

WORKING THROUGH PLANETARY BREAKDOWN

Labour, Skill and the Changing Climate

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Chapter 5

“CREATIVE TECHNICIANS” AND “TECHNICAL CREATIVES”

Transferable Skills for Challenging Times

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Introduction

In the initial provocation for the *All Hands on Deck* symposium in 2023, Chantel Carr and I hypothesised that the likely future global challenges – decarbonisation, a warming climate, geopolitical unrest – will require a significant reorientation of skill. We suggested that future skillsets will require capacities that are practical, technical, materially resourceful, social and care-based, but also creative and design-based.¹ Craftspeople, manufacturing tradespeople, and arts technicians are some of those workers and practitioners who possess essential and transferrable manual and technical skills, as well as having deep knowledge of materials.² In addition, they often share a commitment to more sustainable methods of production, consumption and materials circulation, making their knowledge indispensable for our fraught future.

Despite there being truth to the assertion that an increasingly deindustrialised Australia is at risk of losing its traditional craft skills base,³ there are still some extraordinarily skilled craftspeople, arts technicians, tradespeople and creative practitioners working, making and teaching. Some of these practitioners, however, are not easily categorisable in terms of education or economic sector. Or rather, when they are necessarily categorised (for example, in Australian and New Zealand Standard Classification of Occupations [ANZCO]), some pieces of the puzzle are missing. There are some practitioners who “slip through the cracks” and whose knowledge and skills are regularly misunderstood, ignored, or simply invisible to policymakers, educational leadership and the political class.

The core concept that underpins this chapter is the existence of practitioners whom I refer to as *technical creatives* and *creative technicians*. I use these terms as a provocation, without the intention to affix a term for future use. *Creative technicians* and *technical creatives* refers to a loose group of workers/practitioners who – often for reasons of occupational survival – are both “creative” and “technical,” operating cross-sectorally (that is, between industrial production and creative practice). I elaborate on this definition in the following section.

Importantly, there are broader implications to this discussion. *Technical creatives* and *creative technicians* are indicative of a larger issue that is becoming increasingly apparent: the nature of working life is shifting rapidly, and the required skills to navigate future work are likewise entering a tussle between the necessity of practical skills, and the pressure to be technologically “savvy” – not least in the face of generative AI and industry 4.0. As a result, the standard categories of skill and employment – for example those used by government agencies and the private sector – are increasingly a poor fit for people’s actual working experiences. The systems and structures of organising and governing work (industrial legislation, government “skills lists,” higher and further education) are no longer equipped to handle the dangerous future ahead. We therefore need to rethink skills, education and training systems and employment transition capacities, often in radical ways.

With this in mind, the example of *technical creatives* and *creative technicians* draws attention to how we account for people’s *actual* skills (rather than just on-paper qualifications) – revealing some of the ways in which current understandings are lacking. In a wide range of occupational areas, there exist workers who occupy various hybrid or “in-between” roles, formally or informally. The realities of working life require a full gamut of other skills and capacities that may not, at first glance, seem related to a particular job. This might include improvisation, haptic or tacit knowledge, historical background knowledge, manual dexterity and the hard-to-define ability to just “get shit done.” These sorts of skills and capacities are not easily accounted for in statistical reviews, but can be analysed through detailed qualitative research, as demonstrated in this chapter (and several others across this collection).

This chapter uncovers what I learned by talking in depth to *technical creatives* and *creative technicians* about how they navigate precarity, both in the recent past and in the contemporary Australian context. It considers the training pathways and decisions that participants made, and their reflections on those decisions. I also simply tell the stories of some of these practitioners, in the process, I hope, humanising them, demonstrating their complexity, alongside their nuanced skills and occupational positioning. In this chapter I draw from interviews in the *Makers, Manufacturers and Designers* (MMD) oral

history project (introduced further on). Although in this chapter I only feature a handful of stories from MMD, my empirical findings reflect a broader set of interviews, including from my earlier oral history projects.⁴

In the section that follows, I first provide some necessary definitions and examples to provide some foothold for the concept of *technical creatives* and *creative technicians*. Following this, I justify why this hybrid group deserves our attention, and then briefly introduce the oral history project that inspired this focus. From there, the chapter shifts into the oral history material, allowing the lives and voices of four of these practitioners to come to the fore.

Ultimately, this chapter pushes us to acknowledge the hybrid, “in-between” nature of many people’s skillsets, and it does this in the context of the precarious realities of working life. While my empirical examples generally come from the creative industries, the implications apply across a wide range of occupational areas and fields. Having a nuanced understanding of skill is particularly important in the context of decarbonisation and energy transitions, where those who are physically *doing the work* constantly encounter unprecedented practical problems. The way such problems are solved will often not be through neatly drawn plans or computer modelling, but on a place-specific case-by-case basis, through hands-on trial-and-error, negotiation, and through creative and technical solutions undertaken by those “on the ground.”

Defining technical creatives and creative technicians

When I use the terms *technical creatives* and *creative technicians* I am referring to practitioners who possess deep technical skills in one or more technical trade or craft/making practice, and who have experience working, teaching or training across both creative arts sectors (e.g. visual arts, craft, design, music, film and television) *and* industrial sectors (e.g. manufacturing, construction). This may include people who officially classify as: tradespeople, designers, makers, artisanal craftspeople, art installers, vocational educators, arts technicians and production workers, among others.

