DISRUPTIVE EXPERIMENTATION

Haworth Tompkins:
Kingston School of Art

KINGSTON
SCHOOL OF ART

ON THE RIVER

Art and design have been taught in Kingston in one form or another since the 1870s, initially taking the form of art classes held in Kingston town centre. The lessons followed the ‘South Kensington System’, a state-run syllabus of arts education first developed at what is now the Royal College of Art.

Later, in 1899, a dedicated institute – the School of Art and Technical Instruction – was founded on Kingston Hall Road where fine art was taught alongside the sciences. In the 1930s the two disciplines were divided, with the Kingston School of Art establishing Knights Park, a purpose-built campus on the banks of the Hogsmill River, in 1939. What began as a single three-storey building has gradually expanded along the river, with additional extensions and buildings being added over the following decades to form an assemblage of varying forms: a formal 1930s quadrangle, a vertiginous 1960s tower and the hulking 1970s Mill Street Building, a staggered ziggurat-like structure sloping back from nearby Mill Street.

Kingston occupies a unique spot for an art school; technically in London but firmly on its periphery. Set apart from the likes of Central Saint Martins and the RCA, it has had to invent its own persona, embracing the benefits to be had from a sense of remove and solitude. Located in a suburban area, and tucked back further still off the nearest thoroughfare, one encounters it after navigating a series of quiet, twisting terraced streets, almost as though it had been purposefully hidden away. It can be approached by a bridge, with the Hogsmill River running slowly underneath, the surrounding foliage further obscuring the campus from view until the full extent of its varied and distinctive architecture is revealed. It’s a place with a calm energy; somewhere to simply think and make. Making is the

Sculpture students, c.1960

Knights Park quadrangle building

imperative word, for Kingston is not a space solely for contemplation and its tranquility belies an industriousness that is near unparalleled within British arts education. This is a school with a distinctly practical and hands-on approach to creative education that has seen the likes of Jasper Morrison and David Chipperfield pass through over the years. Heritage equipment sits alongside the cutting edge, creating a purposeful juxtaposition between the analogue and the digital that opens up new avenues of thought and fosters a sense of Kingston's rich educational lineage – you never know who might have been using a wood saw or a printing press before you.

When Haworth Tompkins were tasked with masterplanning the redevelopment of the Knights Park campus they found that it already had a high quality infrastructure, full of potential, just in need of some revitalising and recalibrating. Instead of demolition and starting from scratch, the masterplan opted for a programme of creative re-use wherever possible; identifying and working with the best characteristics of the buildings and troubleshooting areas that needed improvement.

Works began with the Mill Street Building, which houses the school's vast workshops and comprises over half of the total floor space of the site. The building was largely untouched since the '70s and over the years its interior had suffered from a series of ad hoc alterations and a layout that had grown increasingly complicated and inefficient as use of space changed and departments were added and moved around. The result was a building in which space was severely under utilised and departments were scattered across a number of different floors and buildings.

Accordingly, a significant proportion of the redesign was devoted to a much-needed untangling and rethinking of how space is used within the school. Courses were rejoined and grouped by mutual requirements, while also encouraging interaction between disciplines wherever possible. Spaces were opened up, visibility and cross-pollination of ideas were prioritised through large open areas divided by glass. Two new stairwells were introduced at either end of the workshops, for quick access between 2D and 3D design. Under utilised spaces that held latent potential were identified and given a new lease of life, leading to new studios and a big build workshop where there were none before, without the need to increase floor plan.

In a manner befitting the hulking, factory-like appearance of the building, the works are perhaps best described as a series of tactful moves, tweaks and adjustments to a large piece of machinery in need of a service; this can go here and this can connect to this and hey presto it all starts running at full capacity again.

While the interiors of the building were in need of a significant overhaul, the concrete frame and the exterior had fared much better. The straightforward, robust materials – namely concrete and brick – were still in good condition, providing a strong external structure from which to build upon. Some necessary updates, such as new glazing, were added, along with the conversion of its large tiered roofs into practical breakout space and green areas.

Weathering steel was added as cladding and window surrounds. The rust-orange metal was chosen for its tonal similarity to the patina of the building's aged bricks and for its raw sculptural quality – a favoured material of the likes of Richard Serra and Anthony Caro and an echo of the artistic production taking place in the workshops it houses. It lends an additional sense of the building being in dialogue with its occupants; a pre-existing structure that has already shaped and been shaped by generations of students and teachers over its lifetime, and now primed to continue.

