Making Ways
Ko te tohu mohiotanga kei tokonga whakaaro ke.

The true sign of intelligence is not knowledge but imagination.
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The difficult challenge of the architecture exhibition is its failure to live up to the real thing. To visit a building and to feel and understand it within its own environment will always be more than a drawing, sketch or photograph. Too often the viewer is mired in technical drawings, as if all the necessary detail it takes to actually build the thing might stand in for the experience of being inside it.

In Aotearoa New Zealand we do not have a rich history of exhibition making on the subject of design or architecture. Major shows over the last three decades (which number so few they can be counted on two hands) focus on retrospective treatments of a body of work or an architect’s life. While no doubt valuable, these exhibitions can be narrow in scope. Drawings, photographs and models that comprise the architect’s survey are in contrast to other art forms. Instead of the once-in-a-lifetime gathering-together of works within the gallery, in its place the viewer is shown a map that points them elsewhere—to houses, buildings, public spaces and civic infrastructure that exist in far-reaching places, some inaccessible to public view.
When Objectspace relocated in 2017 to purpose-designed premises in Ponsonby, a key part of the gallery’s expansion was a more comprehensive commitment to architecture. Design has always featured within the gallery’s remit, but to newly state architecture as one of three pillars of the gallery’s focus was intended as a clear signal to audiences; and when the gallery reopened it was with New Zealand’s 2016 entry into the Venice Architecture Biennale, *Future Islands*, curated by Kathy Waghorn and Charles Walker.

Since then we have been examining what kind of architecture exhibition making will be important to Objectspace. As urban development continues to grow at pace, reshaping relationships between human behaviour and the natural environment, a reclaiming of architecture as a design practice that affects everyone feels critical. It is here all around us, not rarefied and over there for those few who have the luxury of commissioning an architectural home.

So, for Objectspace, we have a desire to connect audiences to the built environment, to create a sense of ownership over the public and domestic spaces that feature so prominently in our daily lives. But it is also to demonstrate that architecture is a cultural and creative practice and as such can be experienced, documented and interrogated.

When curator Kathy Waghorn brought *Making Ways* to Objectspace in 2019—a project that was intended to exist more as a rolling workshop of activity and connection than a static display—it was an exciting step in the gallery’s exhibition making: an exhibition conceit that draws on the real-world outcomes of four architecture practices but designed within a creative and speculative framework that sought to explore alternative possibilities for architecture.

Over a one-month period the gallery transformed week to week, as a new architecture practice would take occupancy. Each sought to communicate to audiences their particular approach, bearing a striking contrast to accepted ideas of what an architect’s role can be. In week one Unit Y presented a 1:1 scale drawing of a small and modular home. Rendered at human scale the drawing’s role was not to simply entice the viewer to imagine (and in turn want) the...
real thing, but to draw our attention to that gap that exists between an idea and that idea coming to fruition. A charitable trust, Unit Y was conceived to rally the architecture know-how of academics, students and recent graduates at the University of Auckland towards real-life projects for clients who may not have access to architects.

Based in Te Tai Tokerau, Northland, ĀKAU’s occupancy of Objectspace signalled a radical shift in week two—the focus on a singular outcome replaced with an open platform encouraging learning and exchange. ĀKAU is a design and architecture practice seeking to position people and place at the heart of what they do. Working within their own communities they champion the idea that design solutions can be sought and developed from those who will be most affected by the outcome. Through wānanga true collaboration can be fostered, empowering all of its participants to share in acts of design.

In week three Makers of Architecture installed two large-scale interactive screens within the gallery that could be moved through a simple action of pushing or pulling. Projected on the screens, images of the natural environment (sites of their building projects) were contrasted with documentation of customisation technologies they have innovated within their own design and construction practice. The installation sought to make prescient the relationship between site, design and the making process. In drawing these three elements together with equal focus, a more holistic and democratic form of architecture emerges.

Hatch Workshop concluded Making Ways with an installation centred around a chai tea station, available for visitors at any time of day to meet, sit and share a cup of tea. The station was drawn from their work in India, designing and building living quarters for labour workforces. Sensitively repositioning this social element from a context far removed from the gallery was enlightening, requiring the viewer to not merely observe their work as case study but to undergo a change in their own behaviour in the process.

The exhibition design for Making Ways featured an interchangeable and colourful kitset of parts that enabled each practice to reconfigure its
set-up to shape the viewer’s experience. As the relay baton was passed from architect to architect, conversations, workshops and lectures enlivened the space on an almost daily basis. The effect was playful and humane. *Making Ways* made no grand statements about the achievements of the architects it featured, nor did it declare itself the knowledge holder of unanswered questions. Instead it redirected our view towards exchange and conversation, as if to say it is in the space that exists between you and me that good and meaningful architecture can happen.

Kim Paton
Director, Objectspace
August 2020
Tuia i runga, tuia i raro, tuia i roto, tuia i waho, tuia te here tāngata e pae nei, tēnā koutou, tēnā koutou, tēnā koutou katoa.

I draw from above, from below, from within and from without to bind together all the people gathered here today, I greet you all.¹
In the space between the office, the market and the academy, architects in Aotearoa are inventing new forms of architectural practice. In September 2019 *Making Ways: Alternative architectural practice in Aotearoa* opened at Objectspace in Tamaki Makaurau Auckland. As part of the Festival of Architecture, this was not an exhibition in the usual sense; *Making Ways* was more of a staged, live, rolling event. A visitor likened it to performance art, a place where ‘things made way for ideas and ideals’.

It’s satisfying that this was picked up on, as the exhibition was always intended to operate less as a purely visual or didactic display and more as a platform, cultivating a space for discussion about the future of practice in Aotearoa New Zealand.

To generate this conversation, *Making Ways* brought together four practices that are each inventing their own ways of navigating emergent opportunities or overlooked potentials in the making of architecture. Sequentially inhabiting the gallery for about one week at a time, the four practices were (in order of appearance) Unit Y, AKAU, Makers of Architecture and Hatch Workshop. To support this rolling event the gallery—already providing a favourable infrastructure with its high stud, concrete floor and sturdy lighting grid—was fitted out with a robust kit of parts for each practice to make use of. Drawing on the transformability of theatres and gymnasiums as places where objects are arranged and rearranged to accommodate both audience and different types of performance, the exhibition designers lined the gallery with a bright red, translucent, floor-length curtain that could be positioned in different locations, hiding or revealing walls and generating ‘backstage’ storage spaces. Similarly, a mobile scaffold tower could be positioned anywhere in the space and, while used to support the quick turnovers between (and sometimes during) the week-long tenures, it also doubled as exhibition furniture operating variously as a projector stand and tea stall. With the help of colour-coded accessories, 40 door blanks were deployed as hanging display screens, sandwich boards and tables, while 80 red stacking chairs were set and reset as gallery morphed to seminar room, lecture theatre, canteen, workshop and studio. The intention of the exhibition
design was that each practice might deploy the kit to best support the exposition of their ‘ways’ of making architecture—bringing to the fore not only the things they make but how and why they make, for who and with who.

As part of their tenure the members of each practice each took part in a public interview. On sequential Wednesday mornings, over coffee, fresh fruit and pastries, they discussed their work with an interviewer and another practice or organisation sharing similar aims or operating in overlapping spheres. As well as demonstrating that the four practices included in the exhibition are not the only ones who are developing ‘alternative architectural practices’ the intention here was to generate discussion and to share and expand our knowledge of ways of making architecture. So, Unit Y was joined by Maunga: Pacific Architecture Collective, with both navigating the space between the university and practice life for new graduates. ĀKAU, who centre their work within te ao Māori and te mātauranga Māori, were joined by Fleur Palmer, who as an academic and spatial activist also operates from this centre. Makers of Architecture were joined by Andrew Barrie (of the Andrew Barrie Lab) as both, while operating with different aims, explore the potential of new timber structures. Finally, the two members of Hatch Workshop were joined by Professor Kester Rattenbury from the University of Westminster, who we had invited to visit Making Ways to provide an external voice and view. Each of these interviews has been edited and included in this publication so that the discussion might be further circulated. Furthermore, as part of the Festival of Architecture, Making Ways hosted the University of Auckland Fast Forward Lecture series. This included a session on activism in architecture⁴ as well as a lecture by Kester in which we asked her to reflect on the ideas in Making Ways as they might resonate in an international context. This was a big task to assign Kester after only ten days on the ground in Tāmaki Makaurau; she took it up with immediate focus and attention, and she has now generously expanded on her lecture for this publication.
Alternative / Alternatives

If normative architectural practice might be understood simply as the production of a building to serve the brief of a fee-paying client, alternative implies a departure from this in the way that architecture is realised, as well as in the ways in which architectural knowledge and imagination might be employed. This orientation to new forms of practice responds to a number of factors, some local and some global, including:

- the impact of financial structures, liability and insurances in limiting the delivery of professional architectural services to a wide range of communities of different sizes, formations and contexts, and the desire to work with an expanded client range
- not only the promise of new digital and algorithmic technologies to produce optimised design, including the exploration of new forms, but also the employment of these technologies to address issues of the climate crisis through reduction in construction waste and the production of buildings with lower embodied and operational energy
- the desire to act critically, to use practice as a means of research, advocacy and activism, to deal in the politics of space, generating conversations about pressing issues of housing affordability, carbon production, use of resources and urban futures
- the call and need for forms of decolonised practice located in indigenous knowledge, specifically here in te ao Māori, to work within tikanga, especially in the context of Te Tiriti o Waitangi
- the emergence of graduate architects from the global diaspora who bring their own cultural knowledge and frameworks to practice in Aotearoa and, specifically in Tāmaki Makaurau, the emergence of graduates from the Pacific diaspora who are asking questions about this city’s place in the Pacific and the contours of a Pacific urban practice
the desire to expand architectural thinking and making away from the completion of buildings to embrace spatial intelligence through artistic and performative modes of practice, generating more finely nuanced understandings of place

the desire to shift the ethics of contemporary practice, opening up agency with regard to space and place through tactical and collaborative practices, and also developing ontologies for mauri ora.

This move towards new forms of practice has been documented by others in international settings. Some sources that helped to shape the curatorial intention of Making Ways include Rory Hyde’s influential book Future Practice: Conversations from the Edge of Architecture, which documents conversations with seventeen practitioners (not all architects) who articulate their motivations for emergent modes that are pushing at the edges of what may be understood as more conventional forms of practice.5 I also looked closely at WORKAROUND—Women, Design, Action, an exhibition, online broadcast and programme of live events from the Design Hub at RMIT Melbourne.6 This project engaged women practitioners in the ‘expanded field of architecture’ who work ‘towards positive change in the built environment and its surrounding cultures’ by working around existing conventions, systems and structures.7 More recently I have come across the project ‘Next Progressives’, a series of articles by Point Line Projects (PLP) as guest editors for Architect magazine.8 In this, PLP ‘sought out firms from outside of major US cities with a breadth of projects, non-traditional practices and diverse teams’.9

In all of these examples attention is given to the edges of or expansion of the field, practices are described as non-traditional in relation to the norm, a set of conventions and structures that requires, even prompts, often canny and tactical methods of working around.

Most influential in the imagining of Making Ways is the Spatial Agency research project.10 Stemming from a group of UK architectural academics,
Spatial Agency manifests as an online database and book suggesting other ways of doing architecture, ‘moving away from architecture’s traditional focus on the look and making of buildings’, instead proposing ‘a much more expansive field of opportunities in which architects and non-architects can operate’.

These authors propose a shift in focus from architecture as buildings to architecture as ‘matters of concern’, part of ‘socially embedded networks, in which the consequences of architecture are of much more significance than the objects of architecture’. The Spatial Agency database lists over 150 individuals, practices, organisations and networks, both contemporary and historical, producing an ‘extendable repository of examples of Spatial Agency’, sortable into broad thematic areas that group the motivations, locations and means of practising Spatial Agency.

In their introduction to the book, the authors recount their rejection of the initial working title of their project, ‘Alternative Architectural Practice’. They point out that to be alternative, of course, raises the question, ‘Alternative to what?’ In the case of Making Ways we have also asked this question. If we are looking for alternatives, what is it that we are finding lacking, or are trying to move away from? How does ‘normative’ practice operate in Aotearoa New Zealand, and why do we think we need alternatives? While it is difficult to generalise, there are a few factors that clearly form the scene of much architectural work in this country. These include:

- the Institute of Architects’ eight-stage contract, which can be seen to place more emphasis (and fee generation) in the stages of documentation and construction management than in the stages of brief development and project design
- the lack of any in-house research and development that is not directly supported by a fee-paying job
- the influence of procurement models and building legislation that are prescribed by risk management and insurance concerns, and that restrict both the types of project
that can be pursued (for example, see the difficult journey of those developing co-housing\textsuperscript{16}) and those who can undertake them

- adversarial tendering processes in local and central government that foster low design fees
- the costs of building and land as well as the financial models that are available to develop projects for diverse client bodies.

Coupled with all of this is the fact that architectural design does not hold a high value in this country. Observe, for instance, that there is no longer a government architect-type role, underscoring a lack of attachment to architecture as a public good, and that Creative New Zealand, the national arts-development agency, does not consider architecture—neither its publication nor exhibition—part of its remit. So, these are just a few of the areas that, in asking ‘Alternative to what?’, the practices in \textit{Making Ways}, and others inside and outside the profession, see as both barriers and opportunities for change.

The authors of \textit{Spatial Agency} also reject the term alternative because they see it as ‘necessarily reactive to the norm’ and thus it still remains, somehow, in thrall to it.\textsuperscript{17} I don’t think this is so in our case—the practices in \textit{Making Ways} are too busy and focused with getting on with their own ways of making to be constantly indexing back to some norm, and in fact some of the practices in \textit{Making Ways} did not really consider themselves ‘alternative’ until this label was thrust upon them by the curator! The \textit{Spatial Agency} authors also suggest that ‘the norm remains largely undisturbed by the irritant it overshadows’.\textsuperscript{18} This is of course true; the event of \textit{Making Ways} did not shift the course of mainstream practice in Aotearoa New Zealand. However, we could also say that the alternative, once motivated to diverge, remains largely untroubled by the norm as it seeks its own ways and methods. The practices in \textit{Making Ways} are not making a direct challenge to the norm; instead their influence is more tactical. What they are offering is the production of ways for ‘the norm’ to begin to quietly embrace their alternatives—Makers Fabrication are producing
projects for others’ practices, Unit Y and ĀKAU are acting as consultants, and Hatch Workshop’s methods have been adopted by international NGOs.

Maybe in the end ‘Alternative to what?’ is a red herring, and what we are instead looking to trace, and to make platforms for, is a multiplicity and diversity of practice. And maybe this multiplicity has been there all along, but we just fail, for many reasons, to see it and to support it. As part of the ongoing Making Ways project we have begun to look backwards to see if we can identify local instances of ‘alternative’ practice over the last 50 years, and to trace the motivations and trajectories of such work. Our first sketch of this, an essay titled ‘Looking Backwards to Look Forwards: Locating Alternative Architectural Practice in Aotearoa’ is also included in this publication.

In Making Ways we have sought to highlight the practice of architecture and the use of architectural imagination and knowledge as one of multiple alternatives, as a diverse and locally inflected undertaking. We are invested in supporting and maintaining the diversity of architectural voices and operations that enable a lively local architectural discipline that contributes meaningfully to the broader cultural and social environment. We would like to thank everyone who has contributed to the Making Ways project so far—exhibitors, commentators, audiences and supporters—and we welcome and hope for an ongoing conversation on our ways of making architecture.

Kathy Waghorn
Curator, Making Ways:
Alternative architectural practice in Aotearoa
November 2020
A public lecture

Making Ways
Kester Rattenbury is an architectural writer, teacher, critic and academic, and Professor of Architecture at the University of Westminster, UK. Her many publications include several on the radical British architect Cedric Price. Kester is closely involved with the PhD by Practice as developed at RMIT. She was a guest of Making Ways through the University of Auckland, enabled by a Seelye Visiting Fellowship.

On 8 October 2019, Kester presented the Ockham Fast Forward public lecture. Fast Forward is the biannual lecture series hosted by the University of Auckland’s School of Architecture and Planning. It aims to foster debate, discussion and development within the disciplines of architecture, urban design and urban planning. For Making Ways, Fast Forward collaborated with the Objectspace Ockham Residential Lecture Series to bring this public event into the gallery, based around the themes of the exhibition. The following essay is an extended version of Kester’s lecture.
It’s both wonderful and decidedly unsettling to be invited to the other side of the world to talk about a remarkable body of work which innovates specifically with entirely local conditions and local resources. It’s as though being from the other side of the world gave me a sort of authority, a right to pass judgement, when the real knowledge of the work and its position in the world was already in the country, in the room, in the show itself—from its curatorial premise and the construction of the event to the realities of alternative architectural practices in New Zealand, their astonishing work and invention, and the remarkable things they achieve.

My own participation was based on shared interests from our side of the world, especially in the evergreen inventions of design methodologies—the knowledge innovations being made by architect practitioners on a daily basis—and in the emerging academic recognition of them. That’s a general interest in all innovative design work rather than a specialist engagement with any particular bit of it, and that threw up huge challenges in speaking for the Ockham Fast Forward lecture. Looking at the varied, innovative, utterly specific work of the four practices shown in Making Ways in the short turnaround between landing in Auckland and giving the lecture ten days later, and discussing it with those who made it, generated a mass of new information—ideas, methods and outputs extending across all kinds of fields in which I was not at all expert—as well as unexpected comparisons and shared views across my own field of experience.

But since I had this privilege (in a recent but utterly altered phase of our troubled world: mid-Brexit, pre-Covid) I’ve been quoting these fantastic projects extensively, and discussing them whenever possible with a whole raft of more-informed audiences in the various fields to which these projects contribute their remarkable and salutary innovations (and in ongoing conversations with the curators of Making Ways). I’m still learning about just how good these projects are and how much they tell us.

