

Sinéad Conneely and Laura Hannigan

Four thirty-somethings are just over one year into life as the Simple Works structural practice. Jackie Whitelaw talked to two of the founders, **Sinéad Conneely** and **Laura Hannigan**, about branching out on their own, and shaping the future.



Sinéad Conneely, 32

Education: BEng in civil engineering at National University of Ireland, Galway and MSc in applied mathematics at Imperial College, London.

Current role: Co-founder of Simple Works.

Previous employer: AKT II.

Other roles: Co-founder of Scale Rule, tutor to disadvantaged and marginalised young people, technical tutor for the Architectural Association, London.



Laura Hannigan, 32

Education: MEng in structural engineering with architecture at University College Dublin and MSt in interdisciplinary design for the built environment at University of Cambridge.

Current role: Co-founder of Simple Works.

Previous employers: Thornton Tomasetti and AKT II.

Other roles: Senior teaching fellow in structural design practice at the Bartlett School of Architecture, London. Co-founder of community interest company Scale Rule, which seeks to promote diversity and engagement in the built environment.

WELL BEFORE COVID-19 turned established practice on its head, Laura Hannigan was part of a team that won a competition to envisage the office of 2035. Much of the industry is currently debating just how offices will look after the pandemic, but Hannigan and her peers had an answer back in 2017 – even if no one was expecting to need their solution quite so soon.

‘It turns out we were predicting not only office life after Covid-19, but also what its potential impact might be on university operation,’ Hannigan says. ‘We envisaged a large drop-off in numbers of students needing accommodation as teaching moved online, and turned a block of Georgian housing that had been student rooms into a central creative office hub (Figure 1). We anticipated that people wouldn’t be coming to the office every day, just travelling in occasionally

because technology would allow them to work remotely.’

At Simple Works, the crystal ball has come out again, this time with co-founders Sinéad Conneely, Phil Isaac and Jonny Hawkshaw, to create the vision for their new business. This is founded on a conviction that it is young professionals who will be the source of solutions to deal now with climate, social change and, who knows, more pandemics.

‘Construction needs to pivot quickly to respond to whatever the future throws our way, as do clients. For us, climate and community are top of the list. It will be up to younger people like us to reposition our industry and to come up with broader ideas,’ Conneely says. ‘If the needs of society and a response to climate change are to be met over the next 20 years, we are going to need new thinking.’

Seeking autonomy

Simple Works’ aim is to be a business that designs schemes that local people want to live in and with, rather than buildings that are alien and imposed on them. ‘Our role is to be a company that does good and is answerable to our communities,’ Conneely explains, ‘with sustainability at the heart’.

‘That mission is so important to all of us. It was a natural progression to want to go out there and do it for ourselves through our own business,’ Hannigan says.

The four founders all quickly became friends while working for AKT II. ‘I really liked it there and we were all working on big, complex, amazing projects,’ Hannigan says.

For Hannigan, these included the substructure for Facebook’s One Rathbone Square development and the exposed steelwork at Google’s new King’s Cross, London HQ. Conneely was writing bespoke software scripts to streamline her work and was part of AKT’s parametric team on Heatherwick Studio’s Al Fayah Park in Abu Dhabi.

‘But we realised that we wouldn’t have autonomy or control over the big design decisions for years. And we wanted to choose our projects and make those decisions now,’ Conneely says.

‘We worked it out and realised that we were likely to be in our fifties before we had that complete self-determination if we stayed in a big practice.’

That seemed too long a wait when the threats and issues they were concerned about felt immediate. ‘We were lucky to have found each other, to have found four like minds and to have developed the trust that gave us the confidence to go out on our own.’

The business launched officially in May 2019, with all four initially sat round



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FIGURE 1: Winning 'Office of 2035' proposal by Team 88mph for BCO NextGen design competition (2017). Georgian terrace is repurposed as creative office hub in London, to suit commuters and small teams

right and all along we have managed to pay ourselves something every month,' Hannigan says.

They don't have the luxury of turning away work that doesn't quite fit their vision, but 'we have become very good at translating community demands to clients and architects, so we can make better decisions for buildings. And we can convince them that investing 5% extra upfront can deliver 20% carbon reductions that will become increasingly important in the long-term value of their structures,' Hannigan says.