Knights Park campus, c. 1970

Painting students, c. 1940

Music in the quadrangle, 1973

THINKING AND MAKING
MAKING AND THINKING

The workshops at Kingston School of Art can be considered its heartbeat. Divided across two floors between 3D and 2D design, they are the driving force of an institution that is rooted in innovative practice-based education. They are indicative of the school's 'thinking through making' ethos, a guiding principle that prioritises openness, exchange and disruptive experimentation between disciplines. There's a message in the process, new things to be discovered.

Richard Trupp, a trained sculptor and former assistant to Sir Anthony Caro, is the head of workshops at Kingston. He is an enthusiastic champion of the school's interdisciplinary and hands-on approach to teaching, which he experienced through his own artistic practice. He was interviewed one afternoon in his office, just off the ground floor workshops. The shelves were decorated with a few family photos and on the low windowsill sat a pair of ancient looking boots that once belonged to his late mentor.

"I've been here for 20 years, I was a Stanley Picker fellow for sculpture in 2000 and then there was the opportunity to run the bronze casting and the welding here and I said, 'Yeah I'll do it.' Then I became workshop manager then I became head of workshops. So, for 20 years I've seen the school change. Originally we were like most of the other art schools; each course had their own workshop. Fine art had their own workshop, product design had their own workshop. Then I think it was 2008 that we became open access. That was followed by an ethos of 'thinking through making', which has been in place for about eight years.

If someone has an idea, a student will come into the workshop and say, 'I want to make this.' They might not even have a drawing of it. They might just

have an idea in their head. And through a discussion with a technician we might lead them towards a certain material, but what we hope might happen is that through being in a workshop environment, through seeing other people around them making, different disciplines using different equipment, they might find their own creative route. That's what we try to encourage: to enable as many students as possible to see as many different disciplines and to experience as many different processes as we can offer. So that means you will get design students working next to fashion, working next to fine art, working next to architecture, all within this workshop space. It makes it a really thriving and dynamic environment. And then it's down to them to find their own creative route.

Anthony Caro's old boots, in the office of Richard Trupp

That way of thinking has really been brought to the fore in the new workshop space. It is as open as possible while remaining practical and stopping contamination between workshops from dust and noise – which was a real problem in our old space. So everything is visible, but the messy and noisy workshops are contained behind glass walls. You can see straight through from metalwork into woodwork, from ceramics into bronze casting. In our tech room we've got a digital fabric printer there – a very expensive piece of kit that's used particularly within the fashion department but also open access to other courses – and on the other side of the glass wall is our wood mill, which is so big that we could process an entire tree if we wanted to. It's amazing to have these things so close to one another and to think what ideas different students might get from seeing others working on such varied equipment. Then we've got newly designed spaces like our big build space. We've never

had something like that before but we've always wanted it. It's about seven metres high and opens out onto the street, so we're going to be able to make works at a scale that would have been incredibly difficult before. It's about allowing us to say yes to as many ambitious projects as possible, whether they're students of architecture, sculpture, set design, you name it.

Anthony Caro *Legend*, 1994/2001

Sometimes with thinking through making you go down a path that wasn't originally considered. A spontaneous path. Making promotes making. It's about engaging in diverse practices and then the mistakes that happen that students respond to, which enhances the design of what they are trying to do. Whether it's sculpture or whether it's product design or something in the fabric printer that goes wrong or in letterpress, where a letter is the wrong way round but actually looks quite good.

It's something that I've really found through my own personal practice as a sculptor. I remember I was making a piece for Sir Anthony Caro when I was his assistant. There's one piece that I made from start to finish, which is called *Legend*. It was huge, about the size of my office, and it weighed about two tons. There was a lot of hidden engineering and seams, and it was designed to be able to come apart and fit through a set of double doors. Anthony was in his 80s, so obviously he was not going to be doing all this heavy steelwork and I learned a lot through making it. One part was about 500 kilos and needed lifting up to a certain height before being welded on. Usually I would weld on a hoop and then lift it up and fix it in the right position and then chop the hoop off. You'd get a little mark where that was. But he didn't want that. He didn't want any marks on the steel at all. So that also ruled out

grips, because we sometimes used grips that you could clamp on and lift a piece up to the right point. So I was in a real pickle and I couldn't work out what to do. Then I found a piece of steel on the floor and it was wedge shaped, so I got a hammer and started whacking it underneath the piece of steel and it started lifting up. I got it to exactly where Anthony wanted it. I welded it, took the wedge out and it was job done. Thinking through making! The steel wedge I put in my pocket and, years later, I scaled it up and turned it into a sculpture. I've done them all over the country and it all started with that wedge.

Richard Trupp
Wingfield Wedge, 2004

That's all a roundabout way of saying that making work makes work, and it's probably one of the best examples I can give of why I've been so passionate about everything that is happening here at Kingston.