So preparing this text has allowed some leeway to improve upon my rapid-response lecture, to revisit and build on my understanding of the value and
place of this wonderful work. To edit into that talk, and correct or extend it and, in writing this, to myself work in a way which bears some fractional resemblance to what I’m really interested in—which I would argue is the core or DNA of innovative architectural practice and the ways in which we have come to teach it—to use whatever opportunities and resources are available, to improvise and develop, has allowed me to try to make something constructive of the materials I have around me.

Making Ways was a fantastic show—or it would have been if it had been a show. But (as curator Kathy Waghorn herself pointed out) it wasn’t. It was a kind a stage set for a rolling programme of events, designed for open exchange of information. Mutual exchange—often between younger people and older ones—there’s surely a word for this in te reo Māori. [Editor’s note: The word would be wānanga, both a verb and a noun, variously translated as to meet and discuss, deliberate, consider; or a seminar, conference or forum for important traditional cultural, religious, historical, genealogical and philosophical knowledge.19] Ten days in, I was already aware (especially through the amazing works of ĀKAU) of the very different world view of place and society which te ao Māori describes, often structured around design-teaching and the research or innovation engendered around and through it—where I was, for once, on home ground.

It was not essentially the design of the show (very nice) which made it, but what it did that was so wonderful. I landed halfway through its rolling programme with the opening of the Wellington-based practice Makers of Architecture’s installation. The Making Ways project had already established itself in the Objectspace gallery in the laid-back and cheerful Ponsonby district of Auckland—staging events, running tea-stalls, looking after stray academic participants. The exhibition curators and designers had devised a colour-coded stage set: a simple kit of parts (white and yellow walls, red chairs and curtains, and a positive attitude) to allow the four very different practices to stage their own events in the gallery under expressed collective circumstances.
My first sense of a kinship between *Making Ways* and the work of Cedric Price (CP) had been nudged into recognition by a chance collision with an authentic Fun Palace performance on Waiheke Island two days before my lecture; and this sense kept growing. Like CP’s (and unlike so much) design work, *Making Ways* didn’t foreground or fetishise artefacts. Instead it focused on *what* such work might do, and how it might do it. It allowed us to collect ingredient information—what people made, where, how, what was great about it—and discuss this in open and provisional events designed to allow others to imagine how such work might make a world where things could be different, and better.

Makers of Architecture, whose show and discussion I saw first, is a parametric- and digital-fabrication practice—a small design firm with a fabrication workshop running in parallel. This is a tiny fragment of a vast global picture of the reshaping of design practice, outputs, methods and thinking, through the overwhelming rise of digital design and fabrication. That means there are many such practices. But Makers of Architecture’s work certainly offers the most dramatic comparisons with—and differences from—London, where a Patrik Schumacher tectonic extravagance—as famously developed at the Architectural Association’s Design Research Laboratory (AA-DRL)—still seems almost endemic.

Makers of Architecture see the parametric and digital world as tools for efficiency, not formal gymnastics, a chance for the ‘digital revolution’ to deliver on its promises by simply improving design and construction—making it faster, more efficient, less wasteful. Their show was simple—two flexing timber frames linked together as screens for videos of their robot-staffed workshops and high-speed building sites—and decidedly underplayed (the downplaying of glossy pictures or exquisite models was part of Waghorn’s CP-like curatorial drive) with only tiny working models of their small, minimal, highly site-specific, utterly lovely houses.

This distinguishes them sharply from, say, my own immediate teaching neighbours in London, Arthur Mamou-Mani and Toby Burgess, who specialise in geometrical innovations in structural form through
Grasshopper 3D\textsuperscript{20} and Mamou-Mani’s own coding innovations, and through Mamou-Mani’s fabrication firm FabPub. (Arthur, Toby and interestingly \textit{Making Ways’} own Mike Davis, are all AA-DRL alumni.) Mamou-Mani’s designs—made of standard timber and increasingly 3D printed in compostable materials—are progressively shifting towards aspects of economy with units sized to be made and handled at small scale, and are significantly designed to be built by hand, often by volunteers. But their projects are generally growing in size, also a more standard trajectory.

Makers of Architecture are young, enviably free of institutional requirements, and they have a really clear research agenda of their own. Makers of Architecture\textsuperscript{21} came straight out of Victoria University of Wellington, where co-founder Ben Sutherland’s thesis was on cross-laminated timber (CLT) construction\textsuperscript{22}. Jae Warrander was in the same year as Ben at architecture school. When Jae’s family’s house was destroyed in the Christchurch earthquake, they designed a temporary replacement and built it as economically as possible through digital fabrication. The practice was formed on the back of that first job—Jae took out a mortgage on his own house and Makers of Architecture bought their first computer numerical control (CNC) router.

This quickly evolved into a dual practice: Makers of Architecture (who design exquisite one-off houses economically); and Makers Fabrication (a Fab Lab-type specialised construction company and research project). The collective aim is to produce beautiful, one-off, site-specific designs at the same cost as the
ubiquitous New Zealand tract builder home through economies of fabrication. Makers Fabrication is the enabler—both with workshop facilities and a specialist consultancy-contractor project-management team. This arm is available to other architects and designers who want that expertise, either in digital fabrication, CLT or general economies of production.23

Collectively, this means exceptionally engaged and focused research. Makers Fabrication have two teams of builders, and Makers of Architecture test their own designs on them as they emerge. Makers’ design work extends from coding to building information modelling (BIM) models showing every screw position. The building team, wearing VR headsets, go right through the BIM model with tools, testing out their abilities to access, reach and construct every aspect of the design down to fixing the last screw—and lying on the floor to do it. This process—used in oil-rig and car manufacturing—is surprisingly revolutionary in an industry where so much is drawn in so much detail and yet which lacks that direct testing with contractors, with so much that goes wrong on site costing so much and causing so many delays. Of course, as Makers explain, some site mistakes remain, but cost, speed, everything is improved, bringing these beautiful one-off, site-specific buildings down to the price of a tract home.

All this working innovation is modestly hidden inside Makers’ two websites, which seem designed to disguise them as a ‘normal’ architectural practice—perhaps a factor of their relative youth, where being innovative might be seen as risky. It’s also to some extent both hidden inside and utterly exemplified by their exquisite one-off, idiosyncratic yet simple, beautiful projects. My whole family would be on the waiting list, should circumstances ever allow, and my eight-year-old has picked out her bunk in her favourite one.

Both their design qualities and the calibre of their research—if you like to think of things in that way—have been rigorously managed by Makers’ determination thus far to keep things small. During their Making Ways breakfast discussion, they explained that they’d been offered large contracts to build
multiple identical houses, and turned them down. ‘We want to keep this hands-on knowledge of how we’re actually doing things ourselves, and at this time it’d be better to be doing five buildings a year than 200 buildings a year. It’s more manageable, it’s more appropriate and really what we’re talking about is making this knowledge more widely available, more normal.’

(They’re also in discussion with window manufacturers, again, presumably, trying to get a better product at a better price in better time.) That is all truly admirable. My kind of research. My kind of parametrics.

Young, often innovative, architects frequently support and develop their practices by teaching design studio. It is a well-established model but one rarely exposed and even less seldom explained; universities might reckon it risky, particularly if the public at large knew more about it. Yet, it’s a very productive situation for students, staff and schools. Students get to see a real career trajectory in practice; they might snag themselves a job, and perhaps recognise their tutor’s commitment to innovation and become similarly motivated. Practitioner-teachers operating in this way might find their research being tested through their students’ projects as well as their own, and can develop, and (perhaps) employ, new talent. This in turn benefits the institutions and relation with practice more widely, because hands-on, state-of-the-art innovation happens in the schools as a matter of course. Literally.

That’s the classic, simple, supportive
route, especially as it applies to young, and very young, practices. However, Unit Y, who opened the *Making Ways* exhibition, is not a young practice, but an office set up by heroic, experienced design teachers who fought through the bureaucracies of academia for the organisation to exist at all. It’s a ‘project office’\textsuperscript{25} founded and run by Mike Davis (late of the AA-DRL, a graduate of the RMIT PhD by practice programme and director of architecture programmes at the University of Auckland) and Vanessa Ceelen (user-centred design expert, coached by Stanford d.school\textsuperscript{26} facilitators) with *Making Ways*’ curator and colleague Kathy Waghorn (designer, curator, academic, another RMIT PhD) as trustee. Unit Y is on the lines of the UK architecture school ‘project office’ model—to be specific, at first glance it seems to aspire to that at the University of Portsmouth. So, unlike the youngsters working the model outlined in the previous paragraph (which uses teaching to fund, enable and test their personal innovations in practice), Unit Y is bringing practice- and design-based research back into the teaching from which it emerged.

Unit Y has many aims: to make a platform for students transitioning out of university to engage in practice-based research; to find and engage with a new cohort of clients (often small charitable institutions); to develop and run workshops beyond the specialist architectural realm; and to generate design projects which might attract funders. Those are a lot of big aims for a practice run alongside demanding teaching roles and university administration; it stands in contrast to the luxurious flexibility of the young practice office. So, *Making Ways* might be seen as a kind of preliminary report on the potentials and problems of the Unit Y project office model in our times. It’s thus of real interest to those of us now entangled in similar toils, as universities (partly through the growth of PhD by Practice) slowly wake up to the real innovation constantly being done in architecture—and inevitably try to institutionalise this.

The Unit Y project for *Making Ways* looked great and was highly engaging to those who attended the exhibition. It contained a 1:1 scale drawing of a micro-home designed by a recent student, Ayla Raymond-
Roberts, developed and drawn to a high level of detail (including fixtures and fittings) under the guidance and support of CAAHT Studio, the architecture practice Ayla is working for. Just as the potential of the micro-home is greater than the exhibit itself, the research findings of Unit Y thus far are broader, more varied, and as interesting for their challenges as their successes.

Unit Y has found a substantial body of clients—schools, churches, charitable trusts and sports clubs with land and resources—but no knowledge of how to develop them. They have demonstrated that such an office might in itself act as a kind of open consultant for such clients—with designs produced to concept stage. Davis explains that where Unit Y is beginning to deliver an ongoing and sustainable model is where, as with Ayla, the student is paired with a more established practice with some knowledge in the field. Here Unit Y might start to look less like the University of Portsmouth and more like a variant of the London School of Architecture, whose Think Tank projects develop student group projects within a working practice that aim at strategic innovation with real clients and authorities.

In this scenario, Unit Y is pointing to various different directions for such practice-based innovations in architectural schools. One is where they act as (and are paid for) a kind of flexible consultancy, drawing on their broad range of knowledge to organise ideation workshops, strategic innovations or full designs as needed, whether or not the need for a building has been identified—hopefully independent of that drive towards the building as a solution (which was so criticised by CP with his famous quote, paraphrased as ‘you don’t need an architect; you need a divorce’). After all, knowledge—and support, advice and strategy—is a university’s stock in trade.

But the other is really the opposite—for the principles of Unit Y to be a lot more selfish and do like a young practice would do: find a job and do it, repeat. And then bring in its network of experience, of knowledge of research and practice; to somehow reverse-engineer the relationship between older and younger practitioners through architectural education—
so that somehow the youngsters with the energy and
time and greater freedoms can help manifest the
extraordinary creativity and overview of people like
Davis, Ceelen and Waghorn. Perhaps a direction for Unit
Y is simply to work with some of the younger practices—
with Makers of Architecture to realise a tiny house,
or with ĀKAU in workshops—recognising the entirely
two-way exchange on which Making Ways is based.

This is not mere youth-envy. (Okay, you’ve
got me, it totally is.) It’s recognising what age,
experience and the systems we have to use are doing to
us. It’s recognising the old CP problem that architecture
(buildings, but all sorts of other stuff too) tends to
institutionalise aspects, which then, if made too solid,
too resistant to change, become restrictions. When
you’re designing principally within bureaucracy, the
ossification is in danger of happening before
anything else.

Yet Making Ways itself did reverse that,
for all of us oldies (I speak as one of the eldest)
involved with it. It pared things down to the bits we
really need, old and young alike: the chance to look
at and discuss each other’s projects—built or
institutional—and to continue that discussion beyond
the time and place in which it happened. To step out of
our day jobs and burdens and imagine, as we’re trained
to do, how things could work differently. With, because
of, all its challenges, Unit Y was the one that drove
that home the most fiercely. Placing it here, as the
working machine at the front of Making Ways, and a
driver of its enabling network, that’s exactly what it
needed to be. Making Ways is in many ways a positive
brief, a sketch, for other such events to come, and in
inventing itself to focus only on the things that are
rare and valuable—the show, the meeting, the book—
it’s sketching what we overloaded elders really need
it for.

A simpler relationship between education, research and
amazing young practice, and one that we elders can both
admire and envy, is at Hatch Workshop. Hatch did some-
thing which people may think more common than it is:
they did some award-winning research, and then built
it. At least, that may be common where Hannah Broatch
and Mason Rattray met and did their master’s research, at CEPT University in India (somehow they’d managed not to meet at Unitec in Auckland, where they both also studied), but it’s certainly rare in my own UK-based experience. (My closest parallel here is my PhD candidate Tumpa Fellows’ Women’s Health Centre in Rajapur, Bangladesh, where she did the project first, and through the RMIT PhD by Practice model (again) worked out the research, or novel ways she had done things, afterwards; and though that sounds a more obscure route, it’s in my experience more common.)

Hannah’s thesis project (for her Master of Architecture) was a remarkable study—including extensive and wonderful drawings—of labour colonies in India: the shanty-town communities for construction workers and their families on large construction projects. Some of these are camps provided by the construction companies, others self-built with scavenged materials. Mason, similarly, studied working conditions on farms in India. They then sought to build their improved and informed alternatives—unsuccessfully—until Mason, living on a farm near Delhi part-owned by relations, was told they could build there using a bit of land, some corrugated iron and any other scrap materials. And they did, in a determined, high-calibre, barebones improvisation, driving around looking for materials, and working out how to combine them and use local people’s skills on site.

This was a smallish project, developed from refinement and combinations of bamboo scaffolding, mud-construction skills, reuse of available building materials for entirely unexpected purposes, achieved
beautifully using their social and technical knowledge of the users’ needs as well as understanding of social space inside and out. It worked wonderfully and looked good too—and it was built in a state known to be ‘difficult’ to get things built in. So that when Hannah was called in by the boss of a big construction company, interested in her master’s thesis, she was in for a surprise. She wasn’t expecting the boss to have done more than look at the title. But he had printed it all out with post-it notes everywhere. He said, ‘Right, I want this and this and this and this and this. Do you think 1000 or 500 people probably to start with?’

By this time, they already had the basis of the parts that would work to generate a temporary, reusable construction kit of cheap, free and locally available materials, devised to be set up by the resident construction teams themselves and their families. They also had, through Hannah’s work, an incredibly detailed drawn analysis of how such camps were used: the gender differences, the cooking habits, the really severe security problems, the uses of inside and outside spaces, and the crucial importance of providing shaded outside areas for cooking, eating and socialising—areas that were collectively generated in the self-built colonies but painfully absent in the purpose-built ones. There were also the specifics of how these areas were used across gender divisions: if men were provided with their own specialised social space, they would then leave the shaded outside spaces for the women and children; if not, the men would take over those shaded spaces, driving the women and children back inside to a more isolated and overheated interior world. That gave Hatch Workshop a well-tested brief, and they used it.

So this beautiful, very low-cost, highly refined improvisation system accommodates a whole supported society as fully as possible. It has a network of covered open spaces for cooking. It provides cooking facilities through a bottled-gas exchange system, rather than burning scraps of wood on an open fire indoors. It has a secure nursery—utterly fundamental for working parents in a place where children go missing or are even stolen—and a playground made of painted discarded tyres. It has grouped around it, in sociable clusters, 72 rooms, which can be locked to
protect precious, scarce belongings (a determined, deliberate innovation by Hatch), and 29 toilets. Every fragment of it is argued out to get best value for the users, and it’s designed with full constructional drawings for a seven-year life—but then to be dismantled and reconstructed elsewhere.

All this developed from a really engaged and creative knowledge exchange, improvising both with what was available and with the skills—tiling, mud building, scaffolding—that were available, often used for entirely other purposes. But it is recombined and managed through a huge amount of detailing and care. I especially love one specific detail: a column made of a scaffolding pipe, secured by metal hosepipe clamps, exquisitely detailed and set out. Mies, eat your heart out. This is really good stuff.

I hesitated to mention that Hatch Workshop’s work is also, fundamentally, beautiful. Perhaps, I thought, that would sound frivolous, when you are profoundly improving people’s lives, health, children’s safety. But I think this is crucial to the success of their really astonishing work. Maybe it shows that beauty may still contain the appreciation of economy and ingenuity and fitness for purpose. Maybe it does relate to the fundamental human sense of a place where it is good to be, an immediate spatial appraisal—crossing all kinds of boundaries and divides. And of course, it helps in winning awards—which is actually quite a key factor in the structural support for schemes which come from outside the mainstream, and which, with such astonishing skill, in this case, so radically improve upon it. Prizes—themselves more or less mainstream (though NZ sound really promising30)—can be little markers in the levers we can use to share such knowledge, and like all others we need to take advantage of them. And Instagram (Hatch are good on Instagram) can help too. Human appreciation of good spaces can form part of this wider knowledge too, even—perhaps especially—through Instagram because of how much we can appraise and understand space and how it works, albeit partially, through pictures alone.
ĀKAU were the most challenging of all of the **Making Ways** practices for me to get my own head round. Partly, and initially, because so many of the key words were in te reo Māori. Even from their website, I was having to translate everything and consider the very different cultural imagination such words implied—in itself a huge learning curve—as well as the actual realities of Māori communities, way outside my experience, and totally fascinating. Kaikohe in Northland, where ĀKAU is based, is now on my go-to list, should travel to the opposite hemisphere ever become a reality again.