The working and educational histories of this group tend to be complex. This cross-sectoral positioning can sometimes occur simultaneously, as practitioners take on multiple casual and contract roles. Alternatively, shifts between industries can evolve over time, as people move from one economic sector to another, bringing their knowledge with them. They may have begun their careers in a manufacturing or construction trade, but due either to precarity or dissatisfaction with the work, sought employment and training in creative fields. Some ex-manufacturing workers, for example, may have left their original trade, and turned their significant practical skill towards

developing their own artistic practice.⁵ Other practitioners may have initially trained in a creative field – such as product design, fashion or visual art – but increasingly found themselves involved in manufacturing production, for instance in demand by local manufacturers due to their (now rare) practical skillsets. Others may have begun their careers as “designers” in a more orthodox sense, and transitioned to self-led maker production in an effort to operate with more ecological and ethical responsibility, becoming manufacturers in their own right.

A few earlier studies touch on similar phenomena. In 2010, sociologist Mark Banks focused on under-recognised “supplementary” craft and technician roles within creative labour in the United Kingdom.⁶ Read today, a decade and a half later, Banks’ description of precarity seems mild in comparison to the wholesale “gig-economy” state of so many industries in the present context. But his point remains that such roles endure and are deeply important, in creative fields and elsewhere. Likewise, George Morgan and Pariece Nelligan’s analysis of creative labour also points towards the existence of *technical creatives* and *creative technicians*, without directly defining this pattern.⁷

Why focus on technical creatives and creative technicians?

These hybrid practitioners require our attention for three reasons. First, observing their existence points to the fact that the creative sectors can make a substantive difference to the quality of local *industrial* production. Likewise, industrial trades, technical knowledge and manufacturing capacity make a significant difference to the quality of *creative* work produced, and to the skill levels of creative practitioners. Technical skills can enable creative ideas to turn into concrete outcomes that are well-executed and ecologically sustainable. The productive and integrated skill relationship between these broadly-termed “creative” and “industrial” arenas demonstrates that these areas need not be seen in opposition, and nor should one area be seen as “historical” (or solely industrial) and the other as “contemporary” (or post-industrial). Rather, creativity and industrial production are, in fact, essential to each other, in ways that Australian culture and governments have thus far failed to appreciate or capitalise upon.⁸ In practice, there are myriad crossovers between these supposedly separate worlds – across workshops, studios, factories, vocational training centres and industrial estates – throughout urban, suburban and regional Australia.⁹

Second, a close examination of *technical creatives* and *creative technicians* is significant because it points to the ways in which neoliberalism and deindustrialisation have transformed and fragmented not only job security and working life (this is well-established), but it has also fractured occupational categories and social understandings of skill. Here we find a loose “non-category” of

skilled worker, who is not easily placed within formalised occupational sectors or policy settings. This means that these practitioners' precarious occupational experiences are not well understood, and their social, economic and environmental significance is often overlooked.

Third, pointing to the existence of *creative technicians* and *technical creatives* complicates the more mainstream Australian understanding of who a "tradie" is, and what their capabilities might be. In Australian culture, the stereotypical understanding of a "tradesperson" is a younger man – often wearing "hi-vis" – who is typically imagined to be white, heterosexual, able-bodied, manually-skilled, stoic, uncomplicated and who drives a large (petrol) utility vehicle. This cliché is so entrenched in the culture it is regularly leveraged in advertising and political campaigns.¹⁰ But the reality is that skilled practitioners who make, craft, manufacture, repair and maintain are far more complex and diverse than mainstream culture or the media gives them credit for.¹¹ *Technical creatives* and *creative technicians* and hi-vis wearing "tradies" are not quite the same thing, but there are unacknowledged overlaps here that I seek to surface.

Makers, Manufacturers and Designers oral history project

The *Makers, Manufacturers and Designers* (MMD) oral history project – now a part of the National Library of Australia (NLA) collection – featured oral history interviews with craft practitioners, designer-makers and design educators from the states of New South Wales, South Australia and Victoria.¹² Undertaken by myself and co-interviewer Nikki Henningham between 2021 and 2022, MMD traced practitioners' lives and work from roughly the 1960s to the present.¹³ A modest number of participants were interviewed: twelve. In Table 5.1, I list participants' roles, occupations, trades and identities to indicate the depth and diversity of experience that one can glean from conversations with just a small number of interviewees. Detailed qualitative "life history" dimensions can provide a more nuanced picture of training, skill, identities and employment decisions.

Oral histories can surface rich contextual understandings, accounting for the complex intersections of class, generation, gender, education, geographic location, cultural and ethnic backgrounds, among other factors.¹⁴ This approach also allows individuals' stories to be situated within broader collective and national histories. As with all oral history material, interpretations of this material should be undertaken with caution, for instance with the understanding that interviews are subjective contexts wherein meaning is co-produced by the interviewer and interviewee in dialogue.¹⁵ In my analysis I am less concerned with whether the interviewees have all their "facts" recalled with precision. Rather, I am more focused on motivations, narrative positioning and modes of understanding work, training, skill and material practice.