This is a really interesting time to be in the workshops as they are so new and not totally moved into yet. We are currently on reading week so everyone's away. But I'm excited to see students start interacting with it. The fine art students will be let loose in here in a few weeks. They're usually the ones who are most liable to start experimenting with other disciplines and their equipment. That's going to be really exciting."


BEEVERS HYDRAULIC PRESS


ALTENDORF ®
WA80


KSA
KSA
ksa


BRITISH STEEL SRSM

ADAPTIVE RE–USE

Graham Haworth and Dan Tassell in conversation with Eliot Haworth.

Integral to the Knights Park campus masterplan was the decision to work with pre-existing structures wherever possible, rather than razing and starting anew. With its well preserved concrete and brick exterior, and fully functioning but inefficiently organised workshop spaces, the campus's Mill Street Building proved the perfect starting point for a policy of adaptive re-use. Through a series of tactical tweaks, the best qualities of the building have been honed in on and problematic elements reappraised, ultimately unlocking the latent potential of an impressive but long-underperforming structure.

EH Can you start by explaining why you opted for re-use rather than demolition and construction of something entirely new?
GH One answer is related to asset value; in order to reconstruct an equivalent structure, on one level would just cost a lot of money. It's also not the most sustainable starting point.
DT Another would be space. Kingston were talking about expanding student numbers, but actually there was very little room for expansion within the site itself.
EH So you couldn't knock everything down and start again, you couldn't build a load of new buildings, you had to work with what was there.
GH That's right. We went through a process of adaptive re-use. This was also led by the latent potential in the building itself, the Mill Street Building, as it's known, is this massive, tough brutalist structure.
DT It's the largest building on campus – about 50 per cent

of the total floor area – and also contains all the school's workshops. The masterplan for the site has been quite surgical in looking at how we could carve out extra space and how we could use the site more efficiently.

EH And this means you've been redeveloping the building while it is still in use. What has that been like?

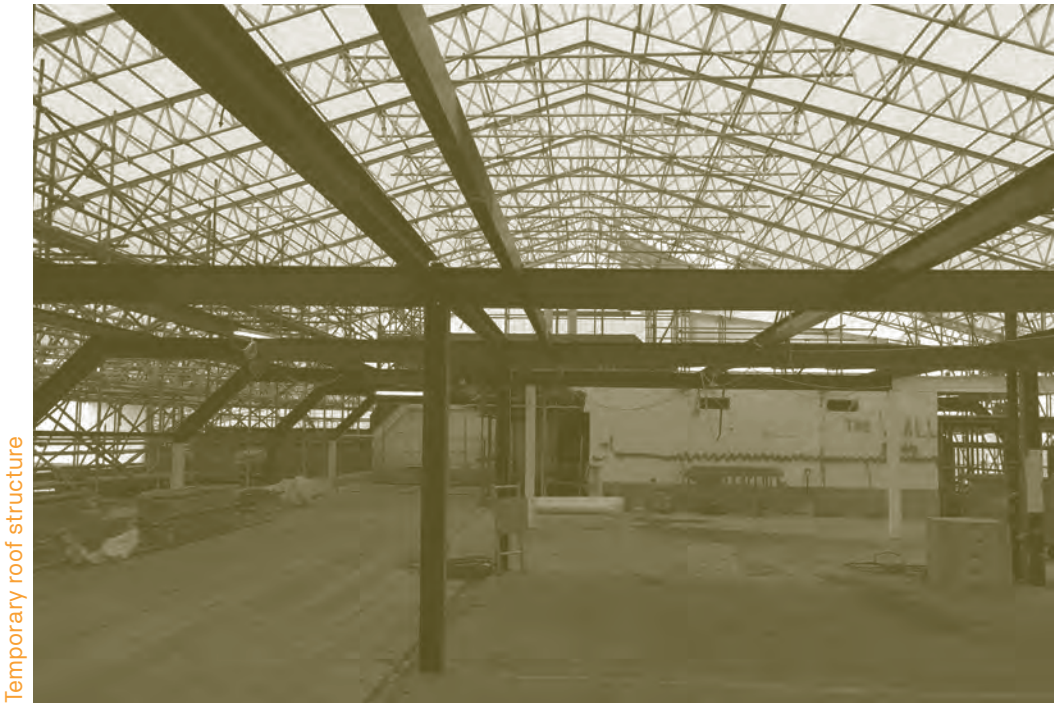
DT There has been a lot of hidden complexity to the project. Due to the sheer amount of floor space in the building and the specialist nature of the workshops, we couldn't just move everyone off site for two years and do the build. We had to make sure the school was fully up and running throughout the works. The project included building temporary facilities – darkrooms for photography, for example – and moving departments from one side of the campus to the other as sections were completed.