Current projects include a co-housing development of 25 units in Norfolk, an eco village in Moray in Scotland for a spiritual community (Figure 2), and the refurbishment of a carriage works in Swindon (Figure 3).

Carbon reduction is at the root of their designs. 'In Moray, for instance, our client has agreed to allow the walls to be thicker so we can use recycled insulation, the superstructure is all timber and we are installing steel screw piles for the foundations instead of using concrete,' she says.

Where possible, they are focused on avoiding demolition and reusing existing structure in pursuit of carbon efficiency.

'I'd like to see the country get to a position where buildings are not only listed architecturally but structurally, so those that are still sound for a given loading can't be demolished,' Hannigan says.

FIGURE 2: Findhorn Foundation development, Scotland

one kitchen table. Within six weeks, they realised they needed some office space and moved into a converted shipping container. One boiling summer and a freezing winter later, they are now in a more conventional office on the same site. 'It was amazing, we built some of our own furniture, bought chairs on Gumtree, but we are glad to have moved everything into our office here in Hackney,' Hannigan says.

Carbon goals

Despite the pandemic, they are doing very well and are ready to employ a new engineer. 'We are really busy, but when we started we lacked the confidence to charge industry standard fees, our prices were too low. We had clients calling sometimes to tell us to up the fee', Hannigan says of the pitfalls of starting a new business.

'One of the biggest issues at the beginning was to admit to each other how much of a financial cushion they each had. 'We had to understand how long we could each go on while waiting to be paid – that turned out to be six months plus back-up plans. We have now got to the point where the fees are





Sharing knowledge

The Simple Works team set out to find likeminded clients from day one. ‘We started with friends, then friends of friends, who were mainly architects. Level three was some cold calling and networking events. We made lists, decided who we wanted to work with and targeted them.

‘And at the London Festival of Architecture, we were out every night meeting new people and it paid off. We found that by being really honest about ourselves and our vision, we got a response and made a connection with people who think like us.’

That openness is a key part of the Simple Works culture, Conneely explains.

‘We are all about transparency and being open to other practices and to new ideas and materials. We think that if structural engineering practices are of a high standard, that’s good for everyone, so want to share knowledge and experience. We are all in the same industry and want to be friends with our peers. It’s good for the profession if we are all at our best.’

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FIGURE 3: Swindon Carriage Works with masonry jack arches and cast iron columns

FIGURE 4: Diversity of thinking is at core of Simple Works’ philosophy

To that end, Simple Works is part of the Small Practice Forum, which is a place to exchange knowledge and to understand the challenges that are common to all the members. They also organise the Sekforde Sessions (<https://sekfordesessions.com>) – a series of ‘provocative debates on the state of the structural engineering profession’.



Embracing diversity

Conneely and Hannigan are also members of the Female Founders Forum – a group of women structural engineers who have set up their own companies and which acts as a sounding board and support group. It’s nice to have that back-up, they say.

At the forum, they have all had the common experiences of sexism, such as being dragged along to meetings on projects they are not part of to boost the diversity, or being spoken over at meetings.

‘But it reminds us to also be aware of the unconscious bias issue, that people like hanging out with and promoting people that are like them’, Hannigan says.

‘As Simple Works grows, we know to be aware of that when we go out and recruit. We all have unconscious bias, but realise that a team of people that are all the same is not good for problem-solving.’

Conneely adds: ‘There have been a lot of studies on the effectiveness of diversity of teams. The four of us are really different (Figure 4) and we know we come to better solutions because we question each other more, and that makes us less likely to think our own opinion is the only one or the right one.

‘We like that healthy debate and we want our team to look very different to us as it grows.

‘Diversity will only benefit the profession. We love what we do, but the future of the profession relies on diversity and equality, so we can relate to the communities we work for, and truly arrive at the best solutions in our day-to-day problem-solving and for the profession as a whole.’



If you’d like to find out more about either the Small Practice Forum or Female Founders Forum, email hello@simple-works.co.uk.



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