TABLE 5.1 Interviewees from the *Makers, Manufacturers and Designers Oral History Project*

Occupations, identities, skillsets and expertise: 12 Interviewees from the <i>Makers, Manufacturers and Designers Oral History Project</i>		
allied health worker	furniture designer-maker	punk
art installer & technician	furniture repairer	retail worker
artisanal woodworker	garment patternmaker	screen printer
artist	garment patternmaking educator	set designer (theatre and film)
assemblage artist	HR recruiter	skate-ramp maker
CNC technician	industrial designer	stone mason (quarryman)
colourist (screen printing)	industrial modelmaker	stop-motion animation technician
community services worker	leatherworker	studio weaver
creative director	mechatronics technician	sustainable fashion activist
defence manufacturing technician	engineering draughtsperson	textile mill worker
design educator	microbiologist	textiles designer
engineering patternmaker	moulding & casting specialist	ticket-writer (signwriter)
fashion designer-maker	nurse	wallpaper factory worker
fibreglass boatbuilder	parent	weaving educator
fine art foundry worker	photography technician (analogue)	youth worker

Precarious work and “doing everything”

The ubiquity of precarious work experiences in neoliberalised economic contexts should not mean we accept this condition *carte blanche*. One core theme emergent from the *MMD* interviews is that *all* those I interviewed had led, and some continue to lead, lives involving insecure work, periods of little income, and balancing short-term contracts so as it make ends meet.¹⁶ Of the participants interviewed for *MMD*, *all* had experienced (or were continuing to experience) serious precarity, and They each spoke of hard decisions they had to make regarding education and training, housing and chosen occupational sector. A lack of formal employment options – stable, full-time jobs – means that *technical creatives* and *creative technicians* often feel they have no choice but to work as individual contractors and small-business owners, even if they are not

entrepreneurially inclined. They are also more likely to take on short-term “jobbing” work for both creative and industrial projects, often at the same time: balancing multiple deadlines. This employment status is often the only way to survive as a practitioner in their field. The much-discussed creative industries’ “freelancer dilemma” certainly applies here: always anxiously looking for more work, sometimes burning out from overload, and then experiencing periods of too little work, and therefore too little income.¹⁷ Indeed, some participants were craftspeople who had recently made the hard decision to find (paid) work in another sector entirely, ultimately giving up on the idea of being able to obtain consistent and secure employment in their skilled craft, as the following example explains. Finally, these examples also demonstrate that diverse, cross-sectoral skillsets are not always the product of intentional career decisions, but can also be an outcome of precarity and human desperation for security.

Ana Petidis¹⁸

Ana Petidis became a studio weaver after a career in the community services and welfare sector. As a second educational path, Petidis undertook a Certificate IV and an Advanced Diploma in Textiles Design and Technology at RMIT, Melbourne. There, she discovered hand weaving, falling in love with the technical *and* creative sides of the craft:

The second year of night school [was] when we had the weave unit taught to us, and my mind exploded ... I just fell. I just fell, and it was – I just had so much wonderment about how this is how you create something! ... It was delightful ... It’s physical work. You have to practice ... I was like, I *want* to practice this. This is what I want to do. It felt like all the things, the logical, rational things, the process-oriented things, and then the creativity, the colour ... there’s quite a bit of maths, and there’s angles, and ... that logical, rational working alongside with colour and visual processing. You know – how am I seeing colour? How do they interact? How does colour change? How does texture work with this? It got all of my senses involved. And I loved it. It just – my brain was awake, and my body was, too. I was using mind and body in this creative process.¹⁹

Petidis’ language itself demonstrates an alignment of technical knowledge and creativity.

Falling in love with weaving was one thing. Finding paid work was quite another. Petidis’ family background is relevant here. During Petidis’ childhood, her Greek migrant parents ran a garment-making cut-and-sew production business, initially outworking from their home garage in the 1980s, before briefly opening their own garment factory. As a child, Petidis spent time in the home’s workspace, playing with fabrics and threads, undertaking simple tasks like

snipping overlocker threads from shoulder pads. Unfortunately, Australia’s so-called “Recession we had to have” in 1990 intervened to make the Petidis family’s garment factory untenable.²⁰ But the family business left a lasting impact on Petidis, who enthused: “I love, love production! I love process. I love figuring out the problems in a process-oriented sort of way, and I can only think it must be from that time, from that start.”²¹ Accordingly, after gaining her Advanced Diploma, Petidis sought practical, hands-on work that was connected to local production. This was a difficult position to be in, in a country where textiles, clothing and footwear (TCF) manufacturing has endured major existential challenges, following Australian economic restructuring from the late 1980s onwards.²²

Petidis reflected that, for herself and her small cohort of fellow textiles graduates from RMIT, the insecurity that faced them was intimidating:

We were just like, where do we go to work? Like, this is futile. What are we doing? And someone said, ‘Oh, I’ve got to pick up a contract and pay for my mortgage the next few months,’ or ‘I’m running out of savings,’ ... some of us were like, ‘I don’t know that I can leave my day job to make the full leap because I’m a single woman, I need to think about my superannuation.’²³