GH It was like one of those puzzles where you have to move the squares around in a grid in order to complete the picture. We had a vision, or an endgame, where we knew where each department would be at the end of it and we shifted them around as we went.

EH Because a lot of the departments were quite jumbled around already.

DT They were scattered around and being used quite inefficiently, so a big part of the project was simply rethinking how the space inside the school is organised and getting the building to work a lot harder. Fashion is now completely in the 1930s quadrangle building, for example, which is a space better suited to clean work. Architecture has moved from that building over to the Mill Street Building so they are now nearer to the workshops where they do a lot of messy work and physical building. Or, to take another example, the school wanted more photographic studios but there wasn't enough space. However there were two large double-height film and photography studios in the centre of the building that were not being used efficiently. By rearranging the partitions we were able to carve out four large studios, effectively doubling the capacity of the facilities.
Another key move was extending the lifts to the top floor and consolidating plant space, which has unlocked about 20 per cent more floor area.

GH What you find is that buildings go through cycles. When they're first finished they're a bespoke fit to the brief and the occupancy levels and usage at that particular time. And then after about 20 years they often need to be knocked down or recalibrated in some way because they tend to get silted up.



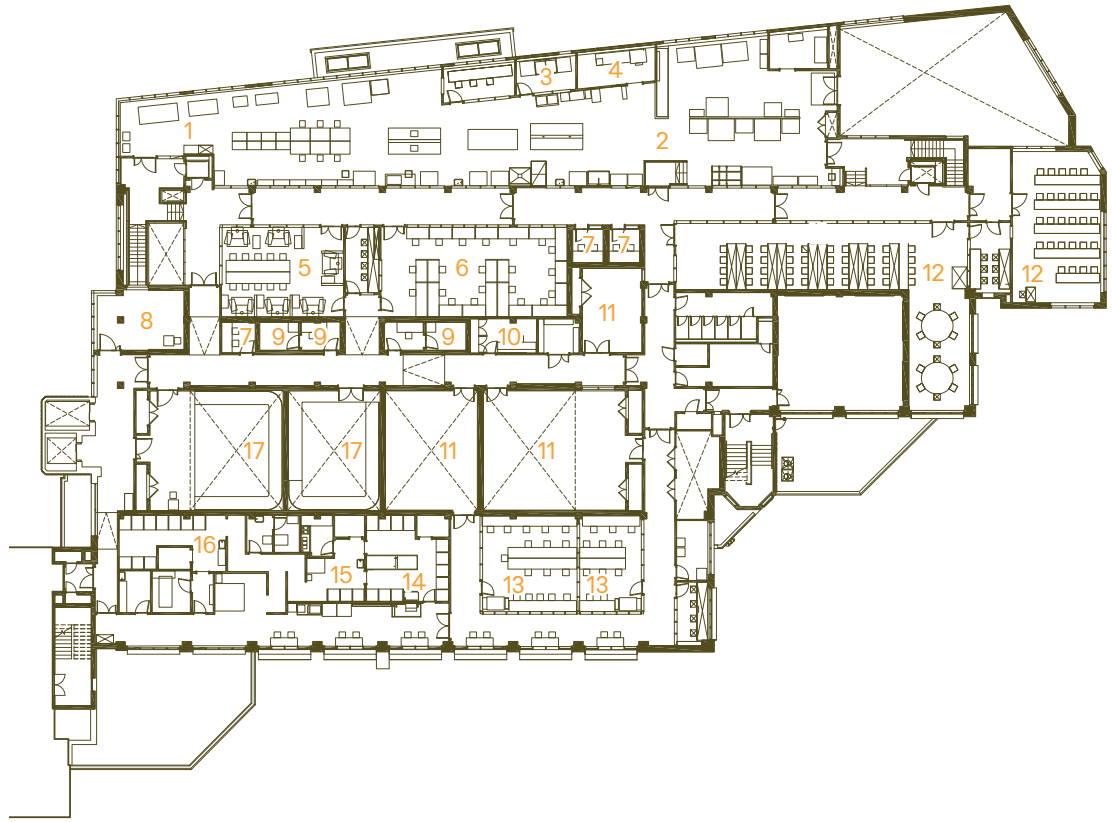
Temporary roof structure

Double-height studio spaces

Mill Street Building
Ground floor

1 Wood Workshop
2 Digital/Hack Space
3 CNC Workshop
4 Sanding Workshop
5 Concrete/Stone Workshop
6 Plaster Workshop
7 Big Build Workshop
8 Ceramics Workshop
9 Forge
10 Welding Workshop
11 Sand Blasting
12 Finishing
13 Resin & Plastic Workshop
14 Materials Store
15 Digital Media Workshop
16 Metal Workshop
17 Workshop Showcase
18 Breakout Space