But ĀKAU is challenging partly also because—and this is the opposite of Hatch Workshop—the pictures don’t really convey the really remarkable way in which this essentially design-based work changes reality. ĀKAU’s work is not a photograpahable project. Again, I have the strong sense of a parallel with CP’s work. The key sense is the difficulty, the mental effort involved in imagining—trying to design, develop and then trying to describe to others—a project—a complex, multi-layered architectural project—which is not in fact building, but which nonetheless changes the way the world works and enriches experience within it.

ĀKAU started about five years ago when Ana Heremaia went back to Kaikohe in the northern North Island, where her father came from but which she, having grown up in Christchurch, didn’t know well. She says that in a very short space of time she learnt a lot about her community, and the many, many problems it faced. Ana determined design to be a means to find some solutions. She set up community-engagement projects—but Kaikohe had had a lot of those already. What it also had was the weariness of a community that had been over-consulted as to its problems and under-delivered to in terms of tangible outcomes—a legacy of promises made to them and eventually broken by people who, having done their thing, then disappeared. That was not going to happen this time.

For this is a community where people want to stay where they are, connected to their whenua and whānau. She asked her friends Felicity Brenchley and Ruby Watson to join her, and very quickly the project reshaped. It became clear that the thing to do was to get the taitamariki—the youth—involved, and to work
with them, learning from all their knowledge and potential. In particular, what worked were projects where the taitamariki were encouraged to develop what were basically creative design generative skills—to develop their own sense of a capacity for identity and change, to engage with what was there and to see it as something they could themselves creatively change. It’s teaching design (if teaching is the right word) as a form of empowerment, which—all of us who teach design know—is a two-way learning process for all of us, and this is perhaps the most remarkable outreach example of it I’ve come across. So the things ĀKAU and the taitamariki of Kaikohe make are ways of empowering a community—not necessarily through buildings, but through a range of projects where outcomes are produced including playgrounds, basketball courts, signage, flags and, recently, events.

Like Makers of Architecture, ĀKAU is a two-headed practice, a charitable not-for-profit trust to support the empowerment—and an architectural practice, which was meant to generate the income, but at the moment is only just about breaking even. This was in itself revealing, Felicity and Ana told me: they started by doing smallish projects—just the very ones that take up all your time. (That of course might work if making buildings was all you wanted to do.) But they also got a five-year philanthropic grant to get them started. And as this proceeds, they are shifting to a model where what the architectural practice offers and is paid for is the direct consultancy and workshops. These aren’t so much about showing others how to consult with Māori, but rather about how to engage a community in a design process, through an ao Māori lens. Working with the taitamariki is the key to this. Consultancy and cross-generational workshops sound like a good direction—where the payment is not for making buildings but for the real knowledge exchange involved (as it might also be for Unit Y).

ĀKAU has a long-term endgame for changing the whole environment, empowering the whole community, but there’s a rule: there have to be immediate outputs along the way. Any time they engage people they have to get something tangible out of it. These things might sound little, might not look like much—waymarkers for
walking and cycling routes around Kaikohe, flags which express people’s whakapapa or genealogies and identities. But expressed and visible identity, or visibly mapping your own territory, are not little things; they’re big things. Those things—and they’re surely more appreciable in spatial reality than in any single photo—are signs of a major shift. They make visible signs of identity, direction, place. And they demonstrate that creative human beings can do, make, build things, improve their lives.

So describing ĀKAU’s projects—a real pleasure—is essential because the single picture will never (as CP’s work always suggested) tell you the story. I would have passed by the bee-house project on the image alone. It was a school design project for boys who were opting out of the school system. Their kaupapa for the term was based around hauora or health. Turning that into a design project resulted in a bee house. To jaded old architecture teachers, that might sound pretty token. But look at these amazing drawings by eight-year-old kids—full elevation and sections, and material studies; this is amazing work. And the physical thing was then driven round the Kaikohe Christmas parade on a truck! All this, tiny as it might sound, is building a sense of a place where people are engaged in making changes, building on what they have, capable of improving the place they’re in.

The flags project is probably ĀKAU’s best-known, possibly because they have run a number of flag-making workshops. In these they ask taitamariki to collect their family identity, to make it visible in their flag designs, which are then printed and installed on the main street of Kaikohe. Teaching people how to do graphic design is the most surprising of empowerment tools. And this made ĀKAU locally famous—‘the people who make flags’. Felicity and Ana told a story about how they were employed to do a master plan—full-fee agreement signed. When they presented the scheme, including a little design for a house, the client said, ‘What’s that?’ ‘It’s a house, and you could have some houses like this. They’re flexible, you can use them in this way.’ ‘Where did you get that from?’ ‘We designed it. We’re architects.’ The client said, ‘Oh you’re architects! I had no idea.’ But that’s exactly the
point. Architects do a lot more things than other people recognise.

ĀKAU is thus having a ripple effect—one of the most amazing things about them. They’re teaching, or empowering, people to learn. They employ and pay teenage interns who themselves develop projects. One of them, Manawanui, began making a fairly simple comment about the town being very dark at night. But some time later Manawanui is project-managing _Bling Bling Toi Marama_33 her own festival of light, and sending a ripple running through the whole community. And now ĀKAU are training teachers, and others, to learn to work like this, the ripple spreads more widely. And—a tiny bit like Tirana in Albania, where the Mayor decided on a low-cost upgrade by getting everyone to paint everything in any colour they liked—everyone now talks about design in Kaikohe. It’s now top of my go-to list, should I ever get back to Aotearoa New Zealand, and I’m hoping Felicity might find me something useful to do.

If _Making Ways_ is at least as much about what it does as what it is, then what does it do? It introduces this wonderful work, of course, in all its richness, innovation and unlimited potential, to those of us well outside its immediate sphere. And that in itself is a huge thing, for that is how all designers learn, by seeing each other’s work and recognising the kinds of potential which we might be able to use ourselves in wildly different circumstances. (And in the age where architectural journalism has been replaced by

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*Poutama Fort*, drawings by young Tama from Kaikohe East School exploring the concept of hauora. The project was then built by the students with ĀKAU. 2019. Photo: ĀKAU.
Instagram, that’s no small thing.) It extends the Spatial Agency project (the defining text on alternative practices) into an overlooked local situation and reminds us that alternative practices have in fact a longer history than the current belief in such practices as ‘new’ suggests. It reminds us forcefully of the remarkable innovative powers of the young—and it more subtly acknowledges the way that design teaching itself enables, supports, generates this in part through that never-ending mutual exchange of knowledge between older and younger, and between one place and another.

But what it is seems very important to me too. *Making Ways* is a project in itself. If architecture is all about assembly—about assembling complex components into something greater and other than the sum of its parts—then *Making Ways* is a kind of architectural project in itself. It was a stage set, a semi-improvised performance, a sequence of events. It made unexpected comparisons and uncovered a few obvious structural things about the workings of design-teaching. It suggested new connections and possibilities—between Unit Y and Makers, or between Unit Y and ĀKAU. It raised new potentials for event-based publications and disseminations. It suggested loads of new projects, ideas, possibilities, which I’m busily discussing back here in lockdown London, in a world where our capacity to share and innovate between ourselves, however small and marginal our possibilities for change might seem, has never felt more important. Although the exhibition ended in October 2019, *Making Ways* doesn’t feel like it is finished; to me it feels like the start of something. Please keep it rolling.
As part of the *Making Ways* exhibition design, the translucent red curtain made a backstage area. Photo: Kathy Waghorn.
University of Auckland students using the canteen developed by Hatch Workshop. Photo: David St George.
A Fast Forward public lecture on activism and architecture as part of Making Ways. Left Kathy Waghorn, centre Julie Stout, right Lynda Simmons. Not pictured: Elizabeth Aitken Rose. Photo: David St George.
Photo: David St George.
Fast Forward is the biannual public lecture series hosted by the University of Auckland’s School of Architecture and Planning.

The series aims to foster debate, discussion and development within the disciplines of architecture, urban design and urban planning. As part of Making Ways we brought Fast Forward to Objectspace, and employed a more informal interview format.

On sequential Wednesday mornings, over coffee and pastries, each of the four practices discussed their work with an interviewer and another practice or organisation sharing similar aims or operating in overlapping spheres. And, since an hour-long interview makes for a very long text once transcribed, what follows is an edited version of each interview.
Unit Y interviewed with
Maunga: Pacific Architectural
Collective by Kathy Waghorn

Fast Forward Breakfast Series
interview hosted by Objectspace
on 18 September 2019
From left: Kathy Waghorn, Icao Tiseli, Matilda Phillips, Lusi Vete and Mike Davis, seated inside Project SML by Unit Y and Ayla Raymond Roberts. Photo: David St George.
Unit Y is a charitable trust set up to enable students, recent graduates and communities to realise architectural projects. Led by architect and University of Auckland senior lecturer Dr Mike Davis, Unit Y reinvigorates the idea of the ‘project office’—an internationally established model of an architectural office operating from a school of architecture. Unit Y validates the skills and expertise of students and recent graduates to produce critical architectural content for a range of clients.  

For Making Ways, Unit Y produced SML. A collaboration between architects Ayla Raymond-Roberts, Chris Holmes, Melanie Pau, Wade Southgate and Mike Davis, SML is a full (1:1) sized drawing of a small house Ayla designed as a final year University of Auckland student. In the context of an ongoing housing crisis, her work aimed to get New Zealanders thinking about demanding quality over quantity in their dwellings.

Unit Y intends to support the extension of Ayla’s critical agenda by building SML, and the Making Ways exhibition provided a giant step towards its realisation. The drawings, printed on fabric, showed the fullness of life the inhabitants of this small house might enjoy. A plan, two sections and two elevations defined a volume 8.4 metres long, 3.3 metres wide and 4 metres high. SML was accompanied by Ayla’s family of models of her small-house designs and a printed archive of Unit Y’s work dating from 2012.

Unit Y were joined for this interview by Maunga: Pacific Architectural Collective, formed by a group of Pacific women architecture graduates on the cusp of entering the workplace. Lusi Vete, Matilda Phillips, Icao Tiseli and Miriama Arnold (absent) address, among other issues, the lack of visible mentors for Pacific women entering the architectural profession. Kathy Waghorn, the curator of Making Ways, asked the questions.
Kathy: For the public lecture series of *Making Ways* we want to acknowledge that, while we’ve got four practices here in the exhibition, that’s not the extent of people in Aotearoa who are experimenting with practice, and so we wanted to invite others in to open up the conversation more broadly. Mike, can you start by expanding on how this exhibition we are sitting in fits in with the aims and intentions of Unit Y?

Mike: This began in 2007 with the Muriwai Surf Life Saving Club. We worked with a group of students over a semester to produce four concepts that we then put to a client. When the semester ended, we had to pass it over to a practice for them to realise. The downstream learning opportunity, in which I contend a great deal of architectural learning lies, was denied to those students who had got the project to that point. So, having pursued projects similar to Muriwai in the time since, we’ve realised that we really need a vehicle to start realising things. Unit Y Trust is modelled on the UK project office. The project office is essentially a practice that sits within the university or within a school of architecture. That’s not a viable proposition within our university, nor in most institutions worldwide as they’re becoming more and more risk averse. So we decided to set up something just outside the institution, to operate as a charitable trust. We accept the risk and at the same time, because it’s a charitable trust, we remove a substantial portion of the financial imperative. That enables us to maintain a learning-focused environment within what we’re doing.

Kathy: I might move on to asking Maunga: Pacific Architecture Collective a little bit about what prompted your formation as a collective and, now you have all graduated from architecture school, how has the collective been shaped through that move?

Lusi: We formed Maunga: Pacific Architectural Collective when we were having conversations with each other about how we saw Pacific influence in New Zealand architecture. We were looking for or to create a more critical discourse about Pacific architecture and, at the same time, to address what we saw was a huge disconnect between...
Pacific Island communities and the architectural profession.

Matilda: Having moved on from school, I think Maunga now is about supporting each other as well as students, because we all found that when we started practice we separated a bit just to experience that first step of going on your own into a practice and trying to make that work. We all have different stories of the struggles we’ve had and the lack of support we felt, not just within our practices, but in the profession in general. We don’t want to see students have that same struggle when they first get into practice, and that first year is really important in terms of keeping them in the profession.

Kathy: Making Ways as a project is interested in the ways that practices or collectives or groups have come together within the broader built-environment field, who have questioned the status quo and have decided that they want to articulate some difference from that.

Lusi: We created a manifesto with three key words when we first started off, which were foster, sustain and extend. Those three words indicate different phases, like sustaining community engagement or sustaining ourselves within our own community; and then fostering other people around us, fostering younger students and mentoring; and then extending was going out into practice and really maintaining ties and connections with people and extending that.

Matilda: I think for Pacific people, because in education it’s really rigid, and the format of how knowledge is approved or validated, it gets quite hard for us to fit that structure, or fit that format. With a manifesto, it doesn’t have a structure and you make the rules, and so you feel empowered in that way. As a tool it’s very useful.

Kathy: I can see, too, how within the studio environment at the university, you have quite a sense of allegiance, and it’s quite a precarious moment when this support network that students have had dissipates as they go out into different practices. Peggy Deamer,
Emeritus Professor from the Yale School of Architecture, has been writing a lot about how we work as a profession. She’s noticed that there are these shifts in contemporary modes of work more generally. She wonders about the future of architectural work, ‘when digital fabrication and various types of information delivery systems recast the nature of how we work, requiring an attention to the architectural knowledge held by a socially diverse panoply of contributors’.

One of the things I’ve been thinking about with *Making Ways* is all of the practices and collectives and individuals that are involved are interested in opening up this ‘panoply of contributors’ to a wider group. So, Mike, tell us about the kinds of people who’ve been coming to the university over the last few years and seeking architectural services. Why aren’t they going to the firms? Why are they coming to the university?

**Mike:** We’ve had people from significant-sized development companies approach us, and other smaller capital companies—asking ‘What’s the potential of this particular space?’—through to successful amateur museologists through to primary schools. I think the reason we’ve been approached is we have a capacity to speculate that I don’t think commercial practice is able to sustain. We investigate the potential of a project by throwing some really sharp, open minds at a problem and saying, ‘What can this be?’ We do that initially within a studio context, and then it comes out of the studio context. If it continues everybody gets paid at an agreed rate, which is indexed against what students might get paid at the university as teaching assistants for instance.

**Kathy:** I’m actually a trustee of the Unit Y Trust, and also I’ve been on the receiving end of quite a few of the emails that come to the university from various groups asking if we could work with them. We’ve had cat-rescue centres and bird-watching organisations and golf clubs, and a whole manner of organisations; and I’m interested in this idea that on the one hand they’re approaching the university because they want to get something cheap or for free, and we have conversations about that, because I know that we don’t think that students should be working for free. Then
also there’s a fine line to tread where we’re also not saying we’re doing something that practices in a commercial sense can’t do. I can imagine our colleagues and good friends in commercial practice going, ‘What is it that you can do that we can’t do?’

Mike: I presented something in the UK a couple of years ago at a conference and one of the audience members quite aggressively said essentially what we’re doing is taking work away from the practices and that we had some sort of unfair advantage. But with clients we’ve dealt with, there is no project without our involvement. Let’s just take a rugby club saying, ‘Look, we’ve got this opportunity in the form of a piece of land, and we’ve got an idea of what we want to run as a programme, but we’ve got no funds to get any sense of what that might be. We can’t go to an architect.’ Other times we’ve had people who’ve said, ‘We’ve been to architects that have given us one shot at it and charged us a lot of money,’ and we’ve said, ‘Well, that’s not what we want,’ and the relationship’s fallen apart. So, what we’ve been doing is investing at that front end.

Since 2012 we’ve had Vanessa Ceelen as a user-centred design expert involved to expand that front end and investigate what are the needs of the users which our concepts might deliver to. What we’ve found is that the work we do at that front end—from the curation of inputs into the studio through to the range of propositions the students produce—becomes material which gives projects momentum and shape that clients can then take forward to funding bodies, and the project opens up again from there. The difficulty we’ve had is having got the project to that point, often that’s the end of our involvement. So you have all that momentum, but then all the relationships that you’ve invested in are severed, and your client effectively has to start again (albeit with well-drawn ideas to start with). That’s one of the reasons projects that we worked on prior to 2017 have really struggled to get moving.

Kathy: So a lot of the organisations that have approached Unit Y and asked for some kind of engagement
are often clubs or other organisations where there are a lot of volunteers involved. There’s a lot of people giving up their time for free, wanting to get a building project off the ground, having quite different and variable expertise and knowledge within the club membership. Instead of having a relationship with a client who knows what they want and you work on the project together, the client is effectively the whole membership of the club who are all working on volunteer time and things are much more stretched. The sense of collectivism, in terms of Maunga, around your communities, do you see architectural projects happening for Pacific communities in particular spaces and in ways that are different from more regular commercial types of practice, and if not, why not?

Lusi: Just from that question, all I can think about is the building that Michael O’Sullivan did for Icao’s Church.39 This huge, amazing space with all these pigs, and just like a huge feast, and all these Tongans everywhere, very community-based.

Icao: It was all fundraised through the church. Generally, there won’t be so much architectural input in projects for our communities. The building structure and how things are put together is very different from what happens here in New Zealand; in Tonga it’s family-driven. When a building goes up, it’s someone’s family’s building, whereas in New Zealand there are so many other factors which go into making buildings and having enough money to make buildings.

Kathy: So, what you’re pointing to is something that we’ve been thinking about as we’ve been curating Making Ways, that there’s a whole lot of building regulation and building economics that work against collectives engaging in a project. So, would that be a thing that Maunga might start to figure out, how you might develop professional architectural services with different and dynamic, and I guess non-normative, structures?

