Issue No.1

Workplace

Perspectives on

the future of

design across

different sectors



Contributors

JOSH ARTUS is Consultancy Director of The Centric Lab, a life science company intersecting with the built environment. The aim of The Centric Lab is to use neuroscience to make spaces, places and cities better for people.

KEVIN CHAPMAN is the Director of Leasing and Origination for Lendlease, where his role includes the delivery and promotion of the 4,000,000ft² of new offices space at International Ouarter London in Stratford. Kevin also represented landlord and tenant clients at Nelson Bakewell, where he led the City office. His previous roles include UK Managing Director of Garbe Real Estate and UK **Property Director** for CLS Holdings Plc, where Kevin was active in the conception of the Shard and London Bridge Place.

DONALD CHOI is the CEO of Hong Kongbased developer Chinachem Group. Donald has over 30 years of real estate development and investment experience in North America, Asia and China on a variety

of project types, including offices, shopping malls, hotels and residential. Donald was Director of Foster + Partners and the Authorised Person Architect for the Hong Kong International Airport. The airport was named one of the Top Ten **Construction Projects** in the World and has won numerous awards, including Best Airport in the World since opening in 1998.

PETER CLARKE is Vice President, Development at Brookfield Properties, predominantly dealing with project management aspects of commercial schemes, including London Wall Place and the new 1 Leadenhall development. Peter joined Brookfield specifically to manage the London Wall Place scheme in September 2014. Peter has previous worked for SLW Project Management, Grosvenor and DTZ.

FELICITY FRANCIS is an established writer with a background in business journalism. Before going freelance, Felicity spent ten years as an in-house journalist and editor on a range of UK and international titles.

STUART HARMAN is the Head of Design at Brookfield Properties. He is responsible for the strategic and detailed design delivery of commercial office development in Australia. Stuart joined Brookfield in August 2011 and has over 29 years' experience in commercial office design, both in Australia and internationally, including 16 years at Crone Partners Architecture Studios, where he was the Studio Director responsible for major commercial projects.

DR JULIA JONES has been examining the effects of music on human behaviour for over 20 years. She advises a diverse range of clients in the public and private sector on the best use of music in public spaces and the workplace. She is CEO of experiential agency Found in Music and a Director of strategic consulting firm Sound Diplomacy.

BOLA LASISI-AGIRI is 23 and currently undertaking his master's degree in architecture at Oxford Brookes University. Bola is also working for Fosters + Partners.

EXCHANGE

Issue No.1

Workplace

make

"With Exchange, Make's new thought leadership series, we aim to explore some of the ideas, challenges and trends that we and our property industry colleagues are encountering."

Welcome

At Make we work across multiple sectors, which I think is a real privilege. We learn so much from those we collaborate with, which is absolutely invaluable as designers. There are so many fascinating trends and changes in these different areas – many of them crossing traditional sector boundaries – that are directly influencing the future of our built environment.

With Exchange, Make's new thought leadership series, we aim to explore some of these ideas, challenges and trends that we and our property industry colleagues are encountering. Each issue will focus on a different sector, with contributions from a range of clients, consultants and industry experts from around the world.

Issue No. 1 starts with the most recognisable of Make's workstreams: workplace. It features a discussion between our project leaders about where the industry is now, along with interviews and articles from contributors like Nick Searl of Argent in London and Natalie Slessor of Lendlease in Sydney, and case studies of Make projects and other thought-provoking workplaces.

We hope this, and future issues, will act as a catalyst for broader discussions.

Ken Shuttleworth Founding Director, Make Architects





















STUART HARMAN

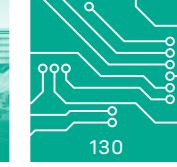






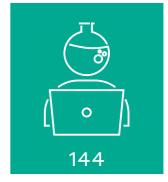












CONCLUSION
150



Long live the office

Fifteen years ago, offices were fairly uninspiring places on the whole. Senior staff were smuggled away in their own offices, and cubicles kept conversations to a minimum. As new technology started to cut the ties that chained workers to their desks, giving people the freedom to work at home, in a coffee shop or just about anywhere, many hailed the death of the office.

"But that was rubbish," says Luke Appleby, co-founder of office agency Kontor, which specialises in finding amazing workspaces for growing businesses as well as established companies. "More and more office space is still being developed, but it's a different kind of space. It's creative, inspiring, adaptable space. People will always want to be together."