Mill Street Building
First floor



1 Letterpress Workshop
2 Printmaking Workshop
3 Acid Room
4 Darkroom
5 Animation Workshop
6 Moving Image Post Production
7 Moving Image Edit Suite
8 Studio
9 Sound Room
10 Green Room
11 Photography Studio
12 Digital Media Workshop
13 Photography Digital Edit
14 B&W Darkroom
15 Film Processing
16 Colour Darkroom
17 Moving Image Studio

Things happen to a building incrementally over time, often without them being thought through. In this case the occupancy has increased, the use of space has changed, there are generational changes in teaching pedagogy. Sometimes it takes someone external to come in, analyse space use and point out what has happened. Most of the time these things happen without anyone realising, but there's just a gradually increasing strain put on the building.

EH It's like that metaphor of the frog sitting in slowly boiling water and not noticing.

DT It's a very reactive and slow process. Every summer a department will put in a request for additional space and they will be allocated something. But often there isn't enough room to keep everything together, so part of a department ends up located somewhere else, or in a different building, and gradually over time the legibility of the campus starts to unravel. It's the same thing in the workshops, a department will buy a new piece of equipment, it just gets put wherever there's space and eventually the logic becomes confused. We've been trying to factor that in through a flexible infrastructure and the grouping of similar disciplines to allow the building to adapt to future needs.

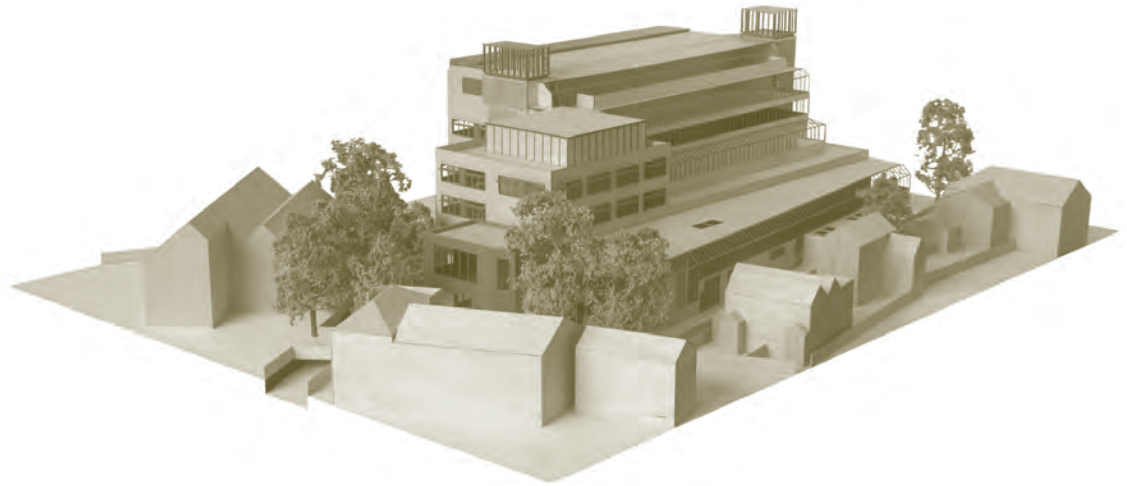
GH I suppose it comes back to the reason why we decided to keep the existing building. It's a pretty robust building in the first place and that enables you to adapt it. Coupled with the philosophy of adaptive re-use is the idea that the building is the infrastructure, the hardware, and all the partitions, moving walls and space layouts are the software that just comes and goes on a much faster life cycle.