Lusi: This idea of collectivism and this idea of community is so inherent to our cultures. It’s not one person who goes out and decides they want to build
something. It’s really so essential, being part of a community, because that’s how you raise money, that’s how you source people and get resources as well. I’m Tongan; we always had shipping containers at someone’s house and it’s being stacked with building materials and windows and things like that, and it’s going to be sent home [to Tonga], and then someone’s going to be building their house with all these parts that have been sourced from their family members.

Matilda: You need that collective community, and we don’t have that in practice, so we’re thinking of how are we going to eventually build something for our community, or input back as architects, not just as community members. There’s really no avenue for that, and that’s what we all struggle with. The longer we stay in practice the further away we move from our communities.

Kathy: It seems that the idea of working collectively is at the root of what you’re saying, and then the challenge is to be able to work for different organisations, different firms, different practices, but maintain a sense of the collective. So maybe what Unit Y and Maunga are doing is saying, ‘Okay, we have the registered architect practice as one structure, but we’re going to have to bend these structures, stretch them to operate in the ways we’d like to operate.’ I’ve heard Michael O’Sullivan speak about the project for your church, Icao, and I know his family was all involved in it and he was virtually on site, making things and building things with the community. That is very interesting because normatively that puts you at quite a lot of peril.

Mike: I’m pleased Michael came up. It’s part of his practice to be on site making things. He’s engaged in the drawing, in the documentation, in the setting of a vision, and then in seeing it all through on site, being present and involved. Is that part of what you do?

Lusi: That’s what we want to get to—the physical output. Our families are a bit like, ‘Oh, so where’s the house?’ It’s actually really important for our
families to see that because they’ve put us through five years of architecture school, then you start working, you don’t make so much money in the beginning. Having something to give and to contribute towards our families and towards our communities, it’s an important signal of what we are able to give to them.

Matilda: I know Icao wants to go home at some point to Tonga and start building, and I definitely want to go home and start building, but I have so little of that kind of hands-on knowledge. I’m not getting it in practice, and yet I know that’s how I actually design and work best.

Icao: I think we see ourselves going back home and investing, and when you go back to the Islands you don’t really need a degree, you don’t need to be called an architect. If you feel the spirit to build, you go build. But the reason we’re going to stick it out here is there’s quality—quality of learning, of practice and of work that we need to do and produce in order to be an example of sorts to those who come after us.

Mike: There’s a pedagogical angle to that which kind of resonates with Unit Y’s purpose. There’s no more powerful way to learn about what we do than when you draw a line, and then you build the implications of that line, and so you understand the implication of your drawing.

Kathy: That’s right, and the split between design and building is historical in a Western sense, and has been traced by architectural and design historians, but that split is something that you’re pointing to in the Islands, in your communities, that hasn’t happened.

Mike: Once you see the purpose of that split, and then the need to bridge it, you start to understand there’s work in architecture. It’s not a matter of drawing a sketch on the back of a napkin.

Matilda: Yes, Unit Y is exactly what all three of us were wanting out of university the whole time we were studying. That sort of thing where what you’re
actually studying towards that semester is a built project, and you’re engaging with people. It’s all about the mutual exchange of knowledge by engaging with your peers and your supervisor, your clients and even people beyond.

*Kathy:* What a great conversation. Thank you all very, very much for coming and sharing your thoughts this morning.
Unit Y exhibition for *Making Ways*: nine SML models by Ayla Raymond Roberts. Photo: Kathy Waghorn.
Above: Unit Y's Project SML, a 1:1 sized drawing of a small house, carefully designed by Ayla Raymond-Roberts in her final year of architectural study. Photo: Sam Hartnett.
Unit Y exhibition for *Making Ways*: model of the SML house with section drawing of this at 1:1 visible in background. Photo: Kathy Waghorn.
Detail of Unit Y exhibition for *Making Ways*: 1:1 plan drawing of the SML house. Photo: Kathy Waghorn.
āKAU interviewed with
Dr Fleur Palmer by
Lynda Simmons

Fast Forward Breakfast Series
interview hosted by Objectspace
on 25 September 2019
From left: Lynda Simmons, Fleur Palmer, Felicity Brenchley and Ana Heremaia. Photo: David St George.
Based in Kaikohe, Northland, ĀKAU, co-founded by Ana Heremaia (Ngāpuhi), Felicity Brenchley and Ruby Watson, is a design and architecture practice that places people and community at the heart of their projects, creating opportunities for youth to be involved in the design of real projects through a wānanga approach. The profits from ĀKAU Studio fund the ĀKAU Foundation, a not-for-profit trust focused around teaching young people design through a kaupapa Māori lens.

Dr Fleur Palmer (Te Rarawa, Te Aupōuri) is an architect, spatial activist and Associate Professor in the Faculty of Design and Creative Technologies at Auckland University of Technology.

Conducting this interview was Lynda Simmons, an architect and professional teaching fellow at the University of Auckland. Lynda is the co-originator, past chair and now archivist and research leader for Architecture + Women NZ.
Lynda: Firstly, before starting, I would like to acknowledge the space we’re in and this wonderful expression by ĀKAU and Dr Kathy Waghorn.

In terms of talking about your alternative practices, it seems to me that all projects have certain ingredients as well as design—we also have funding, a client and a making process. With ĀKAU, those three ingredients tend to be subverted sometimes, or made alternative to the traditional model of a client walking in the door with a fee.

Ana: Taitamariki are our client, community is our client, no matter who approaches us or whether it’s something we instigated ourselves. They’re the ones who are going to be using these community projects. If they feel part of it, if it resonates as something that’s for them, with them, then really that’s success, I guess.

Lynda: How does ĀKAU survive? How do you finance yourselves?

Felicity: We’re very fortunate to have a five-year grant from Foundation North, which is how we’ve managed to fund ourselves for the last two and a half years. Before that we had funding through the Ministry of Social Development and a couple of other small grants. We are working towards becoming financially sustainable in the long term without grant funding, although in saying that I think that the foundation itself, which does focus primarily on providing youth programmes, will be long-term government and grant funded.

We have two entities: the Foundation, which does the youth programme work, which we never get paid for other than through grants, and then we have our Studio, which is essentially a social enterprise, and that does provide architectural services that are paid for. The idea long term is that hopefully the Studio is profitable enough to support some of the work that the Foundation does.

Lynda: Fleur, what about funding for you?

Fleur: I have a position in the university as an academic, and that gives me a very privileged position
in that I have a salary. This funds the projects I’m working on because communities we are working with don’t have the pūtea, the money. They can’t necessarily afford to pay for architects to come in and work with them.

*Lynda:* So the university benefits from your work because that’s active research in the community.

*Fleur:* It works both ways. Definitely the university benefits because my research attracts research funding.

*Lynda:* I wonder if you could just both describe how the ao Māori lens operates in your practice?

*Ana:* We work on a lot of iwi and rūnanga projects. And for our taitamariki, even just engaging them in the design process is through a Māori lens. That makes it a multi-generational approach to a project, rather than having one group of people, one age group, designing.

*Lynda:* Beyond the three of you, could you describe your team?

*Ana:* We’ve got a team of facilitators who work with our taitamariki under the Foundation. We have our own design and architecture practice, and we do a two-day wānanga that we can do with groups of taitamariki to engage them in a real project. We have been doing that for our own projects, but we’re also now doing it on other architects’ projects.

*Felicity:* We had aspirations for what we could do, but actually being up North . . . there are locals there who are much more experienced in working with young people. And that’s brought this whole other level to what it is that we’re doing in terms of the ao Māori approach and the way we work.

We have a small team within the Studio itself. We have a couple of graduates working for us and then it’s the three of us who are all trained in design, so probably five people on the design side. And then we also have a couple of interns who are like our up-and-coming, budding designers who do work on
both sides. They help us with projects and project management and events and stuff like that, and they also work as facilitators, which is awesome.

**Lynda:** So the model extends way beyond the actual design project model. You’ve got the layer of the social connection, which is built into your practice structure and management.

**Felicity:** We’ve been working with Catherine Griffiths, who is a graphic designer, another professional who’s bringing in her lens. We would love the foundation to work more and wider in terms of design professionals, architecture professionals, landscape, urban design so those people can then bring in their expertise as well, and that grows the whole kaupapa.

**Lynda:** Fleur, you’re at the other end of the spectrum because you’re effectively an individual within an academic institution. Can you describe how a project would work for you in terms of who you work with?

**Fleur:** I was just going to respond to this idea of how you might embed te ao Māori into the design practice. I think the thing about being within an educational institution, the way we are educated, we are ill-equipped to work in this world. We need to be looking at the roots of the way we are educated in Aotearoa, to be grounded in indigenous thinking, and grounded in a deep respect for our planet, Papatūānuku, Ranginui, deeply grounded in our wairua, our whakapapa.

**Lynda:** I’d like to hear from you about how to bring this knowledge into the institution and what you’re doing there.

**Fleur:** It’s really important that we are working with people who don’t normally participate in the design-making process. A lot of our built environments in Aotearoa are dominated by the Western perspective and dominated by male principles. Can I say that? So, I’m really interested in how we get representation of other people into that space. Because they’ve got very specific needs that we don’t necessarily understand
if we haven’t lived that experience.

Lynda: This usually comes under the category of ‘community engagement’, which is bandied about. But nowhere in the traditional model is there space or a fee for community engagement. I wonder how you manage that, because that’s what you were just describing, I think.

Fleur: It’s a really tricky realm to be working in, because you can create false hope. And you can be exploiting communities terribly through these sorts of practices. People have to see a real outcome that works for them and empowers them. There must be real outputs.

Felicity: We completely agree with what Fleur is saying. And I think that is a major underpinning of ĀKAU around those tangible outcomes. But it’s hard. Sometimes a client wants to do it [engagement] to potentially tick boxes, and they don’t necessarily understand what we mean by a tangible outcome. We need at least some outcome, some outputs in those shorter timeframes, because often these things are long-term plans and things that no one’s going to see for a long time.

Ana: Especially our small communities up North, and probably all over New Zealand, have had so much consultation, and very little has ever been delivered. ĀKAU takes it on that we’re going to make some real stuff happen. You can have some aspirational stuff, but we really need to see it deliver something.

Lynda: Let’s segue into the making. In order to get things made you hold these workshops and there are outcomes, and they’re visible. They might be small in some cases, but they build towards a bigger one. Do you want to describe some of them?

Ana: I’ll talk about Kaikohe specifically. A little thing like this flag project is a visible thing on the main street. The kids can walk past and go, ‘Oh, that’s my flag, Mum.’ And that’s the first step in a bigger step to changing our community. This year we’re doing the Kaikohe taonga trail. So, it’s just a little bit bigger each time, and with each step we’re finding
more funding. It’s taken us five years to show the value of design, rather than, ‘Let’s just go out and build something.’ But now, every big project in Kaikohe, the kids are involved. It’s a community designed by taitamariki. I don’t know many other communities that could say that.

**Lynda:** From a project-management point of view, everything that all three of you just described doesn’t get a fee attached to it in the traditional model, so you’ve actually expanded that and created it.

**Felicity:** In saying that, we actually have been paid recently for a project where we’re doing that exact role. So, there is recognition now in the communities and there’s a big community hub building project in Kaikohe that is being designed by Opus and TOA architects. The project manager contacted us about it, and now we are involved in a paid role.

**Ana:** We don’t necessarily say that engaging taitamariki in the process should be an additional cost. It speeds up the concept design process—two days in working with the taitamariki and you’ve got the concepts.

**Felicity:** We’ve been working on some other bigger projects where we have a decent concept-design fee, and we do spend all that time working with young people in that concept design, but it means that the rest of the concept design goes so much quicker. We’ve found that it’s just as profitable as if it was just me and Maia [Ratana]⁴¹ going out and trying to do the concept design without their input. We believe it works.

**Lynda:** To extend that making question to you, Fleur, your making is moving more into areas of policy rather than physical product?

**Fleur:** Yes. I shift all the time. When I started out in my twenties, I thought you could resolve this problem purely through design. When I did my PhD, I thought that you could resolve that through really powerful community engagement. I think community engagement is absolutely critical. But we are facing such tricky
problems now with climate change, the displacement of our communities, huge land loss for whānau in the North, that we can act much more strategically trying to advocate for policy change within our district councils so that they are more active in supporting our communities.

**Lynda:** Te Aranga design principles are now embedded in Council design guides.\(^4^2\) We’ve had Te Kawenata o Rata signed between the NZIA and Ngā Aho.\(^4^3\) I wonder if you could all just comment about those steps forward and how they’re having an effect on your own practices, or practices that you’ve seen around, whether it be positive or negative.

**Ana:** I know of the design principles. I think it’s a great first step. It’s always in the implementation I guess is where it’s difficult.

**Felicity:** It’s obviously there in the background, but we’re not necessarily referring consciously to those things.

**Lynda:** And, Fleur, I know that you teach the principles in your courses. I wonder if that’s helping?

**Fleur:** Having been educated in a very Western system, I had to relearn everything about the way I practised. And I’ve found the Te Aranga guidelines quite a useful starting point. They have been 20 years in development by Ngā Aho. It’s a nationwide group of designers and practitioners looking at how they might make visible te ao Māori within our environments—how we might be recognising and respecting tikanga Māori all the way through our teaching practice and our design practice.

**Ana:** Also, when we’re engaging taitamariki, no matter whether we’re working for Te Rarawa or if it’s a Ngāpuhi project, they’re experts in their own right on these things. We’re not actually saying we’re the experts on this; we’re facilitating a process for them to lead their way and design with their own principles about how their project should be rolled out.
Lynda: We need more of you, and I wish there were more of you. How can your practice model, for example, be replicated?

Ana: Well, we definitely think there’s the opportunity to scale the impact. The way we’re looking at doing so is through projects. But we’re also really passionate about the education model and getting all of our taitamariki thinking like designers. We’re developing a programme that we’re hoping to roll out to train teachers to be able to do it within their own classrooms. That’s the next step, and who knows from there.

Felicity: I think when you start something, it’s important to consider your values-based approach rather than just what you’re wanting to produce. You don’t have to set up a foundation that does youth programmes to have a positive impact. It can be sustainability; it can be all sorts of things . . .

Fleur: It’s interesting in terms of Māori and Pasifika practitioners, we’ve got very small numbers within our universities. The government has just funded academics within this space, but we are finding it difficult to attract the numbers. I think the opportunity to grow these areas is through stronger outreach links. With the communities I work with, if you are on $16,000 a year trying to survive with your family, it’s almost impossible to send your tamariki to a place like Auckland to become an architect and afford the accommodation. The institutions need to be doing more outreach, off-site programmes, up in these remote areas.

Ana: Not a lot of our taitamariki up North want to move to Tāmaki Makaurau/Auckland. Whānau is everything for them; they don’t want to leave home.

Fleur: We’ve got other real structural issues. A lot of our tamariki have to leave home once they turn eighteen, and if they’ve got no work at home, they have to move out of their communities. In our communities up in the North, there are not a lot of alternatives apart from being a farmer, working in forestry or bee-keeping.
Lynda: So, all of you are using the education model to have an effect on that, it feels. Are there any questions from the audience?

Audience member one: It's more of an encouraging comment. I'm from the secondary-education sector, specifically technology and design, and one of the big issues that I am experiencing is getting the kids to you. Especially in a staffing crisis. The kids are amazing, but now we're getting to a point where they can't do the course that gets them into university because we can't staff it. So the further your tendrils can reach the better.

Fleur: It does take careful planning, but what is amazing with these wānanga is you can achieve outputs that would take weeks to generate. And we can get kids with a portfolio developed within a very fast timeframe.

Ana: I totally agree. Some of the taitamariki we work with, even some of the seven- and eight-year-olds, they're really doing design work that we did in the first year of uni. I think the earlier we can show our young people design is a real thing, it's a real profession, then we're keeping their creativity open as long as possible.

Audience member one: Because it's very hard to convince a lot of people that the design-focused subjects you're teaching are as valuable as maths.

Ana: We're not saying all the kids should go be a graphic designer or an architect. It's a way of thinking that's problem-solving and coming up with creative ideas while at the same time helping your community.

Felicity: And it's really the future of work for humans. All those other roles, potentially machines will do them. But we are the ones that have those creative thoughts, and so fostering that in young people is so critical.

Lynda: I've got time for one more question.
Audience member two: So how can somebody like me, a sole practitioner, support what you do?

Felicity: Essentially what we’re trying to do is build a network of professionals who are interested in being active in their communities. You might open your studio up so young people could understand a bit more about what it means to be a practising architect. And there’s a lot of community projects, clients that don’t have access to a designer, an architect, or whatever the skill set is. We’re doing a lot of that ourselves, but we’re at capacity. We might need someone to help with delivering on that.