What has emerged is a new breed of comfortable, design-led spaces that combine function with style. Co-working and flexible workspaces have exploded onto the scene, and space in general is being used in a very different way. The question now is whether these new trends have gone too far. Arguably, most changes to workplaces in the last 15 years stem from the impact of technology. In July 2005, Apple's sales of laptops exceeded those of desktops for the first time, and this quickly became the industry norm. Suddenly, work was portable. A further shift came

8

when smartphones were introduced to the masses in 2007. Today, a host of technology solutions make it easy to do business when you're not in the same room as a customer or colleague.

"Technology has enabled businesses to connect with customers on digital platforms rather than in traditional brick-and-mortar point of sale," says Kata Wielgus, office manager at Minute Media, a global football media and technology company that has a very cool UK office in a listed building overlooking Liverpool Street Station.

In turn, this has dramatically reduced the barriers to entry for those looking to start a company. "There has been a growth in software as a service in all

Long live the office

remits – accounting, legal, remote IT and so on – which means speed to market is much quicker," says Appleby. "Successful businesses grow much faster, and office space has to be much more flexible."

The number of start-ups, SMEs and freelancers in the UK has boomed in the last five years. In response, the property sector has had to start offering much more flexible workspaces. According to Cushman & Wakefield, 21% of commercial leases in London in 2017 were for flexible workspaces – that's 2,300,000ft² of lettings, a 190% increase on the previous year.

"Serviced office space on shorter-term contracts give companies the flexibility to grow and work in a better environment than more traditional solutions," says Ryan Fitzpatrick, financial director at digital marketing agency Vayner Media in Shoreditch, which went from zero to 60 employees in just two years. "Often, they also allow business to leverage tech and reduce the number of seats required day to day."

Technology and the growth in small businesses have ushered in a generational shift that has fundamentally changed what we expect from the workplace. As millennials entered the workplace, they brought with them higher expectations for the place they spend so much time. Health and wellbeing have been pushed much higher up the agenda for all of us in the last decade, and more offices take elements such as natural light and space to relax far more seriously.

"The first item that we purchased for the office was a pool table, not desks or chairs," says Wielgus, epitomising the trend to create a fun, social atmosphere

in the workplace. Millennials don't want to wait until 5.30pm for their social lives to start; they want to socialise at work.

It is the acceptance of this shift that has steered employers away from killing off the office to offering much more dynamic workplaces. As desk spaces have become smaller, partly as technology has reduced in size and cost of desk space has risen, more businesses have started to offer inviting breakout spaces – kitchens, seating areas and bars, for example. Offices have come to resemble hotel lobbies or cafes, even homes. While inviting employees to spend more time in the office, these design elements offer the 'collision space' that old-fashioned office layouts lack.

"I worked in a start-up before in an old building, where the kitchen was a dingy little room for 90 people," says Alistair Fraser, head of people operations at online estate agent Nested, which in two years raised £86m of investment and moved offices twice to accommodate growth.
 "Now we've got almost 5 times that size for our 80 or so employees. We see the value in people being able to sit down together at lunchtime, having conversations they wouldn't have had otherwise. It helps the subcultures in different teams mix."

In the war for talent, "having a great workspace absolutely helps us to attract staff," adds Fraser. Wielgus agrees: "I believe that people would rather work for the company 10

that provides as comfortable working conditions as possible. If we can make people feel like they're at home in their workplace, that's great."

But have these trends pushed workplaces too far from being what they are – a place to work? While the open-plan layout currently favoured by many businesses might enhance communication, more businesses are recognising the need for private space. This is what Kontor has found, explains Appleby: "The balance needs to be found between the right environment for people to feel they can socialise and the space to concentrate."

Minute Media favoured an open-plan layout but also introduced phone booths and private zones, which Wielgus says has positively affected company culture. "It is good to make employees work close to each other most of the time, but if needed they should have an option to 'escape' to the more private space," she says. Similarly, Wielgus is not a big fan of another trend – hot-desking – as it "makes workstations less personal and comfortable."

While businesses wrestle with the finer details of workplace layout, there's no doubt that they can offer so much more than they could 15 years ago. Today it's not uncommon for businesses to have dedicated events space, if only for staff socials or to host customer events. The lines between the workplace and the places where we spend the rest of our lives have blurred to such an extent that they are unlikely to ever be fully re-established. But, in all respects, long live the office.

MAKE ROUNDTABLE

Frank Filskow, Florian Frotscher, Liz Glassford, Sam Potter, Jack Sallabank, Becky Thomas, Sarah Worth How has workplace design changed over the last ten years, and what can we expect to see in the future? Jack Sallabank chaired a roundtable with a selection of architects from Make to discuss their perspective on workplace design.

Jack Sallabank: How have you seen workplace design change during your time as architects?

