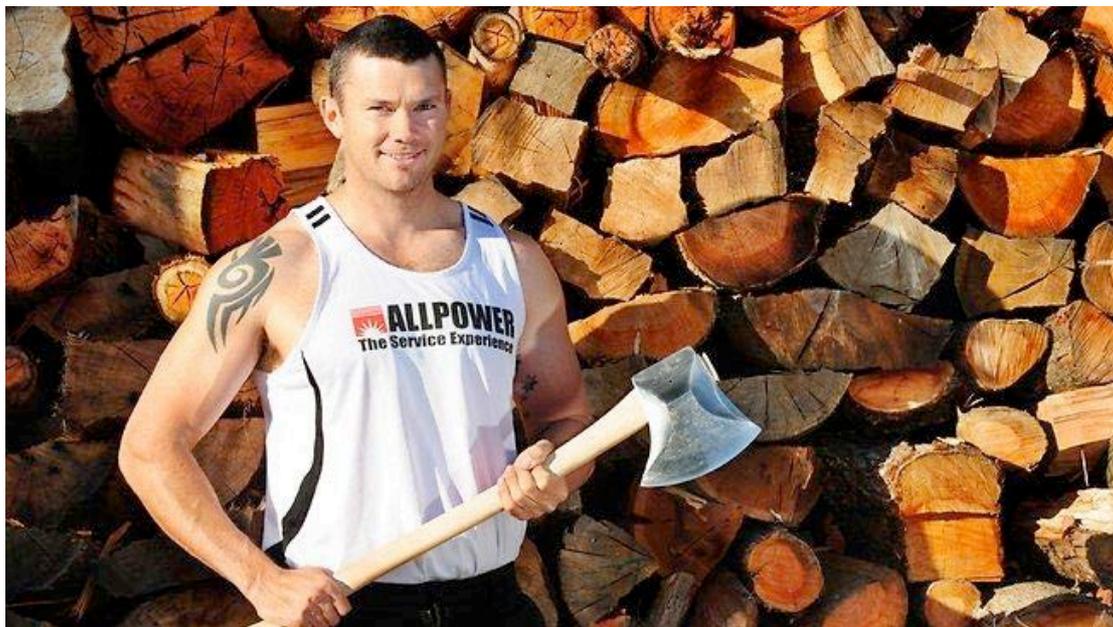


Figure 7 Laurence O'Toole, competition woodchopping champion and brother to Martin O'Toole. Photo by news.com.au

The axe, and narratives of a 'country that makes things'

Clearly, a Keech axe is more than just an axe. The axes transcend a single context; they are multivalent symbols operating in the spheres of manufacturing, agriculture *and* forestry. As explored by anthropologist Michael Taussig, “collective symbolic meaning” nowadays is transferred “not through stories, myths or fairytales, but through *things*, namely the commodities we buy, sometimes sell, and in a very limited way, can be said to produce”.³⁰ Axes are particularly easy tools from which to glean

associative resonance because they are seen as so fundamental to the most basic human activity. Historian of technology Ronald Jager says of the axe,

Few tools have been so fundamental to human endeavour ... this lowly tool participates in a large compass of symbolic meanings and myths: precision work, violence, conquest, pioneering, triumphant glamour, craftsmanship, harvest, heroic strength, and more.³¹

In this example, Keech axes are powerful activators of a set of keenly-held values and narratives about Australian pioneering masculinity, about 'being a country that makes things' through inherited maker traditions, and about exceptionalism: being the 'best in the world' at something.



Figure 8 Keech Axe head

Discussion

Geographers Chris Gibson, Chantel Carr and Andrew Warren have examined the narrative of a ‘country that makes things’, describing it as an alternative to the neoliberal understanding of manufacturing as inevitably collapsing due to ‘market forces’. They explain:

At the outset, the idea that Australia is ‘a country that makes things’ is loaded with cultural baggage. As a rhetorical device it is used regularly by union leaders and federal politicians to signal the ‘real’ economy of making money from material things, vs conjuring money out of thin air as financiers do. This is a moral positioning: an appeal to the working class, to industriousness and usefulness, but also to a generation who rebuilt Australia after the Second World War through manufacturing industries ... Manufacturing things in Australia has a deep cultural history and geography.³²