Fleur: As a profession, we don’t do a lot of pro-bono work in our practices. Lawyers do it, dentists do it, doctors do it a lot. In terms of doing things like collaborating on wānanga, one of the things we really need is facilitators. If you’re interested, let us know. We can really use you.
During *Making Ways*, ĀKAU converted Objectspace into a wānanga where they hosted a rōpu of rangatahi from Taiohi Whai Oranga in Manurewa. Together they developed design ideas for a mobile coffee bar which will promote te reo Māori. Photo: Kathy Waghorn.
Manawanui Uruoa, a design intern at ĀKAU, shares her vision for *Bling Bling Toi Marama*, a festival of light for Kaikohe, realised in 2020. Photo: David St George.
A visitor to Making Ways views work by ÅKAU. Photo: David St George.
A rōpu of rangatahi from Taiohi Whai Oranga in Manurewa take part in a wānanga with ĀKAU. Photo: Kathy Waghorn.
Ana Heremaia, one of the founders of ĀKAU, introduces a discussion on their kaupapa and mahi. Photo: David St George.
Makers of Architecture
interviewed with Dr Andrew Barrie by Patrick Loo

Fast Forward Breakfast Series
interview hosted by Objectspace
on 2 October 2019
From left: Andrew Barrie, Beth Cameron, Jae Warrander and Patrick Loo.
Photo: Makers of Architecture.
Based in Wellington, Makers of Architecture engage in design-making using mass-customisation technologies. They set out to close the gap between architecture and building by establishing Makers Fabrication, a prefabrication and construction company developing projects throughout New Zealand, including New Zealand’s first house produced using CLT, BIM and CNC. The two Makers companies work in collaboration with the design, university and architectural research communities to build, test, iterate, prototype and develop potential through digitally aided architectural design and build-manufacturing processes. This allows Makers to optimise design, planning, budgeting, timing, material use and construction methods while delivering to client, programme and site.

Dr Andrew Barrie is a Professor of Design at the University of Auckland. After completing his doctoral studies in Japan, Andrew spent several years working as a project architect in the office of Toyo Ito, one of Japan’s most innovative architects. On returning to New Zealand he worked with Cheshire Architects in Auckland, later joining the University of Auckland and establishing Andrew Barrie Lab. Andrew’s own design work has won numerous awards in both New Zealand and Japan and has been exhibited in both countries. This includes the Cathedral Grammar Junior School in Christchurch, made in collaboration with Tezuka Architects.

Patrick Loo is the co-founder of Common Space, which was established as a creative platform to develop projects that contribute positively to the physical and social environment around them. Patrick is a registered architect and was a Senior Associate at Jasmax before working with PAC Studio and Monk Mackenzie, focusing on residential work. Patrick’s long-term interest is in how creative industries can strengthen and reposition themselves in an age of exponential change by incorporating strategies and processes from the technology and science sectors. Patrick has recently completed a thesis in this area as part of a Masters of Commercialisation at the University of Auckland Centre for Innovation and Entrepreneurship.
Patrick: It would be great to hear about your individual practices—how you got started, what are the things that have influenced you, and how have they shaped the kind of practice you are trying to achieve?

Beth: We started from university research originally, with a project which was completely digitally fabricated using cross-laminated timber panels and CNC-fabricated cassettes. It was founded on the idea that, with the technology we were using in architectural design having so much information embedded in it, why couldn’t we use it to inform the production of the building and manufacturing process? That’s where our practice began. That particular project and approach generated a lot of interest, and from there we continued to build the practice and then founded Makers Fabrication, the construction company. This was originally seen as a facility for the architectural community and us to continue design research for manufacturing, because the facilities weren’t there for us to continue in the direction we were heading.

Patrick: How does that relate to the exhibition we have behind us?

Jae: We have a video playing which is the process from design through to a complete building. It looks at prefabrication using digital tools, taking the information we put into the BIM model and how it can be extracted, and then produced accurately in a controlled environment like a warehouse. Then it goes through the site construction, which is quite quick, ending with a finished product. The other side is the environments. Our practice does not seek to replicate the same product every time but to respond to different environments. In the exhibit, the panels moving and responding to each other is reflective of that.

Beth: It’s indicative of what we call a parametric relationship—if you interact with one side, it affects the entire system. We created this as an assembly of parts, a dynamic space that could be manipulated.

Patrick: Andrew, how about yourself?
Andrew: My thinking about practice goes back to my days as a student. Back then, most of our heroes straddled the academic-professional boundary. People like Daniel Libeskind, Rem Koolhaas and Peter Eisenman were able to operate in a number of different modes and moved easily across those boundaries—people taught, did exhibitions, wrote books and made buildings. When I completed my training, I just assumed that was how I should do it—establish a practice and do some teaching as a way to keep the wolf from my door. In the meantime though, changes in the way universities operate meant that the idea of the academic who made buildings quite suddenly dissipated. That created the situation where almost all of our architecture school teachers were full-time academics. Compared with the rest of the world, this was unusual. When I started at the university, the opportunity in front of me was to try to resurrect that old model.

Patrick: And how is it looking now?

Andrew: The needle seems to be moving back to the middle. At the University of Auckland these days, academics have a portion of time set aside for research, and it’s possible to make buildings with that time as what is called ‘creative practice research’. The metrics are still a bit challenging though, in terms of what qualifies as legitimate research and what doesn’t. The most effective way for design to be recognised as legitimate research is for it to win an award. But doing a project in the hope that it’ll win an award is really rolling the dice.

Patrick: The thing that was interesting about the people you brought up before was that they were really good at communicating architecture, especially to the general public. Beth and Jae, how do you distill what are very complex processes and ideas? Is that something you work on?

Jae: Business is a lot to do with marketing, making sure clients understand what you are doing. So, we spend a lot of time boiling that down, and working out how we want to communicate it. We are six years on, and
we’ve learnt along the way, but our core intention and our message has remained stable.

*Patrick:* Andrew, in terms of your practice, is there something you are really going after to achieve, or is it something that you are continually reassessing?

*Andrew:* The question for me at the moment is about long-term sustainability. Although we have research time allowed at the university, it’s nowhere near enough to run architecture projects. So I do a lot of nights and weekends. I’m okay with that for now, but the challenge is how to establish a model for creative practice research. I was discussing this with a colleague, who said what I’ve been doing is not really a model if no one else is crazy enough to follow it! Different kinds of projects have vastly different economics. In economic terms, writing a book is a disaster. That’s why most books are written by academics, or by retirees who have time on their hands. I’m really interested to hear from Makers [of Architecture]; they are working in several different modes and must have different economic models or profit generators or control points across their projects.

*Beth:* Over the time we have been doing this, we have shifted into different modes as we have been confronted by some massive challenges—some come up as financial, practical, design problem-solving. We have learnt that we can’t do everything ourselves. It’s really important to get in experts in various areas to generate momentum and take our thinking and methods in a direction that will be beneficial to not just us, but a lot of architects and designers.

*Patrick:* You started out with Makers of Architecture, and then a few years in realised you needed to start Makers Fabrication to achieve the results you were looking for. Can you explain how you got to that point and why you needed to formalise the two sides?

*Beth:* We formalised into two separate companies for many reasons—liability and insurance reasons, and reasons like creating opportunities to work collaborat-
ively with other people, as a mode of practice, and to allow us to work on more diverse, larger types of projects.

Jae: We realised that having just an architecture company and pushing to get things built the way you think the New Zealand construction industry needs to move is hard. You don’t have much control over anything really. To practise the way we wanted to, we needed a partner we could have some influence over. We needed to start our own thing.

Beth: It was also about being able to iterate; to be able to get design development working, you need a facility that constantly allows you to test and improve. If we had to pay someone with a CNC mill to test our designs, it would have become incredibly unaffordable. And we wouldn’t learn in the way that we have done by having that direct connection and ability to go there and test and develop and prototype.

Patrick: When a client comes to you, how do you explain how the two sides of the business work together, and are most people receptive to that?

Beth: A lot of clients approach us because of that connection between construction and design. They like the idea that we can deliver projects time-efficiently, but also resource-efficiently. Using the models we are designing, we can extract data from them so that procurement and material quantities can be optimised, efficiencies are created, waste is reduced. So we touch on ideas of sustainability and resilience. They are things that matter to our clients.

Jae: And great design.

Beth: Design is at the front in every project. The technology is a tool.

Patrick: With prefabrication and manufacturing off site, using systems is advantageous, but can also constrain creativity. How do you balance the two?
Jae: That’s a real challenge. We are trying to make sure there is less guesswork about what’s going on, so that something that is complex, yet beautiful and beneficial to the project, can be resolved beforehand, rather than value-engineered to the point where you can’t face building it. That’s the problem we are trying to solve.

Andrew: In recent years, the models for generating innovation in business are either the tech start-up supported by angel investors (and so able to sustain losses over a period of time), or to have a large entity in the background propping the project up. You guys don’t have either. How do you make small-scale and technological innovation fit together?

Jae: Bite-sized research. We have talked about getting an angel investor, but by doing it in small steps we get much more feedback and information into the architecture practice. It’s both how we are designing as well as how we are building. There are international practices out there doing this, but it’s 500 or 2000 houses a year. That’s just not New Zealand, which might be five houses a year.

Beth: Being quite agile in how we are researching and developing is really important. One risk of large-scale investment is that the innovation gets stunted because you have to become a mass producer. Ours might not be the smartest financial decision but we have had some research students and Callaghan Innovation on board to support our research, so we have been lucky.

Andrew: I wouldn’t be surprised to see a headline saying ‘Makers sold to G.J. Gardner for $100 million’. Is that a possibility?

Jae: It’s not the intention. Essentially, if we can crack this pipeline then we might be able to let that happen in satellites across New Zealand. That’s how most people are working. We have lots of little builders and lots of little architects. If we can join them together then we can create some great architecture that can be more accessible to more people.
Patrick: If you could be an architecture company, a construction company or a technology company, and you had to choose one, which would you be?

Jae: Trying to split it up is part of the issue. The industry is fragmenting. We are trying to bring it back together and have the ability to make great decisions based on research.

Patrick: Sounds like each of you are working with a wide range of people and networks and collaborating in your own individual way. Andrew, for example, your relationships in Japan—how did that come about, how do you maintain those relationships and draw on them?

Andrew: It’s a bit random. You are limited by what you get asked to do. The projects I’ve done have come about by people saying, ‘I need your help with this,’ and me saying, ‘Yes.’ I’ve been willing to use what skills or experience or connections I’ve got and play that out. It seems to me that with design you are always working at the edge of your experience.

Beth: It’s the same with us.

Patrick: Saying that you are always on the edge of your competency or capacity, is that because you are always trying to create something new?

Andrew: Yes, There are a bunch of ideas I’m keen to explore that came out of my experience in Japan. There’s a line of exploration I’m keen on—using timber in innovative ways, including repetitive timber structures, and creating complex systems that are made up of simple things. For me, working on one project at a time is enough. I don’t have the energy for a back office. My ambition at present is to do a little with a lot of control, working with interesting people, and producing results that are good.

Patrick: Does that mean you are turning away a lot of work?

Andrew: As I figure things out, I’m trying to do just
one or two things at a time. I have to think about whether that’s sustainable over time. The innovation I was part of in Japan was in part sustained by youngsters on internships. I’m still trying to find a New Zealand way to reconcile innovation and smallness. We need to figure out how to work on projects that are essentially uneconomic. Who bears that burden? In many parts of the world, it’s the youngest people in the offices.

*Patrick:* Something I learnt when working with you was the idea of flat hierarchy in the office in terms of ways that new ideas can be generated. Is that something you would like to bring into your work?

*Andrew:* Yes, it’s the principle of following ideas, no matter where they come from. Most offices follow people—usually the boss—and it takes a measure of humility for them to align a project with an idea that might have come from the most junior person on the team.

*Patrick:* Beth and Jae, you collaborate with several different offices and I am interested to hear how this works for you?

*Jae:* We have had incredible support starting out, from the architecture community first. We didn’t have any systems or templates so started from scratch, but we did have a lot of people saying, ‘Well, did you think about doing it like this?’ Then in terms of collaboration, as soon as we knew Makers Fabrication was going to be a thing, that was an opportunity for us to collaborate with architects like Tennent Brown, Athfields, Studio Pacific. It crosses over to Makers of Architecture supporting that pipeline roll through to fabrication and output to send to the main contractor, or actually tendering directly for the job and producing the building. There is so much to learn from our collaborators. They will often be working on a larger project like an airport or a library so you can pick their brains about how the contract works for example.

*Patrick:* So, it works both ways?
Jae: Yes, it's really exciting; they have respect for us and we have respect for them.

Audience member one: Can you see your way of practising taking you to do a larger scale of building, and is that something that interests you?

Beth: Yes. The embedded technology we are using in small-scale projects is usually used in large-scale projects. As a system it is transferrable, almost scaleless. Hopefully we will be able to continue to work on different scales and really explore the capabilities of what we are working with, test it a bit further.

Audience member two: Right back to the beginning, how did you fund Makers Fabrication in the first place, coming straight out of university?

Jae: Bank loan, mortgaged part of the house, put it all on the line. We were extremely passionate about what we wanted to achieve, and years later we may think, Wow, we really did that?! And to be fair, we didn't pay ourselves for many years, and then very little for a long time. We didn't have a whole family to feed. It was the right time for four of us to all work on something.

Patrick: That's time up. Thank you all.
The entry to *Making Ways* in the third-week installment by Makers of Architecture. Photo: Kathy Waghorn.
Making Ways installation by Makers of Architecture.

Photo: Makers of Architecture.
3D printed model by Makers of Architecture as part of their *Making Ways* exhibition. Photo: Kathy Waghorn.
Hatch Workshop interviewed with Kathy Waghorn by Kester Rattenbury

Fast Forward Breakfast Series interview hosted by Objectspace on 9 October 2019
From left: Kathy Waghorn, Mason Rattray, Hannah Broatch, Kester Rattenbury. Photo: Objectspace.
Hatch Workshop (Hannah Broatch and Mason Rattray) is a research and design partnership from New Zealand, currently working in India, specialising in socially focused schemes for migrant populations. As a design–build duo, Hatch partners with local craftspeople and workers, with the intention of improving the quality of housing and associated amenities through appropriate incremental interventions. Their goal is to bring dignity to the conditions of overlooked transient citizens.

Hannah and Mason studied architecture at Unitec in Auckland, and as part of their studies undertook an exchange to CEPT University in Ahmedabad, India. This began their research into the living conditions of migrant workers. Hatch has subsequently completed two built projects in India developed from their final-year student projects. The first provides accommodation for workers on a dairy farm near Delhi, while the second—the Nebula Labour Colony, a realisation of Hannah’s award-winning thesis project—provides accommodation for up to 500 temporary migrant construction labourers in Ahmedabad.

For Making Ways Hatch wanted to show how they foreground social concerns and social activities in their work. Furnishing Objectspace as a workers’ canteen, serving hot drinks and biscuits, was a nod to this crucial social space that Hatch have included in both their built works. Around the canteen hung panels of text and drawings explaining their projects.

Hatch were interviewed by Kester Rattenbury, with Kathy Waghorn (the curator of Making Ways) also joining the conversation.
Kester: So, Hannah and Mason, do you want to tell us how you got started?

Hannah: The projects we have completed in India were taken from a combination of both of our master’s research projects developed from our exchanges with CEPT University. I went on two exchanges, one in my fourth year and then one in my final master’s year. Mason was there at the same time. We were doing internships or working; Mason worked for B.V. Doshi while I was finishing school. When I graduated, I went to work in an office in Ahmedabad, a really amazing office, but quite quickly realised—after I’d spent eighteen months researching labour colonies—I felt that working in an architecture office on high-end residential projects just wasn’t what I wanted to do. So I quit my job and I went to visit Mason, who was staying on a dairy farm in India, which is part-owned by his father who is an international dairy expert—

Kester: Oh wow.

Hannah: Yes. So he partly owns this dairy farm outside of Delhi.

Mason: I think we were kind of there just helping design a toilet for a while. Just kind of lending a hand.

Hannah: Yeah, kind of figuring out after graduation like, What are we going to do now?

Mason: But this dairy farm is in an area where Delhi is just expanding right past it. So there’s these giant skyscrapers going up all around this farmland. And I think we thought we would try to build a pilot of Hannah’s project on one of these construction sites. We were going past them every day and we just started trying to meet people and see if we could make something happen.

Hannah: Deepak, who owns the farm where Mason was staying, has some contacts in the local area and we went around with him to talk to some contractors and developers and they kind of just looked at us like,
‘Yeah, just not possible.’ So Deepak very generously said, ‘Why not just build it here on the farm? We really urgently need more accommodation. There’s some scrap materials you guys can use.’ And of course we needed much more material than that, but that’s how it started—somebody just saying, ‘Why not?’

Kester: Amazing. And you said that this particular state was actually a very tough place to get things built. How did you deal with all the legalities and the legislation and stuff like that? Because it sounds like you just started building but that’s obviously not the case.

Mason: That’s not the tricky thing though. There are no legalities or legislation—

Hannah: There is.

Mason: Well, there is, but they’re not fixed. So, typically, you build it first and just later on pay someone to . . . No joke, it’s how things work there. For the duration of the project we stayed next door on a wedding farm. It was built as a kind of party plot to have wedding events on. It was classified as a dairy farm to allow it to be built.

Hannah: It’s quite hard to kind of explain that typology here—a wedding farm.

Mason: But the trickier thing is just dealing with relationships, as the way things work there are very different. You always try to do things through a connection, and learning that for us was quite tricky in some ways because sometimes we could see if we just went down to a different store, we could get the material and it would be cheaper and it would be great and it’d be fast. But if we did that, not through Deepak . . .

Hannah: It would be disrespecting the relationship and that kind of thing.

Mason: And then cause tensions that overall made the project take longer.
Kester: Did you find this out the hard way?

Hannah: Yes! Well, our friends in India tell us that it's known to be the toughest state for gender and caste discrimination and there's a stereotype about people from Haryana being really tough. Apparently, we did things the really hard way to start with, so everything after that was supposed to be easy.

Kester: Maybe it's good not knowing too much about the difficulties in advance.

Hannah: Definitely. I think so. We documented the process on Instagram, which was really important for us in that it helped us get to the second [project]. We started uploading photos and adding little captions, which ended up being the perfect amount of information for people to take in. So, while we were doing that, I didn't know, but there was a developer who had googled 'housing for construction workers' because he wanted to house his construction workers, and that was the title of my thesis.

Kester: So, he found it?

Hannah: Yes, it turned out to be a really good title! He found it and he also saw our Instagram page and saw that we were foreigners, but we could get something built in Haryana and he was really impressed. So yeah, he contacted us, and we went and met him . . .