SAM POTTER: Over the last ten years, the workplace has changed dramatically. It was once just an introverted box where you were from nine to five. But, because of technology and the changing expectations we have about how we want to work and live, the workplace has started to blur boundaries with what you do with the rest of your life. As a result, the design of the workplace is moving at such a pace that it is very easy for designers and developers to get left behind in terms of expectations. For too long, people have had low expectations of what the institution of work should offer them, but that has all changed.

FLORIAN FROTSCHER: We have a new understanding about the efficiency of an office. Office efficiency has traditionally been measured by how many bums on seats a space will allow. Now there is a much better understanding that wider business costs such as recruitment and retention are directly affected by the quality of your workplace. High-quality space is shown to enhance creativity and productivity – designers can achieve this by prioritising daylight, biophilia, amenities, materiality and more.

BECKY THOMAS: Technology has allowed people to work anywhere, which has shifted how we think

Make roundtable

14



about the use of the workplace. That has led to a shift in how people work and when people work, and our job is designing a workplace which reflects that change.

FRANK FILSKOW: A building or an office or a room or a desk are not where you do your work. They're simply part of a 'toolkit' that allows you to do some of your work. The same is true of checking emails from home or on your phone on the train or when sitting in a lobby before a meeting. There is now a huge palette of ways of working, and the building is part of that. Inside the building there should be different parts which have different options – places for working in a group, places for individual working, areas for socialising and so on. Fixed desks are no longer the go-to.

16

Jack: What are the drivers to some of this change?

FRANK: Employers. If you take somewhere like Google, there's a lot of mundane work that has to be done to facilitate the more exciting work the company's known for, and if Google didn't make the effort to make its workplace interesting, then it wouldn't work. If Google just had employees racked up in seats like a call centre, it wouldn't be the place it is now.

Private employees are also leading the way. Career paths have changed, and jobs for life are a thing of the past. Employees are increasingly interested in workplaces that blur the lines between living and working – that offer dynamic environments and a sense of community. We as architects are reacting to that.



SAM: Over the last couple of years we've seen developers and agents changing. They see an image of a corporate reception and say, "I don't want that; I want a market in the reception." People don't want austere space anymore; they want to see a mixture of uses in a building, especially the lobby, where there's room for all kinds of functions and activities, like libraries, coffee shops, galleries and such.

FRANK: Attitudes towards property ownership and investment are changing – that's what's enabling the mixed uses of buildings. Ten years ago if you spoke to a property investor about mixing residential, hotel and office, they would say it physically can't be done, because we need to create red line legal ownership boundaries between those uses. Now people are looking at buildings and talking about them as 'just space', and as soon as you start to refer to it as 'just space' then everything becomes possible. That is crucial.

BECKY: Location of the workplace is also a key driver of change in terms of what the city provides people. In order to attract the best talent, companies want to be in the heart of the city, where there's existing retail, dining and leisure activity. Being surrounded by all of these amenities means that you can provide less amenity space in the office, which then gives you a bit more flexibility with how you design and use your space. 18

Jack: All of that change must mean that as a profession, architecture has new challenges and questions to respond to. What are some of those?

FRANK: How can we create community through a building? We're working on projects which are going to have 20 or more tenants vertically spread through the building. That's no longer just a building; that's a district. If you took that and laid it out, that's the entire commercial area of a small town. Therefore, it should be treated as such – it should have a cafe, shared space, hotel and residential.

SAM: In order to deliver that community and mix of uses, we need to look at how we tackle the use class of a building to allow for as much flexibility as possible.

BECKY: We also need to think about more universal buildings so we're anticipating the refurbishment projects that might take place in 30 years. We need to design buildings so that we don't need to completely demolish them in the future, but instead can retain elements such as the facades and just play around with the use of what's inside the building.

FLORIAN: As architects, we have to be careful that we don't fall into the habit of focusing on the amenities only and letting the lobby area become

Make roundtable

the bean bags and football table of office design. Okay you might have a mixed use market in the reception, but if you stick to just normal office space above, it will look like offices have always looked. Instead, we should be channelling activity through the ground floor and upwards – for example, with mezzanine spaces across the office floors that support other uses.

Jack: Is there a risk that such office buildings in London won't have a relationship with the city and will actually just be big fortresses that most Londoners have no interaction with?

FRANK: It is a risk. Large buildings with lots of companies inside are effectively public buildings and should be seen as such. In Asia, it's often the case that anyone can get in the lift in reception





and go up to the level they want, and then the security starts when you step out of a lift at a particular floor.

We should bring more of that thinking in. Once you've opened the building up and made it more accessible by changing the boundaries, you then have the interesting question of what can we use the rest of the space for?