With this in mind, we can see how the Keech axes speak an ideological language that is anchored in the traditions and biases of regional Australian culture. Much of this ideological language is unquestionably outmoded, conservative, white, hegemonically masculine, and environmentally problematic. But it nonetheless has strong continuing support in some communities, particularly because many of these ideas point to the possibility of satisfying and secure employment. The communities referred to here are regional cities and towns in Australia with large populations of working class and lower middle class people (to some extent the equivalent of the United States’ ‘rust belt’). These people have been hit particularly hard by the downturn in manufacturing following the removal of tariff protections, attendant loss of employment, and the severing of a whole gamut of public support services, as a result of automation and decades of economic neoliberalism, from the 1980s onwards.³³

Let us be clear that this paper is *not* a call for a wholesale return to the ‘good old days’ of early- to mid-twentieth-century manufacturing. Those ‘days’ were

problematic on many levels, not the least of which is gender or environmental impact. But it is a call to engage with the traditional ideals of being a ‘country that makes things’, and making the ‘best in the world’ of something – ideals that have extensive support across the deindustrialising Global North.³⁴ Recent major socio-political upheavals in the United Kingdom and the United States have clearly shown that there is widespread anger, disaffection and frustration at the political status-quo under neoliberal capitalism. As we have seen, this anger can easily be picked up by regressive, populist and dangerous political groups and individuals, and wielded in ways that are against the class interests of those very supporters. The central point here is that traditional narratives about the value of manufacturing still have incredible sway. The challenge is to use these powerful political narratives in a manner that is generative, genuinely progressive and in the interests of the vast majority of working people, not merely as a political tool to gain votes or entrench social divisions.

To grapple with this mix of traditional narratives and progressive policy concepts, it is useful to consider the arguments of political economist Michael Zweig. Zweig argues that we must “reevaluate the constituent base of progressive politics and reformulate our work with class as an important component”.³⁵ Put simply, this means being willing to listen to and understand the political narratives that have popular appeal in so-called ‘rust-belt’ communities. Zweig calls for a “recombining [of] forces within this mosaic of class and race into a progressive coalition” which has “direct appeal to class interests and identity while continuing to address the problems of racism and sexism that remain important sources of suffering across class lines”.³⁶ How this can be achieved in practice remains an open question (and something that we look

forward to discussing at *The Maintainers II*). But it is worth noting that Keech demonstrates a rare crystallisation of practices that combine the maintenance of craft tradition, loyalty to family and community, valuing of local labour, to which they have added a strong drive to reform, improve and be internally critical of their actions. Recent changes at Keech include the recruitment of racially and educationally diverse workers, women being employed in non-traditional trades, employer investments in education and training, and a focus on reducing workplace injury. In this sense, the Keech example achieves a delicate balance of reform and traditional practice (a balance that is not without its internal tensions and challenges, as we have discussed in other forums).³⁷

Importantly this discussion is not about detailing a company's business model, nor suggesting that this is a model that could be directly replicated. It is about how the seemingly irrational maintenance of traditional making practices has a significant role in this story of the sustainment of a company, which has led to the continuation of manufacturing employment in a regional town. Viewed from a broader lens, it is about the role of perceived irrationality, traditionalism, and even nostalgia, in maintaining manufacturing in such a way that goes against the 'logic' of neoliberal capitalism. The case of Keech represents an alternative (but by no means the only option), from which to extrapolate broader options for maintaining sustainable manufacturing practices. As argued separately by Canadian economist Jim Stanford and Gibson et. al., we need not capitulate to the neoliberal notion that the decline of manufacturing in the Global North is 'natural' or 'inevitable'.³⁸ A future of high quality, niche manufacturing is a possibility, particularly if it is approached in a manner that combines investment in research and development, respect for existing

manufacturing skills, and a commitment to maintaining employment in regional communities. Returning to Zweig, it is only through a “progressive coalition” of “class-based politics that is attuned to issues of race and gender”, that we can produce the broad social momentum necessary to combat the increasing infiltration of neoliberalism and corporate power.³⁹ The maintenance of – and respect for – older manufacturing practices and cultures is but one way to participate in the formation of this broad social movement.

BIOs:

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² For example the ‘teeth’ that attach to the bucket-ends of diggers in mining equipment. See <http://keech.com.au/products-services/>

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