Kester: You have to expand on that story!

Hannah: Okay! I studied building construction sites in India as part of my thesis field research and I was quite critical of the conditions that the workers were living in, but I was always a bit worried about being critical. But then I thought, No one's going to read it, and I went on with it. But, coincidentally the development company that contacted us also owned one of the sites that I had studied for eighteen months and was critical of. Anyway, having been repeatedly contacted by the developer's personal assistant, I finally decided to go out and meet him. We went out
to his office and he had printed off my thesis document, the whole thing, and put post-it notes all through it. And he was like, 'I love it. You guys can do this for us if you want to.' They said they had 10,000 workers that needed housing across many sites in Ahmedabad and building sites in Chennai too that they needed housing for. They said, 'If this is something that you guys want to do, for a good ten or more years, we've got projects to keep you going.' So that was just an incredible opportunity that I think a lot of graduates would be so happy to have, somebody saying, 'I want to be a patron for the work that you do.'

Kester: Are you going to do more work for them?

Hannah: Well, no.

Mason: We hope they don’t need us anymore. I mean, we’ve done the one pilot project and we recently visited it after being away for a year, and they’re very proud of it. They’re telling us about all the benefits of it and how it works. We can see they really understand the benefits, that it’s a credit to them.

Hannah: We left them with all the plans and everything so that they could replicate it themselves if they want to, or hopefully improve on it.

Mason: Essentially, before we came in and did our project, there wasn’t anything between self-build squatter accommodation and brick-and-mortar housing. So we’re coming in with this thing that sits somewhere in the middle, but it’s specific to labour colonies. We give guidelines around where toilets should be, how drainage could overall work—these massively important things that an architect can quickly introduce but to large effect. And they can be repeated across all their projects.

Hannah: I think what’s really exciting is the conversation about the exploitation of migrants, particularly in the construction industry. In India, the migrant labour construction force I think is about 200 million people so exploitation is a huge, huge problem.
Mason: The biggest informal industry.

Hannah: When I started it was really hard to find information about this. I thought, Just create a conversation. I never actually thought I would end up getting anything built, but building is what’s creating conversations. When we went back to India about a month ago and we visited our projects, we met about five different local Indian organisations that have taken construction-worker housing up as a topic. So, we’re happy and excited that there are really amazing NGOs and government organisations and development companies that are doing this now, and there’s a network of us that support one another.

Mason: It’s ultimately one of the most successful things. We really hoped that, by creating one model for a development company, other companies would see it and realise it would be good for them too.

Hannah: Of the groups that we know about there are five in Delhi and Bangalore and they’re using our project as a precedent study.

Kester: Fantastic.

Hannah: Yeah. I mean, it’s not to say that our project is perfect, but it’s something to talk about. It’s like something to say, ‘We could improve on this or that.’

Kathy: One of the things you’ve talked a bit about, Kester, and that’s come up through the four practices in Making Ways, is a slightly shifting idea of intellectual property. So, Hatch, you’re documenting things really thoroughly and making that available, so that anybody who is in that field can pick up the ideas and adapt them. Similarly, Makers of Architecture are trying to shift fabrication through their use of parametric technology, but also making this available to other architects and practitioners through their Makers Fabrication arm. And ÅKAU are now acting as consultants for other practices and projects. They are lifting up the status of doing that kind of work, and the visibility of doing that kind of work, and they’re bringing
their practice to other practices, and into other organisations as well. Then the project that Unit Y made for Making Ways—a 1:1 scale small house—came out of Ayla Raymond-Roberts’s thesis project, which has been published, with the idea to build it with partners and collaborators as a demonstration of this idea. So, I think one of the things that’s coming through really clearly in Making Ways is the desire not to just develop knowledge and practice, but a desire to take knowledge and share it on open platforms.

Mason: We had a really great time meeting other people, starting to try and piece together a community, and we like how that’s happening here at Making Ways. I think one of the best things for us is to meet other people and understand how they are making it work, not just with the work itself, but how they’re sustaining themselves—

Hannah: Financially, what their financial models are.

Mason: Yeah, and then understand what our financial model is more, so that we can help other people do similar things as well.

Kester: What do you think your financial model is?

Hannah: Well, yeah! [Laughs.] We actually did get paid for our last project in India. We got paid a monthly salary as project managers, and an architect’s fee on top of that as well.

Mason: We got paid well in India for a year, so that was good. But I think we’re still working that out. I mean, we’ve done the two projects in India and it’s hard for us because we’re coming back and forth. So when we are back in New Zealand, we kind of sustain off rupee savings that we earned over in India and we do a variety of other things, which I think is actually quite useful to us in some ways; I do set-design and between films we actually do certain things with homeware.

Kester: What sort of things?
Hannah: My mother has a small homeware business and we help her part-time.

Mason: And we are teaching. So, between academia, film, homeware—these are great little side breaks that I think are always kind of enjoyable before going back and doing something like our projects in India that are honestly quite draining. But we’re at this point right now where we’re looking back at what we’ve done so far and trying to work out how that’s going to work for future projects.

Hannah: It’s really important for us that we always like and are interested in the work we’re involved in. It’s not aid work; we’re working for companies that want to take a position of corporate social responsibility with their workforce. We don’t want to get grants and aid money because we want the companies to pay for it.

Mason: And we want other people to know that the companies built it themselves.

Hannah: And also for the companies to have ownership over it. We had a few friends come over and help maybe for two weeks or three weeks at a time. But it was really important not to have a team of foreigners coming over and building it, so we had local people in the company that were really running it. And going forward, that’s something that’s really important for us to keep doing.

Mason: And a lot of the conversations that we’ll have while we’re working there are about what can be solved by design in the first instance, and then what needs to be taken over by maintenance or management or education. Usually we will say, as designers, the more you can do with design, the better the project will be. But it’s impossible to solve everything through design alone. Inevitably there is a need for maintenance and management to be sustainable, and that can only be managed by people in the community who understand and believe in the project.
Kester: We are past our deadline—it’s been an absolute pleasure talking to both of you and thank you very much.
The Hatch Workshop canteen as part of Making Ways.

Photo: David St. George.
The Hatch Workshop canteen was surrounded by a small forest of native plants. Photo: David St George.
The Hatch Workshop canteen included a busy wall for children, also a feature of one of their projects in India. Photo: David St George.
Hatch Workshop at Making Ways. Photo: David St George.
Around the canteen, images and drawings of Hatch Workshop’s two projects in India could be viewed. Photo: David St George.
Implements in the canteen (by Petley, friend of Hatch Workshop). Photo: David St George.
Looking Backwards to Look Forwards

Locating alternative practice in Aotearoa New Zealand
The exhibition *Making Ways* set out to develop a platform for discussion about ‘alternative’ ways of practising architecture in Aotearoa New Zealand. In curating this exhibition we wanted to highlight a snapshot of a diversity of practice, however tentative, that is happening now, at this point in time. We both teach in architecture schools, where we observe the trajectory of final-year architecture students and new graduates. In their final-year self-directed research projects, students are beginning to ask questions about their future practice, with some (by no means the majority, but a significant group) using that platform to establish certain personal and ethical positions with regard to their future careers. Some of these questions are prompted by their circumstances, such as the opportunities presented by the rebuild of post-earthquake Christchurch, or by new technology, including their desire to realise the promise of the new digital tools they have explored in their studies. Frequently students are motivated by the really big and pressing questions of the climate emergency and the difficulties and responsibilities this poses for the design of buildings. Also, like young New Zealand-based practices Hatch Workshop and MAU Studio, new graduates increasingly see themselves as global citizens, educated in Aotearoa, but focused on architecture as a field to support social equity both at home and internationally. Some students form supportive cohorts, germinating manifestos setting out their intentions for practice where there are few well-trodden paths to follow, such as establishing a practice with values and knowledge rooted in te ao Māori, as ĀKAU do, or establishing oneself as a diasporic Pacific woman architect living in Tāmaki Makaurau while strongly connected to whānau both here and in the Islands.

These urgent and important questions are increasingly motivating new graduates as they set out their aspirations for careers rooted in their identity, ethics and politics. However, when we look to the practices that they might join, it seems that the diversity of pathways and concerns they represent is not fully reflected in the current make-up of our industry. In the introduction to this book we have already outlined the ways in which architectural practice is currently
shaped in Aotearoa New Zealand, with the result seeming to be quite a narrow field in which practice operates. In the *Making Ways* exhibition we highlighted four emergent practices going about things differently, shaping their work around consideration of how architecture is made, for who and by who. In their exploration of alternatives to capitalism, the feminist economists J.K. Gibson-Graham point to the difficulty of imagining economic structures other than the norm, when the norm seems all-consuming and pervasive. Their task, as they see it, is bringing ‘thinking into action around the economy by creating alternative discourses that will help people perform new worlds’. In our *Making Ways* task of seeking alternative modes of architectural practice we have followed this same tactic. In our pursuit of alternatives we also feel sure there must be good examples of alternative modes of practice that have been tried at different times in the past, and that exploring these might prove productive, providing local exemplars for imagining how to *perform* a more diverse architectural community and industry.

In this research then, we are looking backwards to look forwards, hoping to locate historical instances or movements towards alternative practice in Aotearoa New Zealand. We have not set out to make an overarching study. Instead, in this essay we are locating and drawing out some experiences and knowledge that, while documented in some forms, has not been drawn together with the aim of providing a discourse on the alternative. A further disclaimer is therefore required here: we do not research and write from the perspective of architectural historians. We openly admit coming to this project with a bias; like Gibson-Graham we are in the business of seeking out useful exemplars, rather than setting out an authoritative and complete record. Through this project we hope to identify certain motivations for modes of practice in Aotearoa New Zealand, and we aim to understand some of the forms alternative practice has taken, considering aspects such as financing and workplace organisational structures, relationships to extended client bodies and to the work of construction. We are particularly interested in locating a range of ways of doing architecture—that is, finding out how
Our research has thus far taken two forms. We began with a survey of the published record, reviewing the professional journals (the NZIA Journal, NZ Architect and Architecture NZ) covering the period from 1970 to 2020. We have initially chosen the relatively recent past, knowing that there are of course many notable exemplars to be found earlier. We felt that the trajectory from the counterculture movements of the 1960s, which explored the alternative as its raison d'être, through the identity politics and resistance movements of the 1970s and the Māori renaissance of the early 1980s, to the neoliberal political turn and into late capitalism would make a good place to start, and could help position the impetus of contemporary alternative practices such as those featured in Making Ways. Earlier issues of these journals often document the practices themselves, their organisational structures and motivations, and include critical commentary on the architectural industry as a whole. Later journal issues however are in the main more focused on the publication of individual buildings. Since the late 1980s, unless a practice was featured in a rare practice profile, from these journals it is difficult to know about the financial or workplace structures of offices; the ethics and politics of architects are also rarely discussed. Relationships with clients and building contractors can at times be discerned, with articles sometimes including information on the client (if the client was a family member or a community) and who undertook the construction (if this was the architect, the whānau or a community). One limitation of our project is that the journals we looked at only operate as publication platforms for (and thus record the work of) registered architects; those carrying out architectural work but not legally defined as architects are not included in these publications. A further gap is that these journals cannot tell us about architects working in the expanded field—applying their architectural knowledge in the design of landscapes, urban spaces and urban processes;
academic and historical research, teaching and publishing; in governance, advocacy, social practice, policy-making and planning. And here an inevitable gender bias lurks as Sarah Treadwell and Lucy Treep link this expansion of the field of architecture to women trained in architecture, who for a multiplicity of reasons carve out alternative spaces for practice on the ‘edges of other barely contained fields’, in film, fashion, art practices, interaction and game design, project management, engineering and writing.\(^{53}\)

Our initial overview of the published record led us to a series of conversations with architects and academics that were useful in giving more in-depth and specific information about the ethical motivations, social contexts and work of particular individuals and practices.\(^{54}\) While these conversations were useful in gaining a deeper understanding of the inner workings, contemplations and causes that were relatively undiscussed in the journal articles, they were limited in number; there are others we would yet like to talk with who will have valuable insights for the project. It should also be noted that, as we both live in and were educated in Tāmaki Makaurau Auckland, we are likely missing important insights from other cities (perhaps especially Ōtautahi Christchurch) and the regions. This essay then marks the beginning of our research and we hope that as such it will bring us in contact with others who can inform the larger *Making Ways* project.

One final disclaimer! Alongside the difficulty of defining the alternative (as we have covered in our introduction) is the situation that the alternative is temporal—what might be considered alternative set against what might be considered normative has changed, and will continue to change over time. Treadwell and Treep note that changes to the nature of architectural practice are ‘inevitable and necessary given the ongoing social, economic, ethical and technical fluctuations taking place globally’.\(^{55}\) As a local example, with regard to architects’ role in fabrication, in the 1970s almost anyone could and did carry out on-site construction work. However, more recent legislative changes have curtailed this activity, with licensing now required in order to carry out, or
supervise, restricted building work (RBW) essential to the structure or weathertightness of residential buildings. So, where the more experimental architect-builder, or architect constructing a building collaboratively with a community group might have been more common in the past, in a contemporary setting this is certainly an alternative model. The building industry in New Zealand is also yet to see the real impacts of computational advances (parametric design tools) at any large scale, with `joining sticks’ still the normative technology in domestic construction. This means that ‘alternative’ can currently encompass a practice like Makers of Architecture, who are using digital technologies to design and construct domestic buildings, but we imagine (and hope) that methods such as theirs will become the mainstream of practice in the future.

How alternative? Within the system, or structural change?

The motivations to develop diverse forms of architectural practice appear to operate in two ways: the impetus is either to develop new modes of practice within the existing system, or to develop ways of practising that can cultivate larger shifts in response to the system and step outside its norms. What we mean here by ‘system’ is the broad and seemingly all-encompassing capitalist paradigm that underpins many contemporary forms of knowledge exchange, including the exchange of architectural services for fees. The second position is of course the more radical; intimately connected to societal and cultural concerns, it not only questions the status quo of architectural production in Aotearoa New Zealand as a form of commerce, but also sees normative architectural practice as imbricated in maintaining capitalist structures and their associated power relations. The motivation to develop different forms of practice for this second group is inherently political, wherein architectural practice should operate in ways that help to shift rather than maintain these power structures.

In 1973, JASMaD founding partner John Austin’s description of the partnership’s multi-
disciplinary practice illustrates the more limited scope of the change-from-within position. Austin sees that any practice has ‘only two alternatives’: they must generate income either by undertaking commissions from parties outside it (individuals, corporations, institutions), or by undertaking commissions of its own making from land purchase, conception, design and implementation. ‘No other choice exists for the practitioner. Plenty of other choices exist for an architect outside this role, i.e. education, construction technology, product manufacture, politics, protest groups.’ In this conception, architectural practice can only encompass work that fits within a model of financial exchange design and other services directly related to the procurement of a building provided to a paying client, or the production of the practice’s own profit-making built projects (architect as developer).

In contrast, in 1981 architect Russell Withers (of the Archangels Architects Collective and a frequent columnist at this time for professional journal NZ Architect) called for architects to be active in structural change through questioning the very basis of the delivery of architectural services and the application of architectural knowledge. In calling for an ‘Alternative Professional Movement’ he suggested that architects have a much broader role to play than the design of building for paying clients or for profit. Instead they should be asking, ‘What sort of environment, what sort of society are we really trying to achieve or promote?’ stating that ‘by generally serving only those who are in positions of power and within the dominant (European) culture (such as the banks, insurance companies, industrial companies, affluent individuals)’ the design professions ‘become agents for social control by reinforcing the status quo’.

Motivations to generate different or new forms of practice stem then from these two different directions. The first is to do the business of architecture better, to understand the shifts and opportunities in the marketplace and generate ways of practising that can deliver to these changes. In this case a practice might develop extra skill sets (such as JASMaD’s development as a multi-disciplinary model), might change its workflows or generate different forms of contract that
prioritise specific roles for the architect in a given project (architect as project manager, et cetera). The second motivation, represented in Withers’ Alternative Professional Movement, is not restricted to responding to the market as a singular driver; instead, underpinned by the values and ethical disposition of the architect, such practices operate to question the normative structures of society (such as the market), and architectural knowledge is deployed to effect changes in these structures. The architectural theorist Jane Rendell calls practices that operate in this way ‘critical spatial practices’. These are self-reflective practices ‘that seek to change the world, or at least the world in which the inequalities of market capitalism, as well as patriarchal and colonial (or post-colonial) interests continue to dominate’. In Aotearoa New Zealand this of course includes responding to the complex legacy of colonisation and its deep, long-lasting, macro and micro effects for Māori in terms of social equity, justice and a continued ‘desire to be Māori’. A critical spatial practice may also attend to the inequity and danger of environmental issues and concerns, which range from local issues (heritage demolition and harbour infilling), but also encompassing the planetary issues of resource use and climate crisis. Increasingly, the social legacy of colonisation and the environmental impacts of urbanisation are understood as intertwined, and alternatives have sought to encompass or be led by indigenous knowledge and practices.

In *Making Ways* it’s fair to say we are more motivated by the second position, where practices are shaped in relation to the values and ethics of those involved and that seek to develop alternatives to the norm in smaller or larger ways, but we recognise that the first position also offers useful practical exemplars for shaping the way architects work. From both directions, to act on these motivations, practical shifts are made to the means of practice, including the following.

- Financial models: not only regular fees for services but also sliding fee scales; use of barter and exchange; pro-bono work (sometimes called design aid); funding
other than through client payment such as philanthropic support; entrepreneurship and self-generation of projects.

- **Client relationships**: acting as one’s own client; representing the client but not acting as designer; collaborative-participatory design models, sometimes called community architecture; making use of methods from associated fields such as user-centred design; expanding the architect’s roles in work for clients such as scoping a project and identifying opportunities.