The new Bloomberg Building, for example, has a public route through it at ground floor. There's hardly any amenity offer inside, but this route is effective in drawing the public into the building as well as encouraging employees to get out into the city to have lunch, coffee etc.

BECKY: Bringing residential into business districts is also vitally important to address that issue.

Make roundtable

20

People expect places to be open 24 hours, and you can't achieve that by just having commercial centres. If you were redoing Canary Wharf now, it would be completely different – you would put a lot more focus on the public realm and the amenities, and it would undoubtedly include lots of residential.

FRANK: Traditionally, town planning has had different areas for work, for residential and for the civic centre. Now, with the way everything has blurred, people's home life doesn't come to an end when they get to work; similarly, their work life carries on at home. So why should work and residential be miles from each other? We don't need to have an area full of empty houses in the day or empty office space in the evening. We actually should have districts where you can, live, work, play and learn in one area.

Stratford is a good example of this: there are all types of buildings, and new districts are being created that people want to be a part of. In fact, Lendlease is trying to make a case for Stratford as an office destination with its IQL development. The aim is to build on Stratford's Olympic legacy and increase its already diverse mix of uses by bringing in more universities, businesses and cultural institutions.

Jack: What are some of the changes you expect to see in the future, and how do you ensure you stay relevant and responsive to that change?

SAM: I think it's a very exciting time and there are a number of things we should be doing. We have a responsibility to push policymakers and legislation to catch up with what we're hearing end users say, to ensure we can have flexibility about the use class of buildings.

I also think we need to keep learning from the co-working model. Co-working may prove just to be a fad, but what it's doing is demonstrating the key principles of building a community within a building, and it's changing the model of how tenants in a building can interact, share space and work together. The more we can understand about the way these communities operate, the better we can be at building future workplaces for them.

FLORIAN: I think we will see more sectors transitioning into the tech industry, and this will



Make roundtable

22

change how they think about their workplaces. Take banking: it's becoming more and more of a tech industry. Therefore, if you're building an office for a bank today, you should reconsider what it needs to look like. Does it have to visibly be a corporate bastion of security, or can it look like a fun place to be while still being secure? The next part of that is where they will locate their business and how that will change London. Does a bank still have to be in a financial district like Canary Wharf or the City?

BECKY: Some of the projects we deliver take years to develop, so it's important we continue to encourage the client to be progressive with their thinking. It could be ten years before the project is complete, and you don't want it to be already out of date before it opens. Therefore, we need to get into the mindset of thinking about and planning for what might happen in the future.

FRANK: I think staying relevant and responsive to whatever change may come means remaining true to the fundamental principle that we don't design workplaces, we design places for people. We need to design places that people want to be in. What is it that people need to do while in that place, and how do we best enable that?

Case study The British Library

24

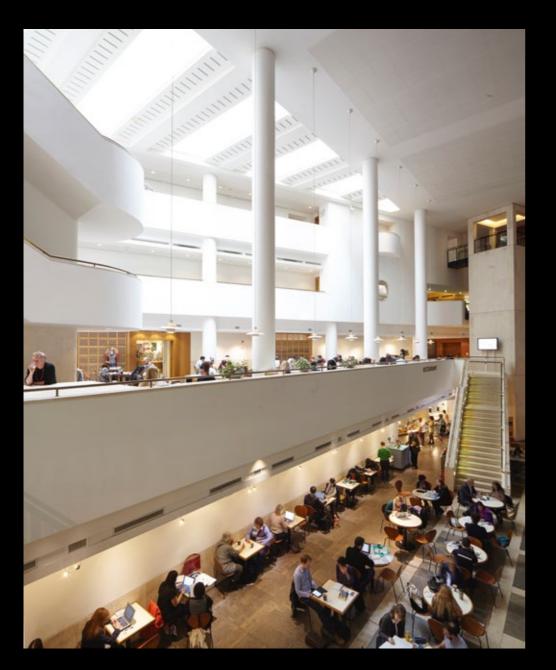
Good placemaking invites people into the building and creates a public space within the building.

"The British Library is a really interesting example of this. It was designed with no anticipation of public involvement. It was an elitist building designed deliberately to look so. It had a private courtyard that enters into an exclusive library space and was designed in every way to keep people out. But ironically it has evolved in the opposite direction. It has reinvented itself as a public building.

All of the workspaces that were there for elite library users have been taken over by students or by people travelling in and out of London who need a place to work for an hour or two. It has become a co-working space without even knowing it. It is 100% public, but it is still completely secure. Why can't we design office buildings that work like that and which in turn contribute to the public realm?"

Frank Filskow Partner, Make





SUCCESSFUL SPACES The cafe area of the upper gallery is such a popular meeting place, it's expanded to the level below.