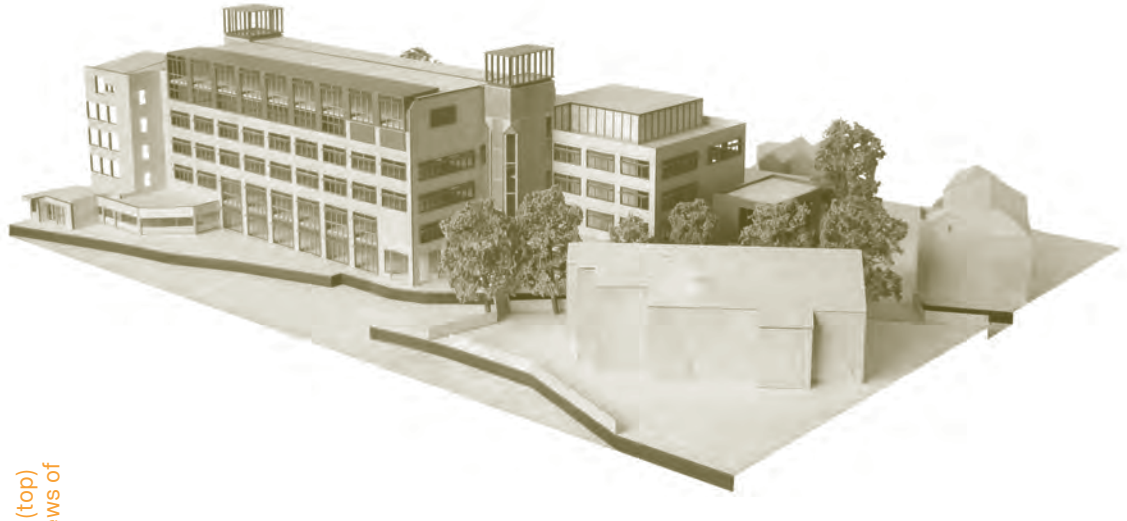
EH Talking of the hardware, and this robust structure, tell me more about the building itself. How did you decide to make use of it?

GH It's very industrial, very direct.

EH I think you've described it in the past as 'factory-like'.

GH It is. It comes from a period of architecture where lots of buildings were just thrown up by not particularly significant architects, but it's actually proven to be quite robust. And in addition to that you've got this really interesting amalgam of buildings through the campus. There is the quite formal 1930s building, a really awkward tower in the centre, a quite nondescript 1960s building and then the New Extension, which is from the 1970s. All those disparate pieces create a really interesting infrastructure for the college. It's pretty rough around the edges, it's got character, and there are some very odd things going on.





Models showing north west (top) and south west (bottom) views of the Mill Street Building

Sloped glazing being installed on studios

Lift tower extension works, as viewed from Avenue Road

Above all, it's really interesting spatially and provides an element of found space that creative industries really like to kick against. It's not like a generic new model that feels like an office block, it has actually got a lot of ins and outs, and eccentricities. The proximity to the river and the setting of it really helps that, too. It creates a really special set of spaces for the faculty to inhabit.

DT The whole approach has been deliberately low key, to allow the processes and the functions occurring within the building to take centre stage and for the building itself to not feel too precious.

GH Our role is almost curating the fabric of what's there. We curate it and bring the best bits out. There are some amazing steel vierendeel trusses, for example, which we've kept. The patent glazing on the north façade has a really specific character about it. So we've kept that idea but used modern performance glazing to make it work better. There's a concrete waffled soffit everywhere that was hidden underneath really horrible ceiling tiles. So it's about trying to strip it back to the essential qualities, which provide a good setting for other people to do their work in. The brick, the raw concrete, the foundations and the loading they provided was all there and still in fine condition and provided the key background elements of the building.

DT Just by keeping those three elements, immediately we were able to make the most of embodied carbon that was put into the building originally, saving around 1.5 million kg of CO_2 when compared to rebuilding these elements from scratch. The project has been certified as BREEAM outstanding, which has been a challenge for this type of building.

GH The materiality of the pre-existing features is important, too. It's a brick building, it has a robustness to it, it has gone through that first few decades of weathering and it has a really nice patina to it.

DT That's partly what influenced the decision to use weathering steel in the cladding and the window surrounds. It's tonally similar to the brick so it feels like a natural product that weathers the same way the brick weathers.

GH I think it's not a pretty building, it's a bit ugly, in fact. It's quite like an old truck or a tool that you have a functional use for that has worn in over time. So that gives you a license to use quite tough materials, to actually be quite direct about the new pieces that you're putting next to it and within it. If you tried to make a building from scratch,

I think the tendency, particularly within a residential neighbourhood, would be to be quite sensitive about it, almost picturesque. Whereas this building was designed at a time when there was little regard for context. It's quite refreshing to work on something that has that strength of purpose. A lot of the material choices and the approach to the spaces were about responding to the sheer brute scale of it. The citadel nature of it. Those concrete towers, they're not shrinking from anything, really. And formally it's really direct and quite inspiring to have that to work with.

EH The idea of rectifying missed opportunities within a building is interesting. You almost give the structure a second roll of the dice. One big missed opportunity here were the roofs, which are vast, flat and tiered, but didn't have anything on them.