As luck had it, for a few years Petidis found employment as a textiles designer at one of Australia’s last woollen mills, Geelong Textiles Australia, in regional Victoria. This role – albeit insecure – placed Petidis between creative textiles design and industrial production, where she “loved that constant need to problem solve”:

I was really ... fortunate to use the textile design skills, and understanding that craft skill of hand weaving, being able to design for industry in ... upholstery fabrics, and then later we designed a whole range of blankets during the pandemic.²⁴

At the mill, Petidis collaborated with sustainable design outfit Seljak Brand. Together, they found a use for the mill’s “deadstock” yarn, weaving it into retro wool blankets in outrageous colour combinations, and marketing the blankets directly through social media.²⁵ For a short time, it was a bustling moment of creativity, sustainable materials and local production working in dynamic fusion, despite the context of Covid-19. In 2022, however, the Geelong Textiles family owners sold the factory and business, which marked the end of Petidis’ time at the mill.²⁶

Possessing comparatively rare skill as a hand weaver, Petidis’ one-off woven works – which she creates in her own time – are now in demand by gallery collections,²⁷ and she has taught textiles design and weaving at RMIT. Like her work in manufacturing, the tertiary teaching work remains sporadic and insecure. Ultimately, Petidis resolved that weaving and textiles could not reliably be

her “day job,” it was “totally casualised ... unstable.” At the time of writing, she works full-time in the community services sector:

There’s a saying ... how do you make a fortune in textiles? You start with one ... That’s the kind of reality ... it was precarious ... my partner and I have other grand plans for ourselves ... and needed that stable income and a salary job where I could have sick pay and annual leave ... So I went to my other set of skills, my ... community service skills.²⁸

The loss of Petidis’ technical and creative skills in textiles design and weaving – to both the textiles manufacturing and vocational education sectors – is considerable (to be fair, it is a win for community services).

Claire Tennant

Moulding and casting specialist Claire Tennant likewise reflected on her career and explained the various stages she experienced before she ultimately started her own business (in specialist moulding and casting). Tennant’s pathway is perhaps unusual for a moulder. In Australia, moulding is a formal industrial trade, and one that is ordinarily male-dominated. Typical training consists of an apprenticeship (incorporating a vocational Certificate III in Engineering: Casting and Moulding – although nowadays not all foundry moulders hold a formal qualification in the area, largely due to training unavailability).²⁹ Tennant, by contrast, initially undertook a tertiary degree in industrial design, but decided she did not want to work as a professional designer. In the early stages of her career, she developed local and international “hands-on” experience working in plastics manufacturing, modelmaking for stop-motion animation, and making props for the film industry.

Tennant’s experience working at a stop-motion animation outfit in Adelaide was sporadic, as is a great deal of work in the film and television sector:

It was more about their lack of work than anything I was doing ... I was in and out there a few times, but I actually spent the majority of my time working as a receptionist at a kung-fu academy.³⁰

Later, Tennant worked at Mackinnon & Saunders in Manchester (one of the UK’s best animation producers and puppeteers), which she describes as “my peak career highlight,” despite the fact that “the wages were so low for the work that people put in.”³¹ When her visa expired, Tennant returned to Australia and tried to find work:

I just couldn’t get a job to save my life, and with this glowing CV and all this amazing experience, there just wasn’t a job to have. So many people I talked

to were like, ‘If there was a job, you would have it. It would be yours.’ But there wasn’t, so I just had to get a job. I got a boring job ... Then I got a less boring job in an art shop.³²

Tennant’s experience speaks to a lack of opportunities in more than one sector in Australia: both manufacturing/making but also the film and television industry. Finally, Tennant found work in a fine art foundry in Sydney, where she honed her skills in moulding and casting large sculptures, developing expert knowledge of casting, moulding materials and small-run production methods. At this time, Tennant gradually accrued her own contacts and began to take on small jobs independently.

Tennant ultimately decided to take charge of opportunities herself, starting her own business and studio, specialising in moulding, modelmaking and casting. The following quote by Tennant is unusually long, but it is shared because it demonstrates the way in which employment stability for Tennant is paradoxical because requires *doing everything at once*. It also means embracing both technical/industrial jobs as well as more “creative” ones. Tennant’s story also points to the difficulty of classifying her field and expertise in a way that acknowledges her broad, cross-sectoral contribution, spanning many fields of practice. Tennant reflected:

I’m absolutely a jack of all trades. I think my success in running my own business for the last fifteen-odd years has been in that I have so many different ... I don’t want to say ‘expertise,’ but yeah, I sit in a very niche spot where there’s not really anyone that does so many things and is ... the jumping-off point before ... factory manufacture. ... On the list of things that I do: ... mould making for sculpture and casting ... people come to me a lot for materials testing. I do life casting, which is taking moulds from people, like baby’s hands and feet, and pregnant bellies, and faces, and full head casts for prosthetics for film, but also for body casting, for sculpture that people can hang on their walls ... I do slip-casting, slip-cast moulds for ceramicists ... I do mould making for bronze and also glass investment casting ... foundry casting. I do 3D printing and laser cutting. I teach, as well. I teach at university and also in high schools, and I do art workshops as well, for funsies. I embed things in resin for ... display purposes. I do ad work. I do some film work. I have done numerous TV series sets and props over the years ... and I also make art for myself, which I’ve only just started doing in the last couple of years. I never considered myself an artist. More a technician, until recently. Maybe now 30–70 [percent] towards technician (slight laugh) and 30 percent artist ... I do a reasonable amount of work for Sydney Vet Science Department, Sydney Uni, for their teaching models. I’ve done a very complex equine teaching model (slight laugh), which was quite the brain bake, because I had to learn about horse anatomy and all sorts of

stuff ... it's a lot like my brain is full all the time, and there's not a time where I don't have eight jobs on the go ... You've just got to compartmentalise a bit, but it's hard!³³

There are evidently high risks of burnout in such an approach. A couple of years after this interview, I was again in contact with Tennant, who explained that this way of working (referred to above) was not sustainable. In the intervening years, it had resulted in serious physical and mental harm. Tennant now operates differently. With her family she has moved out of a high-cost, high-stress urban environment in Sydney, to regional Victoria, and she is more selective about how she works:

I have since massively cut down on what work I do and who I do it for. I still have a large wheelhouse of skills to offer, but I'm offering them more selectively and only investing in clients that can appreciate the complexity of what they are asking and appreciative of my skills to get it done.³⁴

This quote points to the fact that public perceptions of skill *matter* – they matter to workers, and they matter to productivity.

From one practice to another

As noted earlier, the skillsets and knowledge held by *technical creatives* and *creative technicians* are acquired through a diverse mix of formal educational pathways (apprenticeships, degrees) alongside more informal learning pathways, such as auto-didacticism and “on the job” learning. The next two MMD interviewees are practitioners with diverse employment and training histories, who have shifted from one thing to the next in succession.

Mike Buick

Arts technician and assemblage artist Mike Buick formally acquired skills through various vocational training programmes, but is also self-taught in other respects. Buick is a trained composites boat builder, mechanical engineering draughtsperson, analogue and digital photographer and woodworker, and at the time of interview he worked as a casual art installer/technician for a well-known Australian sculptor, while continuing his own art practice. Reflecting on his formative early years, Buick spoke about the value of Australia's vocational educational system (known as TAFE) for his skill development:

I think it was really useful for me to have that as a start ... it was very good. I mean, I had ... I'd basically started three careers through TAFE. So, it gave me an amazing opportunity in life ... The first career in boatbuilding

was through the Reinforced Plastics Certificate that I did, and the second career in drafting ... the engineering drafting course ... the third TAFE course I did was the Mechanical Technology Certificate, and that, I think, enabled me to do a lot of work in the art field, as an arts technician, as an installer.³⁵

Buick’s background draws attention to the fact that Australia’s vocational educational system historically operated as a conduit between both industrial and creative skill development.

In the 1990s Buick worked at Gilbarco, a company that manufactured petrol station equipment. He was based in the drawing room as a mechanical draughtsman, hand-drawing pumps, consoles and bowsers, but it was not long until technological change was a factor to contend with:

In my area, definitely ... CAD was coming in, but on the factory floor, not very much yet, at that stage ... Initially it was just more and more drawings being done on CAD, but there was always hand work to be done.³⁶

Economic downturn and company downsizing led Buick into a rocky time, where he was retrenched, rehired, and ultimately decided to pursue other things:

Well, [the job] had two endings, and two beginnings ... there was one point where I was retrenched because of a downturn, and I’d spent about three months out of work at that point, looking for work and not being successful, and eventually got the same job back again, because one of the other draughtspeople left, so that was a new beginning in the same role. The other end was when I got the travel bug and decided to go off cycling around the world for a year.³⁷

Buick’s global cycling tour also led to a passion for photography, which moved well beyond a tourist’s enthusiasm for travel snaps:

I’m the kind of person who, when they get interested in something, will launch into it and it will become a passion, so it wasn’t long before I was consuming photography magazines and consuming books from the library on photography, and on coming back from that trip I remember regularly going to the library and getting four or five books at a time on photography, technical books, and consuming them and then three weeks later going back and getting another four or five books. That’s basically how I learnt photography.³⁸

After teaching himself photography (both analogue and digital), this led to a phase where Buick worked as a photography assistant and freelance

commercial photographer. As with engineering draughting, Buick's encounter with photography sat him at the cusp of the technological change from analogue to digital. He had to learn both methods, but saw himself as "quite fortunate to have experienced that transition."³⁹

Finally, Buick's Mechanical Technology Certificate from TAFE led to contract employment as an arts technician; he now takes on regular casual work as an exhibition installer and sculpture production assistant. He also repairs timber furniture on an ad-hoc basis. As Banks observed, arts technicians are one of the most ignored forms of cultural and creative labour,⁴⁰ but Buick did not express any concern about lack of recognition. The work is not enough, however, to satisfy Buick's own creative impulses, and he makes sure to only work part-time, so he has enough time to work on his own art practice, making neatly balanced three-dimensional works with reclaimed timber, found objects and two-dimensional collage. Buick explained:

A lot of the artwork that I do now harks back to mid-century design on the one hand, but on the other hand, [it] can have a bit of an engineering bent because of my background and my experience. You're a product of your experience and your past, you know.⁴¹

Clearly, Buick is well aware of how his technical and industrial experience informs his creative practice.