- **Construction engagement**: design and build; offering specialist design services and skills to other practices; developing specialist in-house fabrication services; using craft and carpentry skills as part of a practice.

- **Scope of practice**: diversification of architectural knowledge to develop work in closely related areas such as exhibition design, urban design or construction management, or including research- and technology-based innovation; education (formal and informal, sometimes including ‘live projects’ with students that cross into their practice work); writing, policy work, advocacy, protest and engagement in political work as inherent parts of practice; developing and applying one’s own specific cultural expertise and locating projects in this space as well as consulting for other architects or clients in this space.

These practice permutations often overlap where, for example, practices formulate alternative ways of engaging with construction that lend themselves to particular financial models, as well as forming new and interesting relationships with diverse clients. And all of these factors shape and are shaped by the fundamental nature and scale of a practice’s organisation, including those of partnerships, registered companies, loose collaboratives, cooperatives, registered charitable status, ‘storefront architecture’ and profit-share models.
At first in our research we thought we would be able to cluster practices under the list above, grouping together those who engage differently with construction or develop different client relationships. However, due to the overlaps just mentioned, this is both not possible and not useful. Instead what follows below is more simply a sketch of the many alternatives we have begun to explore: nine practices arranged loosely chronologically, and a brief description of how they have operated or do operate in terms of diversifying modes of architectural practice.

At this early stage in the research we have more material on some practices than others, and some are well documented in other sources so we have kept their entries short. In some cases practice structures are fluid and we have not recorded all their permutations. A more extensive documentation of the many more individuals, practices and collectives that have pursued practice alternatives, and a meta-analysis of the modes of practice developed, remains for later in this project. Our intention in Making Ways remains that of both looking forwards and backwards in order to support the ongoing cultivation of a diversity of architectural voices and operations. We firmly believe that recognising and encompassing a multiplicity of practice not only reflects who we are, but also strengthens the field to invent its own range of work—its own economic and regulatory frameworks, its own industry methods, its own ways of making—that contributes meaningfully to the broader cultural, social and ecological environment in Aotearoa New Zealand.

JASMaD (later Jasmax)

It might seem quite strange to begin a list of alternative practices with JASMaD, the forerunner of Jasmax, one of the largest practices in Aotearoa New Zealand. However, the firm began in 1963 with the intention of developing a practice centered on multi-disciplinarity, in which large, complex projects could be tackled by teams, in order to 'offer the client all the skill associated with the project'. At the time, this interdisciplinary approach was both alternative and entrepreneurial.
In an article titled ‘The Architect in Multi-Disciplinary Practice’, founding partner John Austin set out the model of practice that JASMaD had developed in the decade since its formation. He wrote, ‘The scale of many new projects places the architect, once the dominant professional and sole agents of the client, in a completely different role [...] Most certainly he [sic] may have to widen the scope of his capabilities as “new professionals”—systems analysts, management consultants, environmental experts, building systems designers, sociologists and economists enter the fields traditionally reserved for architects and engineers.’

The practice grew in a number of stages, first with Steve Jelicich, John Austin and Graham Smith, who were soon joined by Ivan Mercep, later by Rod Davies, and eventually by John Sutherland. Their initial intention was to operate as a shareholder company, but in Davies’ recollection the staff they employed did not want this: ‘I’m very liberal-minded so I wanted to create a business owned by the team. But the team didn’t want that. It was peculiar to find intelligent people you’d employed as professionals saying, “We don’t want to be part of making decisions, that’s your job. You make the decisions then tell us what to do.”’

In 1967, in the midst of an economic downturn, JASMaD diversified their services, forming Environmental Research, a company ‘to do research work into all aspects of human habitation’. The company had two spheres of operation: information systems (including the production of publications for the building industry), and demographic and market research. By 1974 JASMaD had evolved from a partnership to a company with nine directors and staff of around 48. It was structured around five divisions: research and planning; design (interiors, graphics, product and exhibition design); development; information; and architecture. It also had in-house engineering services. The development division had been established to compete with the design-build packages being put forward by construction companies. Rod Davies also taught at the University of Auckland School of Town Planning.

Part of the reason the large multi-disciplinary practice now seems normative may be
JASMaD/Jasmax’s continued growth and influence; in becoming one of New Zealand’s largest architectural firms, they have likely been influential in positioning what contemporary practice is. Or it may be they were part of a wider international shift towards large interdisciplinary practices that resulted from the increasing complexity of the construction industry. What is clear is that the range of services offered and the way the office is structured has continued to evolve to meet changes in the market and industry.

Neil Simmons

At the time of writing Neil Simmons, at the age of 86, continues an active architectural life from his home studio in East Auckland. This entry draws significantly on architect Lynda Simmons’ master’s thesis, which she wrote on the career of her father. It has been supplemented by a conversation we had with Lynda. Neil graduated from the University of Auckland in 1959 and as an early working pattern, ‘for fear of being “buried”’ he chose to leave some excellent larger practices and operate as a sole practitioner. Like the majority of sole practitioners in this country, the main part of Simmons’ architectural output has been residential, including early pole-house constructions. He has however produced other building types, such as community sporting facilities, retail, car yards, some factories and planning/development projects.

In 1967 Simmons set up an office in central Auckland with Barry Curtis, a town planner, and Danny Hrstich, a surveyor, forming Hrstich, Curtis and Simmons as a cooperative office. Barry Curtis and Danny Hrstich continued their already established partnership and Simmons operated as a sole practitioner, but alongside this they established an associateship to collaborate on certain projects. In mid 1975 Hrstich, Curtis and Simmons moved office space to an old warehouse building on Hobson Street. Simmons took the lease for the entire two-storey building, and over the seventeen-year period that Simmons operated from that building a small community was created, occupied at times by furniture designers, filmmakers and other architects. This style of office-workshop-studio was completely in
tune with the counterculture movement and communal ethos of the time. When possible, Simmons chose to be involved in the building of his projects, due to his firm belief that design knowledge is connected with the process of making. He assisted the builder on his own home at Eastern Beach, Auckland (built 1964–68, additions 1972–76) and, for the duration of another project—an experimental continuous vertical pole house—every weekend Simmons (and sometimes his family) would drive to the Coromandel site to work with the builder. (The builder and Simmons submitted a tender proposal as a team, which was accepted by the client.) Lynda thinks the impetus for this could have been that the unconventional structure required on-the-job decisions. Given this was experimental construction, for Simmons, resolving details during construction was the best approach. The client was aware of the benefit of this arrangement in terms of inbuilt site supervision.

Neil sometimes used to barter and exchange as payment for work. (Lynda notes that this was always declared.) For example, for one job, for producing the design and working drawings for a three-building chalet development at Tūroa (1983), he was paid in a piece of the project land. He was then able to build one of the three buildings, while the client developed the other two-thirds of the property.

In 1984–88, Neil and son Dean built another two chalets in Tūroa in their weekends. Again, the construction system was experimental, using prefabricated sandwich-wall construction with exposed studs. (The walls were built on the floor platform, then winched into place with either a HIAB or a pulley system and the family Land Rover.) At times Simmons also experimented with combining education with his practice, collaborating with staff at the University of Auckland to involve students in the documentation or construction phases of projects, including the detailing of an early pole house at Hahei (1974) and the construction of a small spa-house building at a holiday campsite at Ōhau Channel, Lake Rotoiti in 1977.74

Athfield Architects Limited

Given that the huge output and influence of Ian Athfield,
and his wide circle of collaborators, is already well-documented elsewhere, we are not going to elaborate on his practice in this essay. However, we want to note his clear intentions to develop alternative forms of practice.

Founded in Wellington in 1968, Athfield Architects strived to maintain a close connection between design and building—Athfield built much of his own house and office himself, with the help of colleagues, employees, family and friends, and the wider community. His clients often contributed to the construction of their own houses, and projects often reused salvaged materials. In some projects Athfield employed a collaborative design process, and he sometimes operated as architect-developer. Alongside his practice, Athfield was active in the Institute of Architects, serving as President 2006–08, he taught at the Architecture School at Victoria University of Wellington, and was involved in civic and social activism, as is seen in the adornment of his own house on a prominent Wellington ridge with a large ‘keep new zealand nuclear free’ sign in the 1970s. From its early days, Athfield Architects has adopted a fairly flat hierarchy and while now working on large-scale and civic projects, and with offices in Christchurch and Auckland as well as in Wellington, the firm operates a shareholder financial model with employee profit-share.

Stanish and Withers—
Archangels Architects Collective—Stanish and Green

In 1971 Nick Stanish and Russell Withers established a partnership which by the early 1980s had evolved into Archangels, a cooperative practise. For Stanish and Withers, the initial impetus to practise in non-normative ways arose from a context of economic and social change in which they saw architecture as a social act. In the 1960s, they were fighting slum clearance in Ponsonby under the Comprehensive Development Act. By 1968, Nick Stanish explained, ‘everything was under question’. In April 1975 Stanish and Withers moved their office to a shopfront in Ponsonby, and began to pursue community architecture, recognising that a lot of people in the area had little access to
To give a documented example of their approach, in the late 1970s, Stanish and Withers were commissioned to design a community hall for the Auckland suburb of Green Bay. Following their community-architecture methods, after research and analysis, and interviews and discussions with the community, they found that a community hall on the given site was not required, but rather a place in the centre of the local shops for parents to meet in the daytime, close to the medical centre and other amenities. An existing building was renovated to serve this purpose. This approach was articulated by Withers when he wrote, ‘The prevailing characteristic of instant superficial solutions to a superficial brief is I believe professionally unethical. Of course it is in the professional’s own pecuniary interests to build buildings (any buildings); so encouraging clients to find alternative non-building ways of meeting their needs is not supported.’

Throughout the 1980s Russell Withers wrote regular articles for NZ Architect (the professional journal) in a series called ‘Life Styles’. He wrote columns on racism and sexism in architecture, connecting the practice of architecture to the social, economic and environmental issues of the time (which have not gone away!). In an early article he articulated the need for an ‘Alternative Professional Movement’ to establish participatory community involvement in the built environment through collective decision-making with affected communities and empowering communities to self-help, with a focus on cooperative housing, intentional communities, and the role of architect as facilitator and ‘change-agent’. He called for the development of ‘collaborative models of shared responsibility’ and challenged normative professional practice as ‘now open to serious enquiry, not only as to what constitutes worthwhile knowledge but also how such knowledge is used or applied’.

The expanded range of work needed to support a community approach to architecture also required a different kind of office structure. Archangels operated as an ‘architects collective’ based on mutual support that was non-hierarchical. Members practised indepen-
dently under a group umbrella, coming together for larger projects or competition work. The collective umbrella allowed each of the members to pursue an expanded form of practice—Withers in community work and co-counselling, Chris Fox in pottery, and Nick Stanish in education (at University of Auckland). Rick Pearson joined the practice developing his own specialty in exhibition design, and Briar Green later worked with Stanish, forming Stanish and Green. Developing a manifesto that proposed an alternative architecture practice critical of the ethics and politics of normative practice, as well as developing a cooperative organisational form to support a diversity of practice, clearly situates Stanish and Withers in the terms of critical spatial practice that Rendell sets out, and provides a useful exemplar for how architects might structure a cooperative practice with shared concerns yet also pursuing individual projects.

Ellen Brinkman

In 1989 Ellen Brinkman left Dodd Paterson Architects, where she was a director, to establish her own practice, which she ran from her family home. We are including Brinkman here as a documented exemplar of this alternative developed by many others, especially women—a choice to move to solo practice situated alongside domestic life. A 1991 profile on Ellen Brinkman’s solo practice comments that working from her own home was necessary to reduce the intensity of working in practice and address a ‘developing imbalance between her architectural life and the rest of her life’. However, Brinkman also saw it as beneficial to her relationship with clients who, having employed her for residential work, could enter her home, which she saw as ‘only fair’ given she was designing theirs. At this time, Brinkman was not only working on domestic projects but also on larger municipal projects and building-defects work, and she noted that she enjoyed the change in working life that had brought her into closer contact with the end user of her work.

Brinkman distinguishes that the work ‘is not kitchen table architecture. I believe I have enough of a profile that people come to me because I’m very
Brinkman had previously been active in the New Zealand Institute of Architects as local branch member, then chair, and as councillor on the National Council, so was able to see the practice of architecture from multiple viewpoints. The author summarises the profile by noting that, 'When Brinkman started out, she was surrounded by men and very formalised business structures. There were no keys as to how a woman could operate in such a world and no available role models. Brinkman has carved her own path and in doing so, has created a strong and viable role model for tomorrow's graduates.' It is interesting that at that time (the early 1990s) to make a choice to move away from the mainstream would be considered role-modeling for women. This does seem to allow the mainstream to continue with unbalanced work-life practices, with women needing to forge a separate, alternative path—and perhaps this is still an issue.

As noted by Brinkman, working from home can be a choice to allow for more intimate relationships with clients, and a closer relationship between work and family life. Some solo-practitioner working from home have been profiled in journals over the years, but there may be as yet undocumented, rich, alternative-practice models in these small practices. This choice is, however, made more difficult in a contemporary context by the ever-increasing administrative time and cost imperatives of professional practice being focused on an individual (rather than being distributed across a much larger organisation).

Strachan Group Architects

Dave Strachan’s Strachan Group Architects (SGA) is a practice that operates as a kind of guild, as can be seen in the arrangement of their Kingsland, Auckland, office and workshops. Upstairs is the SGA practice office (currently with seventeen staff) while downstairs there are two workshops. From there, Cam Strachan, one of Dave’s sons, operates Strachan Group Landscape Architects (SGLA), while Dave’s two other sons, James and Fraser, operate Crate Architecture + Building Innovation, who specialise in architecturally designed
homes and shop fit-outs. Here then, unusually for the contemporary practice of architecture, is an intimate connection between designing and making, as architects from SGA discuss projects with both groups. Parts of SGA projects are prototyped and prefabricated in the workshops, some projects are both designed and built by the three companies, and Dave sometimes undertakes his own carpentry work downstairs.

Motivated by combined interests in design, fabrication and education, as well as a desire to work for a wide client base, SGA is also involved in teaching. For a number of years Dave Strachan ran Studio 19, a design–build studio for the Unitec School of Architecture in which, over the course of a year, a group of students designed and fabricated projects for community groups including houses for VisionWest Community Trust and a community-centre space for the Cook Islands Development Agency New Zealand. SGA’s relationship with VisionWest is ongoing; they are now jointly developing tiny houses to support the accommodation of teenage boys in family settings that also give them some independence.

This involvement between practice, education and community projects was extended in 2017 with a collaboration between SGA, Crate and Architecture + Women NZ, through which sixteen participants joined a building workshop to prefabricate and install a live-in research facility for the Motu Kaikoura Community Trust on Kaikoura Island at the outer edge of the Hauraki Gulf.93 This project, supported through much industry sponsorship,94 was mentally and physically demanding, involving raising industry support, teaching new building skills to the participants who prefabricated the facility, then disassembling and transporting the parts via ferry and helicopter, and finally with the full team reassembling the project on site. For Strachan this attentiveness to education, and educating others, extends and permeates his practice. The office is a small community, built on a deep care of education, ways of thinking about making and architecture, and a care of people and local communities.
Andrew Bull and Mike O’Sullivan established Bull O’Sullivan Architecture in 1994. Glenn Watt joined them in 1999. The practice has its base in central Auckland and an arm in Lyttelton. Well established and widely awarded, they are included here due to the propensity for the practice, and Mike in particular, to be deeply involved in the building of their projects. In the context of *Making Ways* we might celebrate this kind of action as a form of socially cohesive resistance to the division of labour and disciplinary boundaries we have come to accept as the norm in the building industry. That resistance isn’t articulated by Bull O’Sullivan as a polemic but is rather an embedded quality of approach to the work of architecture. In an interview titled ‘Architects Who Build’, O’Sullivan discusses learning how to build by working with his carpenter father and, at the age of sixteen, designing a house for his sister. He laments the controlling impacts of legislation (such as the Health and Safety at Work Act 2015) that would, in effect, limit such formative experiences for others.

Bull O’Sullivan’s Lyttelton studio (2015) was built mostly in the weekends with O’Sullivan himself operating as carpenter, surveyor and project manager. His own family house (2009) was produced in a similar manner with significant help from his neighbours in Mangere, Auckland. But Bull O’Sullivan’s social design-and-build ambition was realised at a much larger scale with the Lesieli Tonga Auditorium (Auckland, 2017). Funded by the 300 families of the Free Wesleyan Church of Tonga, it was a collaborative community project between the practice and the congregation. Lynda Tyler’s article on the auditorium in *Architecture New Zealand* presents a project team that includes O’Sullivan, Brad Bonnington (of Bull O’Sullivan) and ‘the people of Tonga’.