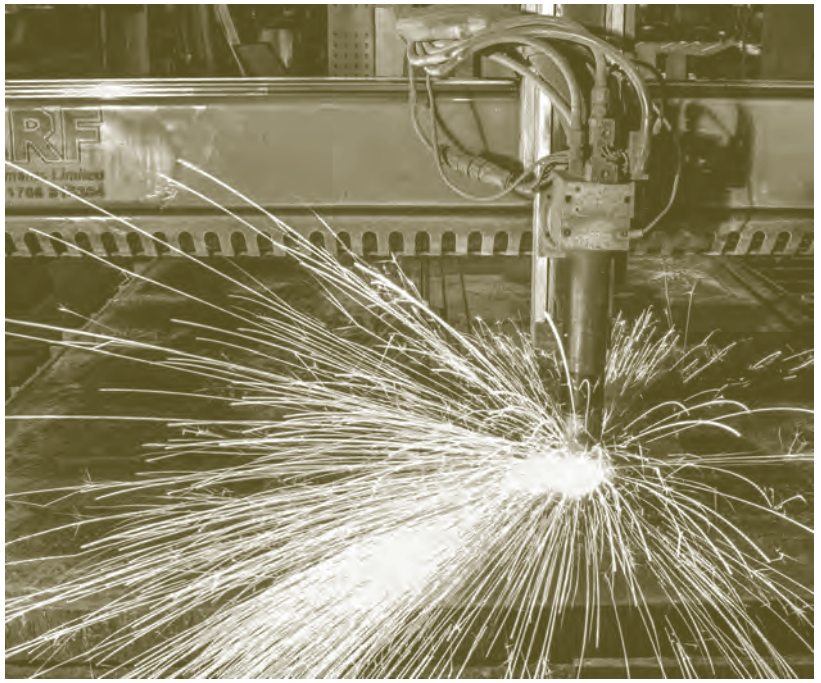
DT That's right. There's a huge surface area of flat roof that was previously just covered in bitumen and pockmarked with roof lights, but fundamentally wasn't being used for anything. So we did two things; we introduced roof terraces, which provide breakout spaces for studios, and we introduced 800 square metres of green roof. That not only provides biodiversity for various plants and insect species, but also attenuates rainwater runoff. That roof is working quite hard now.

GH Breakout space is so important and is typically really underestimated with regards to the need for it within schools. We were doing a competition for Liverpool School of Architecture earlier in the year and all the students we interviewed complained about how there's nowhere to go. They are working really long hours, it's a very intense discipline, there's no space to go out. So, at Kingston, they've now got this roof terrace and on the riverside we've created this really nice terrace space. So students can be introspective and focussed for bursts of creative work and then then go outside and relax and get a bit of fresh air.

EH In terms of re-use, there's a nice parallel between the re-use of the best architectural elements of the building and what is going on in the workshops, where it's filled with equipment from various eras of the school. They don't want to throw it all out and replace it with new stuff, if it works they want to keep it.

GH It's a really good way of connecting with the past. You forget the fact that Jasper Morrison or Matthew Hilton made something on one particular machine that's still there. That can be really inspiring. There's a cultural continuity with