NO UNUSED AREAS Every inch of the library's public circulation is used by members of the public looking for places to pause or to work.



NEW USES Desks originally designed for library users are now used by members of the public for informal meetings and remote working.



A DRAMATIC SETTING The setting and scale of the public areas set the stage for ad hoc habitation that creates a dynamic and attractive setting, drawing other users in.

NICK SEARL London

Partner, Argent



"The more these giant office buildings play a societal role and are not just a fortress to the activities that go on within them, the more our cities will benefit."

We discuss... Google's workspace, Brent Cross South and launching delivery drones from buildings.

Nick Searl

JACK SALLABANK: You've been at Argent for 11 years. What sort of change have you witnessed in how offices are used over that time?

NICK SEARL: The important thing you just said is how they are 'used' as opposed to what they are – there is an important distinction between the two.

In addition to the experience at King's Cross with Argent, I've been working with the British Council for Offices (BCO) for the last seven years, where I've been lucky enough to be on the London awards judging panel. Over those years I have visited over 180 office buildings. That has given me an extraordinary insight into what has been going on in workplace design and the changes over that period.

Two things have really struck me. One is how much more flexibility there is in terms of location. A lot of organisations that you would have allocated to a very specific part of our city are now going to very different locations, and they are being driven by the connectivity and quality of the environment around the building as much as the building itself.

The second big change has been the way that buildings are being fitted out and the types of organisations now occupying those spaces. We are seeing banks, law firms and insurance companies organising themselves in the same way that we see advertising companies, media agencies and tech companies organise themselves.

What seems to be driving this is a common set of themes around how buildings are used as social places for interaction and collaboration, places to share knowledge and places to attract top talent. Not just places to 'work' in the traditional sense of the word. And of course the war for talent now transcends the different sectors, with banks now trying to attract the same people as Google.

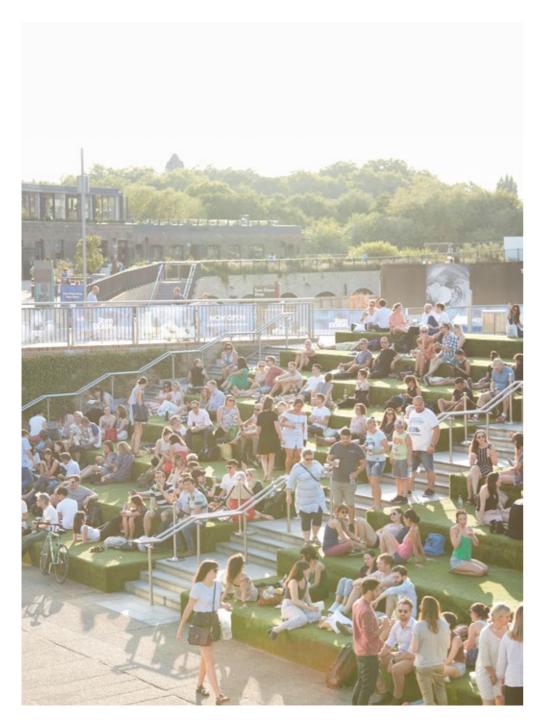
The fundamental impact of all this is that the places where people go to work now provide a much better experience than they used to. There is now a much greater appreciation of how people want to work and how they can be most productive. We don't always get it right, but this shift in approach, to my mind, has to be a good thing.

JS: In terms of those 180 offices that you've visited, how do you judge whether it is a success or not?

NS: Talking from the BCO perspective, the first thing that we require from a developer or a business is for them to talk about why they have done the things they have done and how this is bringing benefits to its various users. The BCO judging is not an architectural competition or a technical specification competition. It is about assessing the effectiveness of the workplace to support the businesses and the people who are operating within it.

JS: Is there a common theme that you have noticed with businesses that get the workplace right?

NS: There is one theme that stands out for me. It's when the person presenting the rationale for the project is the leader of the business that occupies it. Often



SOAKING UP THE SUN Canalside steps sweep down to Regent's Canal from Granary Square, providing eight levels of tiered seating. 36

this person will have been involved from the start, and has owned the brief, the process and the outcomes. When that is the case, the drivers are clearly business-led, not simply design-led, and are all the stronger and more credible for it.

JS: Google is one of your big tenants at King's Cross and is often used as the example when it comes to talking about how office design has changed. What have you experienced from working with Google?