Karl Bergersen

Karl Bergersen, proprietor of the Sydney-based recycled timber furniture business Three of a Kind, has a life history that traverses multiple subcultures, creative practices, manual trades and industries. In many ways, his career evidences a wild mixing of late twentieth-century Australian and American sub-cultural and production histories. Throughout his life, Karl's interests, fields of expertise and making experiences include: skateboard ramp design, screen-printing, leatherwork, stone masonry, furniture design, woodwork, graphic arts and music (band) management. But to even write such a list feels reductive, as much has been left out. Bergersen was one of the few makers I interviewed who has shifted from a precarious individual maker – scraping by on very little – towards a successful small business owner with a number of employees. He laughingly describes himself as a "cashed-up bogan,"⁴² self-consciously referring to the ways in which family background, taste and place all influence social class categories. In this way, Bergersen himself is well aware that he is hard to categorise, and appears to enjoy an element of surprise when encountering people.

Bergersen proudly explained that, while he has some official vocational training in screen printing and stonemasonry, his current career as a recycled

furniture designer and manufacturer emerged from proudly self-taught roots. Here, “ticket” refers to formal vocational qualifications:

I’ve got two tickets, but I don’t use either of them. I’ve got my Quarryman’s ticket ... I don’t use that ... So I’ve got two tickets in two different trades that I don’t use, and I’ve got a furniture store with no ticket, and that’s what I do.⁴³

Unlike Buick, Bergersen is less enthusiastic about the training provided by Australia’s vocational training institutes, nor about formal education generally. This position also impacts Bergersen’s views about hiring labour for his furniture-making business:

It’s hard to get the right people. I find it’s easier, rather than getting qualified cabinetmakers and joiners and teaching them to un-learn, and adopt my aesthetic, I find it easier to get people like builders, or [basic] carpenters ... and then teach them how to – because they don’t have a preconceived idea ... The people who I’ve found to be the best at this kind of work are ... set-carpenters. People that have worked in film and TV. ... They’re ... taught to work to the aesthetic.⁴⁴

Here is a direct example where a local designer-manufacturer has specifically sought *creative technicians* (set designers/set-makers), due to their aesthetic understanding.

For Bergersen, employment and subcultural involvement have always been intertwined, and I draw attention to this to indicate the *cultural* complexity of Australian local production between the 1970s and 1990s. As a youth, Bergersen was involved in surf culture and early skate culture in Sydney in the 1970s. He worked as a “general dogsbody” at Emerald Surfboards, and discussed early experiences building DIY skateboard ramps, and skating vertical at Pymble Pools with skateboarders Adrian Jones and Johnny Tesoriero. Surfing and skating went together, but Bergersen also embraced “gear head” car culture, and soon after that, punk. Later, Bergersen’s interests expanded to include Santa-Fe styling, Rodeo and cowboy culture, and he is a passionate collector of mid-century Americana. This unique mix of subcultural interests and passions is something Bergersen consciously articulated, noting that his wide-ranging passions did not always fit smoothly in Australian culture:

I’ve always mixed up my passions irrespective of the fact that the culture, or the tribes and the people didn’t mesh so well. They do now, but they didn’t back then. And that’s why punk rock was so appealing and serendipitous to me: because there was no fucking rules. It was, do whatever you want ... and that appealed to me a lot, you know. That is just in my nature, I think. So,

punk rock, yes, it was a movement, but I think I've always been a punk rocker, even before it existed.⁴⁵

Bergersen's early employment history also included several years working at Sydney t-shirt factory Phantom Textile Printers, where he excelled in the technical sides of colour mixing, as well as being a "prankster, a clown and a buffoon" (his self-description).⁴⁶ Consequently, he was fired and re-hired a number of times by proprietor Dare Jennings, better known (later) as the founder of Australian brands Mambo and Deus ex Machina. Bergersen's work history also involved working for local councils building stone retaining walls around Sydney Harbour. Later he became a self-employed leatherworker, sitting on his front porch handmaking belts for the Zimmerman sisters' local fashion shop, before they had hit major fashion success. The time spent making belts was pleasurable but precarious: "I was on the, I wouldn't say 'bones of my arse' but I was living – sailing pretty close to the wind in a financial sense."⁴⁷

Bergersen's foray into recycled furniture began in the leatherwork period, when he needed a table for himself, and, having little means, decided to make one. He "borrowed" some timber waste from a construction site across the road, and produced a solid, well-proportioned recycled timber table with its own unique character. Soon, Bergersen's distinctive recycled furniture style was attracting attention, and he began making pieces for friends and acquaintances. Ultimately, Bergersen decided to start his own furniture business and opened a shop, initially in South Newtown, Sydney. It was not an easy start:

I've never worked harder in all my life ... It was fucken hard ... It's the first time I had my own business ... and I was thinking about my future. Am I making a go of it, or not? There's your motivation right there, you know? Like, I couldn't afford to take my foot off the gas because I had overheads ... When I opened that shop, I had no money ... I had a tax return of 500 bucks.⁴⁸

The hard work ultimately paid off, over time. Bergersen's furniture business is now at a stage where he comfortably refuses to take on new work when the backlog is too long, because he does not want his customers waiting for long periods.