Design studios being formed from old plant space

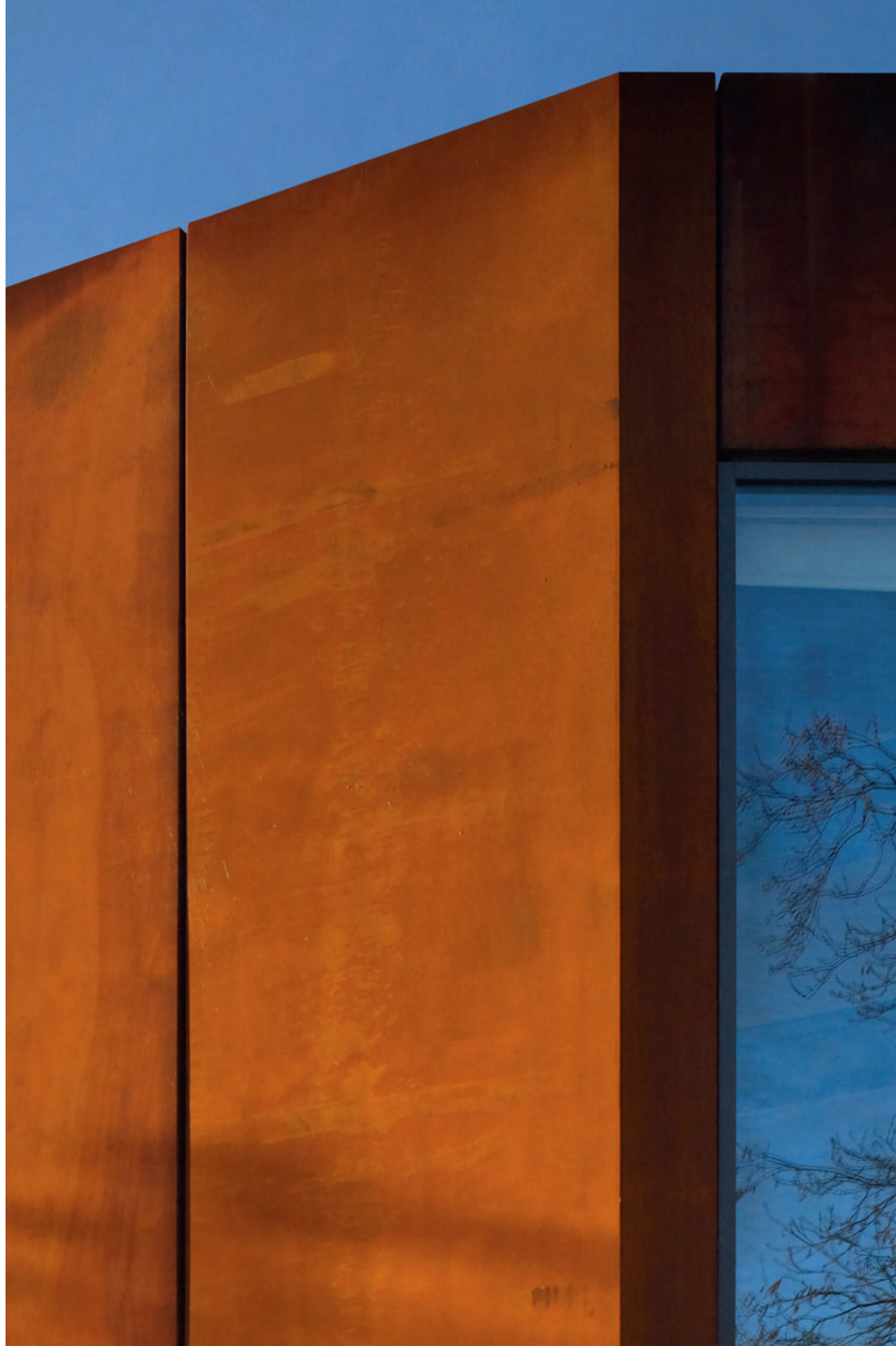


Weathering steel fabrication

previous talent that has been through the building. I've actually been wondering about the building's architectural lineage a lot recently. Because although it wasn't designed by a big name architect [George Watt & Partners], it has some James Stirling type moments in it, particularly with the patent glazing. It looks a little bit like the Lyons Israel Ellis polytechnic building in Marylebone, and I'd be fascinated to know how the stylistic influences came about.

EH It would be fitting for a building that's a bit of an ongoing narrative.

GH Exactly. I mean, it's all still ongoing. We were asked the other day by one of the architecture tutors about whether we could give their students the drawings, because they wanted to study them and run workshops to discuss how to inhabit the space. It's great how they are engaging with the space and using the building itself to teach the students who are now studying within it.



DISRUPTIVE EXPERIMENTATION

Haworth Tompkins:
Kingston School of Art

Project
Kingston School of Art

Address
Kingston School of Art
Grange Road
Kingston Upon Thames
KT1 2QJ

Kingston School of Art

Architect
Haworth Tompkins
33 Greenwood Place
London
NW5 1LB

Architect Team
Rowena Bond, Sho Das-Munshi, Graham Haworth, Edoardo Milli, Ken Okonkwo, Patrick Quinn, Jonnie Rees, Mariana Rodrigues, Federica Russo, Kishan San, Dan Tassell

Project Manager
Turner & Townsend

Structural Engineer
MLM

Service Engineer
CBG

Thank you
Penny Sparks and Richard Trupp

Published
February 2020

Title
Disruptive Experimentation:
Kingston School of Art

Editor
Eliot Haworth

Design
Cartlidge Levene

Printing
Pureprint

ISBN
978-1-5272-5896-9

Image credits
Philip Vile
Haworth Tompkins
Pages 9–16, 18, 21–44 and 57–59: Images courtesy of Philip Vile
Pages 4–8: Images courtesy of Kingston University Archives and ArchiveKSA
Page 19: Image by John Riddy, courtesy of Barford Sculptures Ltd
Page 20: Image courtesy of Richard Trupp
Pages 47–55: Images courtesy of Haworth Tompkins
Page 55 (lower): Image courtesy of Fabrite