NS: Many people look back ten-plus years ago with regards to Google, and they remember bean bags and slides. At that time what Google was doing inside its buildings was radically different from the norm and reflected how the company thought about itself at that time and how it wanted its people to operate and work differently from other organisations. That was very pioneering, and many people started to copy that. The reality now is that Google, and indeed many other significant tech and media companies, is far more sophisticated than that. Any notion that Google is putting slides and bean bags into buildings today is misguided. Google's very thoughtful about creating workplaces that bring large numbers of people together, who do very different jobs, to collaborate.

JS: How does a developer respond to the changing needs of occupiers?

NS: When we are talking about a single occupier of a building, in some ways we need to do less rather than more. We need to make sure the building is extremely well specified and serviced in terms of power, connectivity etc. And of course high-quality design generally, both internally and externally, is a good thing. But the last thing we want is to see tenants ripping out interior finishes and other parts of the building. Providing a simple, flexible structure into which they can create a variety of different environments, with the ability to change things quickly and inexpensively, is a motivation in these circumstances. And of course the earlier developer and occupier are working together on this, the better the outcome.

At the other end of the spectrum, where we have multi-occupied buildings, we need to do more, particularly on the 'software' side of our business. By 'software' I mean management, services, amenities – whether they're physical or digital. Our industry has always focused on the 'hardware' side of the business, and while this remains important, the emphasis is shifting.

One of the areas where I don't think we have done enough is examining how our office buildings fit into cities as buildings with relevance to the people who live in that city. Most buildings are big plate glass walls, very often with steel security barriers inside and someone with a peaked cap who looks remarkably like a security person. The implicit message is that if you don't have a security pass or aren't visiting someone who does, then this building has nothing to do with you and you're not particularly welcome. We (and others) have taken tentative steps with some of our buildings

to address this. In our R7 building, by introducing a cinema, a restaurant and a leisure use into the ground floor of the building, which can only be accessed through the front door, we are actively inviting the public into the building. Another example is Kings Place, just over the road at King's Cross, where the concert hall, restaurants and galleries welcome the public into the ground floor of this office building to meet and to work. It's a good start, but we have a long way to go to address this issue in London.

The King's Cross you see today has been planned and built over an 18-year period. By the time it's finished, it will be more like 23 years. Trying to imagine what businesses will be doing and what they will need in 20-plus years is extremely difficult – the rate of change is accelerating exponentially. The attitude in the planning phase at King's Cross was to allow for as much flexibility as possible, and that manifested itself in a significant overprovision of below-ground ducts and conduits. And it was

38

"The King's Cross you see today has been planned and built over an 18-year period. By the time it's finished, it will be more like 23 years."

It's not always going to be possible, and it's not always going to be desirable, but the more these giant buildings play a societal role and are not just a fortress to the activities that go on within them, the more our cities will benefit.

us: In this location you have a tech cluster forming. How do you plan and provide for those future industries?

NS: One of the big challenges is ensuring that we are providing these businesses with significant digital infrastructure so they can run their businesses effectively. London is lagging in that area generally. a good job we did, because they have been well utilised. Basically, we need to build as much flexibility and capacity into buildings and developments as possible to allow for all the things that we don't know about yet.

We recently spoke to a company that wants to rent space on the roof of our buildings for drone deliveries. It's at quite an advanced stage of developing this service, and that raises lots of questions about how objects and people will move around our city in future, what impact that will have on the design of buildings, and how can we plan for such changes now. I'm afraid I don't have the answer on that one just yet. JS: Brent Cross is your next big project. Argent is rightly applauded for the success you have made of King's Cross, and people will be very interested to see what you do with Brent Cross. What are the plans?

Ns: Brent Cross South will be developed by Argent Related and will bring to bear not just our experience but that of Related, which is perhaps best known in the UK for its Hudson Yards project in NYC.

The project is situated at the bottom of the M1, and it will have a new Thameslink station built within it, which is going to bring you straight into King's Cross St Pancras in 12 minutes, so the fundamentals of transport connectivity are excellent. It also has incredible scale.



ICE CREAM TIME Young and old are provided for at Granary Square.

Nick Searl

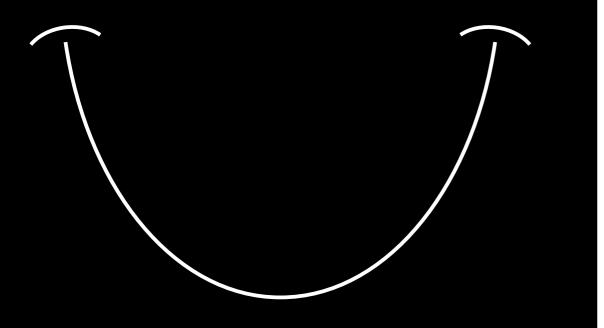


It is 10,000,000ft² of mixed use, including 6,700 homes, with significant sport, leisure, education and retail components. Importantly it also includes some 3,000,000ft² of office space – roughly the same as we have here at King's Cross. That excites us for a number of reasons, first and foremost because we think a thriving new town centre needs a daytime economy of people who work there. These people use the shops, restaurants and leisure facilities, making them sustainable and successful in the long term. Without them, it's effectively a dormitory town.