Like the craft entrepreneurs described by Susan Luckman,⁴⁹ Bergersen consciously resists expanding his business any further, not wishing to lose creative control: "You've got to get a balance where...all this furniture has me in it, my stamp on it and my aesthetic and my input, and once I get too far from the factory floor, that's when things go south."⁵⁰ In this way, *Three of a Kind* stays relatively small in scale. One of Bergersen's bugbears is that in the current globalised economy – where cheap, poor-quality furniture can be ordered from overseas and arrive in a flatpack in a matter of days – people no longer understand the true costs of carefully crafted, local production. By contrast,

Three of a Kind is an all-in-one set-up with the shopfront, workshop and Bergersen’s home upstairs, now based along the bustling Parramatta Road, in Leichhardt, Sydney:

Retail at the front, and then workshop at the rear with the glass at the back ... which has been a huge benefit, just really driving home the point that it’s made on the premises. People are a bit taken aback. It’s really rare to see anyone manufacturing in Australia, and it’s also really rare to come into a premises and you’re looking at, and talking to, the person that’s making the stuff for you.⁵¹

This set-up allows him to *perform* production, as well as emphasise the technical nature of how recycled timber furniture is made.

For all his talk of hard partying days, Bergersen is no loose cannon in terms of craft. He has a strict aesthetic sensibility, strong craft ethic and longstanding tacit technical knowledge, which he is cautious about imparting to others unless he really trusts them. Bergersen also knows where to source good quality recycled timber in Sydney (it is all about personal connections), and how to cut, treat and paint recycled timber so that it appears consistently aged, thus retaining its character. With this aesthetic sensibility comes a strong commitment to making durable furniture that should endure over generations: “I want stuff out there ... that is a lifetime purchase. Planned obsolescence just isn’t in our vocabulary. Pieces that people will be proud – heirloom stuff.”⁵² Bergersen proudly boasts that he has now been in the furniture business long enough that the children of his early buyers return, as adults, to report on how the family piece is going.

While this isolated story is one of success, it is also rare: most furniture-making and furniture consumption does not look like this, and Bergersen’s pieces face that long-standing “Arts and Crafts dilemma”: most pieces are only affordable for reasonably wealthy buyers, as their pricing accurately reflects the labour involved in their production. Bergersen, for his part, wishes that mainstream Australian culture understood and respected craft skills – and the intense efforts involved in dealing with recycled timber – to a greater degree. Despite possessing abundant practical and technical proficiencies, *creative technicians* and *technical creatives* remain paradoxically undervalued, even as demand for their expertise grows. Such practitioners exist in a neoliberalised political-economic system that does not meaningfully account for their skills or capacities.

Conclusion

As noted at the outset, the example of *creative technicians* and *technical creatives* is indicative of larger problems in how we understand, conceptualise and plan for the changes to working life and skill in the future. The intertwined

challenges of climate change, geopolitical and economic instability and technological shifts combine to expose just how much our existing categories and conventions of occupation, skill and education are no longer fit for purpose. This begs the question: where to from here? One place to start is from the ground up: what capacities do people actually have, when we actually take the time to observe and listen?

Building an understanding of *technical creatives* and *creative technicians*' life histories and personal perspectives helps open our awareness – beyond just the creative industries – to people's ability to develop multiple sets of practical skills over a lifetime. Much like the “maintainers” and repairers increasingly studied by scholars in a variety of disciplines,⁵³ *technical creatives* and *creative technicians* possess manual and process skills, such as sustainable making practices and knowledge of older technologies, infrastructures and production systems, as well as social and relational knowledge of supply networks and sustainable waste management chains.⁵⁴ Such dispositions will be critical in the context of futures featuring infrastructural breakdown, disaster recovery, adaptation and finite resources.⁵⁵ One of the key things that the lives of *technical creatives* and *creative technicians* tell us is how they bring their prior experience to bear on whatever they undertake next. Ignoring such capacities would be a great loss, because the skills that such practitioners bring to society are not isolated to one profession or industry, but are transferrable in ways that will likely be valuable for years to come.

Notes

- 1 Stein and Carr, “Call for Papers.” In using “creative” in this chapter, I acknowledge that the term has, for several decades, become a buzzword within the politics of neoliberal economic restructuring. “Creative” therefore carries the stain of political rhetoric, false hope about opportunities in creative economies, and the supposed benefits of flexible labour. I continue to use the word, however, because it is useful in collectively encompassing the arts, craft, design and aspects of media and communications. For critical commentaries on the neoliberal mobilisation of “creative” and “creativity,” see, for example: McRobbie, *Be Creative*; Morgan and Nelligan, *The Creativity Hoax*; Gill & Pratt “In the Social Factory?”; Hawkins, *Creativity*; Taylor & Luckman (eds), *Pathways into Creative Working Lives*; Banks, Gill and Taylor (eds), *Theorizing Cultural Work*; among others.
- 2 Carr and Gibson, “Geographies of Making.”
- 3 Luckman and Tower, “The Value of Craft Skills to the Future of Making in Australia.”
- 4 The background concepts that inform this chapter have developed from my empirical research over the past decade and a half, which has largely focused on the human and design outcomes of deindustrialisation and economic neoliberalisation in Australia from the 1980s onwards.
- 5 I elaborate on this particular pathway in Stein, *Industrial Craft in Australia*, 191–224.
- 6 Banks, “Craft Labour and Creative Industries.”