In a separate interview, O’Sullivan also discusses the practice’s insistence on designing and fabricating a dining-room table for the clients of the family houses they design. While O’Sullivan frames this as developing a close attention to the family living in the home, what he doesn’t discuss is that
many of these tables are made by his students in the initial phases of the design studios that he teaches at the University of Auckland. From an educational perspective, the tables operate as vehicles to develop hands-on skills and to deliver some level of understanding of what it is to design, draw and realise a material artefact in the world. Implicit within these exercises is O’Sullivan’s understanding that this also constitutes an opportunity for students to learn about each other, from each other, about themselves, how they work, their qualities, capacities and differences. This kind of learning experience lends itself to the galvanising of cohorts of students—groups who will spend significant parts of their careers practising in relation to one another—who openly discuss ‘the O’Sullivan studio’. These students carry out of the institution some sense of the social potential and implications of architectural practice and a willingness to be hands-on with their projects.

designTRIBE—Rau Hoskins

The roots of the practice designTRIBE can be found in Whaihanga, a group established in 1992 at the University of Auckland’s Department of Architecture to ‘elevate the status of Māori architecture’ and provide mutual support amongst Māori architecture students.\(^\text{101}\) Initiated by Rau Hoskins (Ngāti Hau, Ngāpuhi) and Saul Roberts (Te Ahiwaru, Wai o Hua), who were then commencing their master’s studies, Whaihanga grew to encompass Māori graduates, practising architects and staff members, including Tony Ward, Mike Barns (Tūwharetoa ki Kawerau) and Vaughn Payne. Hoskins, who then continued his involvement as a tutor alongside Roberts, described the community focus of the group that engaged students in live projects with real clients: ‘we’ve created learning environments for our students which are located in the community, so the responsibility for the education is not among tutors and lecturers alone, but is located in a wider environment, where they’re learning from all sorts of people’\(^\text{102}\) including those who would use and inhabit the projects. In 1993, the Whaihanga studio group designed Te Wharekura o Hōani Waititi in West Auckland and previous projects
included a museum for Ngāti Hine in Moerewa, Northland, and a design for a whare wānanga in Whakatāne. Hoskins noted at the time that the skills required to provide architectural services to Māori communities are quite different to those usually taught in the schools of architecture.\textsuperscript{103}

In 1994 designTRIBE was formed as a collaborative architectural design practice to provide Māori and wider community groups with access to high-quality architectural services. The practice specialises in the design of kaupapa Māori, as well as mainstream, educational facilities, with significant experience in projects ranging from kohanga reo through to tertiary, community and residential facilities.\textsuperscript{104}

In terms of the impetus of \textit{Making Ways}, and the expanded sense of architectural knowledge and practice we aim to document, we want to especially draw attention to Hoskins’ activity in policy, advocacy, activism and research. Hoskins is a pivotal figure in the development and application of Te Aranga Māori urban design principles, now central to the Auckland Design Manual. Te Aranga are ‘a set of outcome-based principles founded on intrinsic Māori cultural values’ for enhancing outcomes in the built environment.\textsuperscript{105}

They aim to support mana whenua presence, visibility and participation in the design of the physical realm and to operate as a ‘tool which could be readily communicated to user groups, and readily adopted’.\textsuperscript{106} Now embedded in urban design practice in Tāmaki Makaurau Auckland, Te Aranga Principles are being further refined or ‘re-grounded’ in Tāmaki Makaurau, as well as being adopted and developed by other mana whenua groups. Hoskins continues to work in this area with civic agencies including Eke Panuku / Development Auckland and the City Rail Link, as well as in collaborative teams with other architects on private developments.

Hoskins is also active in Māori housing advocacy and papakāinga design projects. In 2002 he authored the \textit{Māori Housing Design Guide}, he is chair of Te Matapihi, the national Māori housing support body, and has acted as an adviser to the Minister of Housing on social housing policy.\textsuperscript{107} He is on the steering committee of Ngā Aho, the network of Māori design professionals. Taking the impetus of Whaihanga
forward alongside practice and advocacy, Hoskins has developed specialised design teaching at Unitec’s School of Architecture where he has lead Te Hononga—The Centre for Māori Architecture and Appropriate Technologies,\(^{108}\) in which he has been active in researching both traditional and hybrid Māori dwelling-construction techniques. Drawing on this research Hoskins co-wrote and presented *Whare Māori*, a thirteen-part television series which screened on Māori Television in 2011.

**Andrew Barrie Lab**

Since its inception in Auckland in 2014, Andrew Barrie Lab (ABL)\(^{109}\) has undertaken a wide range of projects, many of which relate to Andrew Barrie’s role as Professor of Design at the University of Auckland’s School of Architecture and Planning. In this way Andrew spans the dual, and these days sometimes difficult to integrate, roles of academic and practitioner. With the introduction of Performance Based Research Funding (PBRF) in 2003, universities in New Zealand implemented a funding system that rewards the generation of ‘quality-assured research outputs’ by staff. In some fields, both the quality and quantity of ‘research outputs’ are easy to verify. In the humanities, for example, academics publish their work in scholarly journals, and the number of articles and the further citations of those articles is carefully counted. The need for ‘quality assurance’ has proved more difficult for architect academics and others whose output is creative rather than (or in addition to) scholarly. Over this period Andrew has craftily maintained an architectural practice that makes award-winning buildings and innovative timber structures, clearly positioning these as producing the ‘new knowledge’ that meets the university definition of research.

For university-based architect-academics, awards are a relatively straightforward way to gain the quality assurance of a building as a research output. Award-winning projects by ABL include the Cathedral Grammar Junior School (opened 2016) designed in collaboration with Tezuka Architects (Japan) and the multi-use Oxford Terrace Baptist Church (opened 2018), both
in Christchurch. For each of these projects, ABL, working with a team of engineers and new graduates, designed and employed innovative timber structures. Much of the background research and development for these projects came from Andrew’s collaborative teaching, in which senior architecture students design and fabricate experimental timber structures for clients such as schools and churches, with each student building on the knowledge developed in earlier students’ work.

More recently, ABL has been part of a collaborative team from the University of Auckland school that designed and fabricated Learning From Trees, an experimental timber pavilion for the 2021 Venice Architecture Biennale. This continued ABL’s work in the research, publication and exhibition of Aotearoa New Zealand’s architectural culture, which includes the long-running series of Block maps and itineraries on local architecture (a map of Taranaki architecture being the most recently published), Andrew’s curation and design of the Objectspace exhibition, In Context (2019) on the Auckland practice RTA Studio, and his frequent contributions to books and magazines on architecture in New Zealand and Japan. A productive relationship between education and practice has been sought by many architects over the years (as discussed by both Mike Austin and Nick Stanish in our personal communications); ABL provides an exemplar of how to navigate this in our contemporary conditions.

Thanks to Andrew Barrie and Ashleigh Smith for their contributions to this essay.
Located in Kaikohe and co-founded by Ana Heremaia (Ngāpuhi), Felicity Brenchley and Ruby Watson, ĀKAU is a design and architecture practice that places people and community at the heart of their projects, creating opportunities for youth to be involved in the design of real projects through a wānanga approach. The profits from ĀKAU Studio fund the ĀKAU Foundation, a not-for-profit trust focused on teaching young people design through a kaupapa Māori lens.

Andrew Barrie is a Professor of Design at the University of Auckland. After completing his doctoral studies in Japan, Andrew spent several years working as a project architect in the office of Toyo Ito, one of Japan’s most innovative architects. On returning to New Zealand he worked with Cheshire Architects in Auckland, later joining the University of Auckland and establishing Andrew Barrie Lab. Andrew’s own design work has won numerous awards in both New Zealand and Japan, and has been exhibited in both countries. This includes the Cathedral Grammar Junior School in Christchurch, produced in collaboration with Tezuka Architects.

Dr Fleur Palmer (Te Rarawa, Te Aupōuri) is an architect, spatial activist and Associate Professor in Huri Te Ao Hoahoanga / School of Future Environments in the Faculty of Design and Creative Technologies, Auckland University of Technology.

Hatch Workshop (Hannah Broatch and Mason Rattray) is a research and design partnership from New Zealand, currently working in India, specialising in socially focused schemes for migrant populations. As a design–build duo, Hatch Workshop partners with local craftspeople and workers with the intention of improving the quality of housing and associated amenities through appropriate incremental interventions. Their goal is to bring dignity to the conditions of overlooked, transient citizens.
Kathy Waghorn is the curator of *Making Ways*. Her interest in the diversity of ways that architecture might be practised stems from her doctoral thesis (RMIT, 2017), which proposed a correspondence between architecture and socially engaged art practices that foreground the complexity of place. Kathy was formerly head of architecture studio courses at The University of Auckland and is now Associate Professor at Huri Te Ao Hoahoanga / School of Future Environments in the Faculty of Design and Creative Technologies, Auckland University of Technology.

Kester Rattenbury is an architectural journalist and critic, teacher and academic. Her major publications include *This Is Not Architecture: Media constructions* (2002), which remains a set text on the working relationships between architecture and its representations; *Architects Today* (2006) with Robert Bevan and Kieran Long; the Supercrit series with Samantha Hardingham; and *The Wessex Project: Thomas Hardy Architect* (2018), shortlisted for the RIBA Research Award (2019) and nominated for the SAHGB Colvin Prize (2020). She is Professor of Architecture at the University of Westminster, UK, where she teaches an MArch studio with Sean Griffiths, and where she set up the EXP research group, with its major projects Supercrits and the Archigram Archival Project (with Murray Fraser and also shortlisted for the RIBA research awards). She also established the PhD by Practice stream at Westminster in close collaboration with RMIT. She lives and works in London with partner, Tim, daughter, Alfrey, and whippet cross, Nellie.

Kim Paton is the director of Objectspace, New Zealand’s only publicly funded craft, design and architecture gallery.

Lynda Simmons, an architect and professional teaching fellow at the University of Auckland, is the co-originator, past chair, and now archivist and research leader for Architecture + Women NZ.
Makers of Architecture are based in Wellington and engage in design-making using mass-customisation technologies. They set out to close the gap between architecture and building by establishing Makers Fabrication, a prefabrication and construction company developing projects throughout New Zealand, including New Zealand’s first CLT-, BIM- and CNC-produced house. The two Makers companies work in collaboration with the design, university and architectural research communities to build, test, iterate, prototype and develop potential through digitally aided architectural design and build-manufacturing processes. This allows Makers to optimise design, planning, budgeting, timing, material use and construction methods while delivering to client programme and site.

Maunga: Pacific Architectural Collective was formed by a group of Pacific women architecture students on the cusp of entering the working environment. Lusi Vete, Matilda Phillips, Icao Tiseli and Miriama Arnold give voice to ideas and opinions formed through their work and to address the lack of visible mentors for Pacific women entering the architectural profession.

Mike Davis teaches and researches in architectural practice and pedagogy at the University of Auckland’s School of Architecture and Planning. He was director of architecture programmes for eight years from 2012 and co-founded Unit Y Trust in 2018 for the purpose of extending architectural education beyond the borders of the academy. A registered architect, Mike has practised for the past 25 years in New Zealand, Canada and the Netherlands. His project experience spans from high-density housing to heritage retro-fits, from government buildings to resorts in locations from Ethiopia to New Caledonia. He holds a PhD from RMIT (Melbourne) and a Master of Architecture in Architecture and Urbanism from the Architectural Association’s Design Research Laboratory (London).
Patrick Loo is the co-founder of Common Space, which was established as a creative platform to develop projects that contribute positively to the physical and social environment around them. Patrick is a registered architect who was a senior associate at Jasmax and then worked with PAC Studio and Monk Mackenzie focusing on residential work. Patrick’s long-term interest is in how creative industries can strengthen and reposition themselves in an age of exponential change, by incorporating strategies and processes from the technology and science sectors. Patrick has recently completed a thesis in this area as part of a Masters of Commercialisation at the University of Auckland Centre for Innovation and Entrepreneurship.

Unit Y is a registered charitable trust, set up to enable students of architecture, recent graduates and communities to realise their architectural ambition through realising building projects. Led by architect and University of Auckland senior lecturer Dr Mike Davis, Unit Y reinvigorates the idea of the ‘project office’—an internationally established model of architectural office which operates from a school of architecture. Positioning students and recent graduates at its core, Unit Y utilises and validates their skills and expertise to produce critical architectural content for a range of clients. For more information visit unityprojects.co.nz.
Endnotes

Introduction

1 Scotty Morrison, Māori at Work. Auckland, Penguin Random House, 2019, p. 211. A version of this greeting was used at all Making Ways hui and live events, and was chosen for its reference to space and people.


3 The exhibition design for Making Ways was by Frances Cooper and Anto Yeldezian.

4 Speakers in this session were architects Julie Stout and Lynda Simmons (then co-chair of Architecture + Women NZ), and planner Dr Elizabeth Aitken Rose.


7 Ibid.


11 Ibid.


13 Spatial Agency Database.

14 Ibid.


18 Ibid.

Making Ways: A public lecture

19 This definition is drawn from the online version of John Moorfield, Te Aka: Māori–English, English–Māori Dictionary, <https://maoridictionary.co.nz>.

20 Grasshopper 3D is a visual computer-programming language that runs with Rhinoceros 3D, a computer-aided design software.

21 Makers of Architecture was founded by Ben Sutherland, Grant Douglas, Beth Cameron and Jae Warrander.


Makers of Architecture, personal communication with Kester Rattenbury.

A ‘project office’ is an internationally established model of architectural office which operates from a school of architecture.

The Hasso-Plattner Institute of Design, commonly known as the d.school, is a design-thinking educational organisation based at Stanford University, California.

Ayla Raymond-Roberts carried out the detailed design development; Melanie Pau and Wade Southgate populated the resulting drawings.


CEPT University in Ahmedabad, India, was formerly known as the Centre for Environmental Planning and Technology.

Kester is referring to the biannual awards scheme developed by Architecture + Women NZ, which has categories recognising leadership, diversity and the whole career of an architect, rather than highlighting specific one-off buildings. See <https://www.architecturewomen.org.nz/aw•nz-dulux-awards>.

Ākau is a word from te reo Māori meaning a shoreline. ĀKAU take this to be where fluid meets grounded, a meeting point.

From a revenue perspective, as this shift takes place the practice is increasingly paid for running workshops with community members on a range of projects (for which they might not be the architect), and for a full range of architectural services in some cases. The trust does have a professional outreach programme—ĀKAU Professionals—which is about teaching others how to run workshops and engage with young people, but this is a charitable activity that has an alternative source of funding.

In July 2020, Bling Bling Toi Marama was attended by more than half the population of Kaikohe—an achievement all the more remarkable given, post COVID lockdown, the decision to proceed was made only four weeks prior to the event. <https://akau.co.nz/foundation/bling-bling-toi-marama>.

Awan, et. al.; Spatial Agency Database.

See the essay ‘Looking Backwards to Look Forwards’ by Davis and Waghorn on page 126 of this book.

Fast Forward Breakfast Interview Series

For more information visit <www.unityprojects.nz>.

The Maunga: Pacific Architecture Collective manifesto is available as a video online. See: <https://archiparlour.org/maunga-pacific-architectural-collective/>.


Maia Ratana (Ngāti Rangiwehehi, Ngāti Raukawa and Ngaa Rauru ki Tahi) is part of the ĀKAU whānau.


For more information visit <https://www.commonsplace.co.nz/>.
Looking Backwards to Look Forwards: Locating alternative practice in Aotearoa New Zealand


For documentation of this collective, see: <https://www.instagram.com/maustudio_nz/).

Another of the four practices included in Making Ways. <https://akau.co.nz>.

See the interview with Unit Y and Maunga: Pacific Architecture Collective on page 50 of this book.


Group Architects and their fabrication arm, Group Construction Company, are a mid-twentieth-century example we could include here. (See Julia Gatley, Group Architects: Towards a New Zealand architecture. Auckland: Auckland University Press, 2010.) Further back, of course, we could also look to Māori building practices in precolonial-contact Aotearoa and the innovations of Māori building through the period of colonisation. (See Deirdre Brown, Māori Architecture: From fāle to wharenui and beyond. Auckland: Raupo, 2009.)


At this stage of our research we have carried out conversations with Mike Austin, Nick Stanish, Dave Strachan, Lynda Simmons and Sarah Treadwell.

Treadwell and Treep, p. vii.

RBW includes building work that is critical to the integrity of a home and ensures a property is structurally sound and weathertight. A licensed building practitioner (LBP) must be used to design and carry out RBW. It is an offence for an unlicensed building practitioner to carry out RBW unless they or someone supervising their work is appropriately licensed. Ministry of Business, Innovation and Employment, ‘Licensed Building Practitioners’, <https://www.lbp.govt.nz/>, accessed 22 August 2020.


For an exploration of alternatives to capitalist economies that do exist in many places and diverse situations globally, see the work of the Community Economies network led by J. K. Gibson-Graham. <https://www.communityeconomies.org/about/community-economies-research-and-practice>.


Ibid., p. 28. (Original parentheses.)
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68 Rod Davies quoted in ‘JASMaD’, *NZIA Journal*, v. 6, 1974, p. 115.

69 ‘JASMaD’, *NZIA Journal*, v.6, 1974, p. 115 and p. 118.


71 Conversation with Lynda Simmons, 20 March 2019.

72 Lynda Simmons master’s thesis, p. 44.

73 Ibid., p. 46.

74 Ibid., p. 52.


76 In 1976 the *NZIA Journal* profiled Stanish and Withers as part of their ‘Architects in Practice’ series.


78 Ibid.

79 Ibid.


81 At this time, Gerald Melling was the editor of the professional journal and the publication had quite radical content.


84 Nick Stanish personal communication, 17 June 2019.

85 In the 1980s, Stanish and Green worked on a cooperative housing project on a site in Ponsonby. The site was offered by the Housing Corporation as an experiment to house seven or eight different families. They designed two big houses, where there was a common kitchen and each family had its own separate living space. In the end, however, the Housing Corporation rejected the project.

86 Thanks to a profile by Tommy Honey, as part of the Women in Architecture Series, *Architecture New Zealand*, May/June, 1991.


88 Ibid.

89 Ibid.
90 Note Brinkman’s criticisms of the NZIA: ‘tremendous unrealised potential as a base for practice support, education and public information’. Ibid.
91 Ibid., p. 30.
92 For more information see <www.sgaltd.co.nz>.
95 For more information <www.bosarchitecture.co.nz>.
97 Refer to the NZIA awards platform, for instance: <https://www.nzia.co.nz/practice/BullOSullivanArchitectureLtd/1643>.
101 Architecture NZ, March/April 1994, p. 34.
102 Ibid.
103 Ibid., p. 34 and p. 72.
108 Ibid.
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