From an office perspective, in a location like Brent Cross South we have to ask ourselves what type of buildings do people and organisations want? It's not a business park and it's not a West End office building, so what is it? We think there's a new model, and we're in the process of figuring that out right now.

LOOKING AHEAD Visitors passing an area of Granary Square still mid-development.

WELLBEING and the WORKPLACE



Josh Artus Founder, The Centric Lab

Wellbeing and the workplace

A staggering 57% of people are dissatisfied with their workplace settings, believing they don't support their productivity, reads the latest Leesman report. I find this interesting at a time when workplace design, culture and technology have never been of a higher quality. Perhaps the relationship we're looking at is more complex than we think. Are we looking at the right things?

In a recently published piece of work The Centric Lab produced alongside University College London for the Future Cities Catapult, we demonstrate at length that health, wellbeing and productivity are delicately interconnected systems within the built environment. The purpose of the publication was to identify where, how and why neuroscience will be a useful tool for 44

Wellbeing and the workplace

such noise, air and visual stressors on our productivity throughout the day, week, month and year. As there is still a lot to learn about the brain, we cannot directly relate activities such as collaboration or creativity to cellular activity in the brain. While there are strong correlates, there are also outliers. Creativity and collaboration do not follow a linear path. Is a midfielder in football not creative? Is a mechanical engineer fixing an engine by the side of the road not creative? Is putting up a tent in the

> wind not a creative and collaborative effort? Each of these represents distinctly different physical and psychological settings, and is driven by other motivations. Therefore, it is perhaps remiss of science to argue that

urban placemakers in the 21st century. As a field of research, cognitive neuroscience is concerned with identifying the

biological processes that underpin cognition. To focus on the latter and reverse engineer is the wrong way around. In fact, as demonstrated in our publication, called "Neuroscience for Cities," it is perhaps taking into account the former that gives us a better understanding into how a person perceives the world around them and underpins their biology to be well and productive.

Neuroscience allows us to see, identify and evaluate what is experienced but not expressed. For instance, our psychological perception of taking the London Underground daily for 30 years may not be that much of a bother, as it has become habituated. However, biologically we should be looking at the half-life of

'X' spatial quality will make someone more productive. If anything, our research is telling us that before we try to go for elevation, let's get our foundations in order.

We sit on the side of the fence that says humans are highly capable; when their homeostasis and environment are aligned, anything is arguably possible. It is therefore the role of built environment practitioners to not only understand the biological interconnectedness of urban life into building curation and spatial design,

but also work with other groups to improve their own unrelated service, such as transport networks, delivery systems and public infrastructure. Is it not mad to think that, in the face of the fact that urban pollutants and stressors – such as air pollution from vehicles, light pollution from buildings and streets, and noise pollution from density – decrease health, wellbeing and productivity, corporate bosses should be working harder to improve those, as opposed to worrying about their lobby design?

When it comes to neuroscience, the workplace and the buildings that encompass them, we see the responsibility being twofold. Firstly, there is the need for building owners and their designers and managers to ensure they are biologically in-tune buildings and spaces that intuitively support a person's agency. That is supported and cross-referenced by rigorous research into how physical qualities impact or support biological and cognitive processes associated with modern work.

Secondly, as we grow into the 21st century world of work, user experience and customer-centric 'human economy', it's time to take into account that a person's perception and value of a workplace and building sits beyond the red line on a plan. This means that alongside the world of IoT and smart buildings, we must also work smarter in the interconnectedness of people and the

> multitude of spaces they inhabit and systems they use to guide and enable their lives.

47

The role of neuroscience in the built environment is to identify stressors preventing humans from capability and advising on risks to be mitigated. Applying scientific theory is a little like buying Thai fishing trousers while travelling and wearing them back home: context and relevance are everything.

There is no doubt that the complexity of measuring productivity as a result of built environment elements is tricky. It is one for the time being made in faith of the research, the interpretations and the applications. Understanding humans, how we work in an ecosystem and the interrelation of all those elements is not only the journey of neuroscience in the built environment, but also the job of the built environment leaders of tomorrow.

KEVIN CHAPMAN London

Director of Leasing and Origination, Lendlease



"Most experts will probably admit that the Australians are a couple of years ahead of us in terms of how they measure productivity."