- 7 Morgan and Nelligan, *The Creativity Hoax*.
- 8 Luckman, “Making Bodies”; Carr and Gibson, “Geographies of Making.”
- 9 See also: Grodach, O’Connor, and Gibson, “Manufacturing and Cultural Production.”; Gibson et al. “Made in Marrickville.”
- 10 Humphrys, Stein and Frankham, “The Deep Political Power of Fluoro.”
- 11 Luckman, “Making Bodies.”
- 12 Stein and Henningham, *Makers, Manufacturers and Designers Oral History Project* (hereafter: MMD), National Library of Australia. Part of an Australian Research Council Discovery Early Career Research Award (ARC DECRA 2021: DE210100158), which uncovered connections between the design industry, technical trades and vocational education, tracing the second half of the twentieth century to the present.
- 13 In line with the preferred style used by the NLA, *MMD* uses life-history interviews, the longest in this project being over five hours and the shortest at around two and a half hours’ duration.
- 14 The nature of life history oral histories is that, in many cases, participants choose to remain identified. In limited cases I occasionally anonymise participants, where ethical concerns may arise.
- 15 For a nuanced (and still relevant) summary of different approaches, sub-disciplines and evolving concerns in oral history practice over the past five decades, see Thomson, “Four Paradigm Transformations in Oral History.”
- 16 These findings are certainly in line with a great deal of existing research into cultural labour from the 1990s onwards, see, for example: Gill and Pratt, “In the Social Factory?”
- 17 Pitts, “Creative Labour, Before and After ‘Going Freelance.’”
- 18 Another aspect of Petidis’ story is shared in our sister collection, see: Stein, “Saving the Loom.”
- 19 Petidis, interview with Henningham, *MMD*.
- 20 Petidis, “Devoted.”
- 21 Petidis, interview with Henningham, *MMD*.
- 22 Webber and Weller, *Refashioning the Rag Trade*.
- 23 Petidis, interview with Henningham, *MMD*.
- 24 Stein and Petidis, “Rescuing Weaving Technologies.”
- 25 Seljak Brand, “This Geelong Mill Has Been Weaving Wool Fabric for 100 Years”; Seljak Brand, “Meet the Makers.”
- 26 “Geelong Textile Group Sold to ATI.”
- 27 For example, Art Gallery of Ballarat acquisition, Petidis, *Devoted*, 2021, <https://www.artgalleryofballarat.com.au/explore/the-collection/search/12636>.
- 28 Stein and Petidis, “Rescuing Weaving Technologies.”
- 29 Romensky, “Hard, Dirty Foundry Work Copes with Digital Disruption and Lack of Apprenticeship Courses.”
- 30 Tennant, interview with author, *MMD*.
- 31 Tennant, interview with author, *MMD*.
- 32 Tennant, interview with author, *MMD*.
- 33 Tennant, interview with author, *MMD*.
- 34 Tennant, personal communication with author, 28 November 2024.
- 35 Buick, interview with author, *MMD*.
- 36 Buick, interview with author, *MMD*.
- 37 Buick, interview with author, *MMD*.
- 38 Buick, interview with author, *MMD*.
- 39 Buick, interview with author, *MMD*.
- 40 Banks, “Craft Labour and Creative Industries.”
- 41 Banks, “Craft Labour and Creative Industries.”

- 42 Bergersen, interview with author, *MMD*. “Bogan” is an Australian slang term, loosely referencing unsophisticated working-class culture; it can be pejorative, humorous, self-deprecating or celebratory, depending on usage.
- 43 Bergersen, interview with author, *MMD*. A quarryman, in this usage, refers not to someone who works in a quarry, but a lower level of qualified stonemason. It is a trade related to cutting and placing stone for retaining walls and pavers.
- 44 Bergersen, interview with author, *MMD*.
- 45 Bergersen, interview with author, *MMD*.
- 46 Bergersen, interview with author, *MMD*.
- 47 Bergersen, interview with author, *MMD*.
- 48 Bergersen, interview with author, *MMD*.
- 49 Luckman, “Craft Entrepreneurialism and Sustainable Scale.”
- 50 Bergersen, interview with author, *MMD*.
- 51 Bergersen, interview with author, *MMD*.
- 52 Bergersen, interview with author, *MMD*.
- 53 Strelbel et al. (eds), *Repair Work Ethnographies*; Russell and Vinsel, “After Innovation, Turn to Maintenance.”
- 54 Carr, “Maintenance and Repair Beyond the Perimeter of the Plant”; Carr, “Repair and Care”; Stokes and De Coss-Corzo, “Doing the Work.”
- 55 Carr, “Repair and Care.”

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