JACK SALLABANK: From your time at Lendlease, what sort

of changes have you seen in how you're designing workplaces?

Kevin Chapman

KEVIN CHAPMAN: The biggest change has been in the health and wellbeing aspect, and what platform occupiers are given to layer across their own health and wellbeing agenda. At International Quarter London (IQL), we focused on this from the outset of our design evolution. So we have buildings that are delivering 100% fresh air; we have buildings that have specifically designed active stairs. We're bringing fire escapes to be highly visible in front of lifts,

FUTURE SKYLINE International Quarter London as it will look next to the Olympic Park. putting staircases on the outside of buildings so they're highly visible and exciting to run up and down.

Through the leasing of IQL and the tenant engagement we have had, tenants are very tuned into this and to the extent that they have to demonstrate that they are delivering healthy workplaces to secure the best talent in the market.

How we as developers respond to that health and wellbeing agenda is the biggest change that I have noticed.

JS: How is 100% fresh air achieved in a building?

KC: It's technically very simple. It does need a bit more extraction. Five years ago, 20% of air in an office was being recycled; the main plant would maybe only bring in fresh



We discuss... International Quarter London, Australia's advanced workplace design and achieving 100% fresh air in a building.

air of about 80%. We wanted to deliver the freshest, healthiest air that we could, so we extract all of the air, and the stuff that we bring in is fresh from outside. That does mean that we have to up the capacity of the air handling plant, but it doesn't mean a lot more than that. It's a very effective measure that we take, which tenants understand. Knowing that you're which certain businesses prefer. So that was something we were very keen to do here. Conversely, the coworking and flexible office operators prefer shallower floorplates, so it's important that we maintain flexibility to do both, because we have to meet both customer needs.

52

JS: Lendlease is an Australian company. How much do you draw

"The biggest change has been in the health and wellbeing aspect, and what platform occupiers are given to layer across their own health and wellbeing agenda."

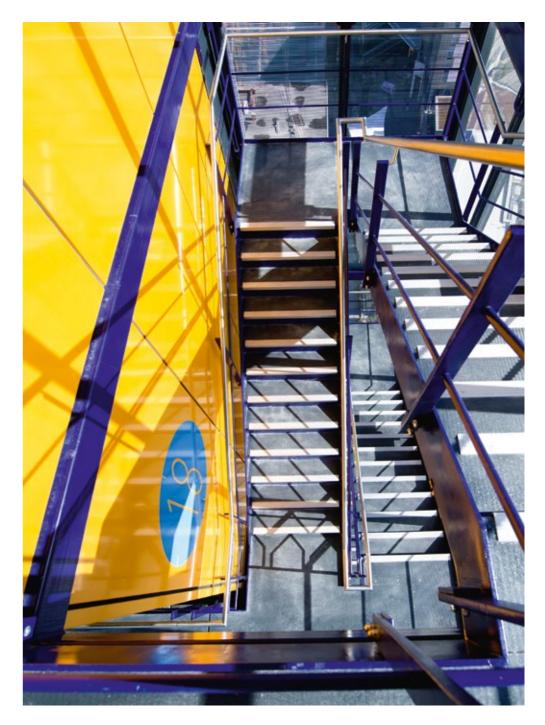
getting 100% fresh air as opposed to recycled air is a technical aspect of a building that customers understand, so why shouldn't developers do it?

JS: Building on a site such as the Olympic Park with IQL offers a lot of empty land to play with. What are the advantages of this over a restricted site in central London?

KC: We had the luxury of designing our own masterplan at IQL many years ago, which now sets the parameters for the buildings. We made sure at the early stage that we did things such as bring in side core buildings as well as centre core buildings, because we are finding certain tenants prefer side core buildings. It gives you much greater visual connectivity across a floor, on the experience of workplace developments in cities like Sydney and Melbourne?

KC: We've been really fortunate that we've been able to pull on a lot of the expertise we have in Australia. Most experts will probably admit that the Australians are a couple of years ahead of us in terms of how they measure productivity. Through Alison Webb, who heads up our workplace team, we have been able to call on the smarts of other parts of the world and feed that into our plans for IQL.

Especially with the financial sector, we have found it very helpful for them to be able to understand and learn what banks have been doing in Sydney and Melbourne with their workplaces.



STEP UP Colourful staircases on the outside of buildings at IQL encourage workers to take the stairs.



GREEN STREETS CGI illustrating how the public realm will be integrated into the streetscape.

US: It's interesting to hear you say that Australia is ahead of London. Why is that?

KC: One answer to that, especially in the banking and financial sector, is that Australia is quite an isolated place, and therefore the best talent is scarce. It's relatively easy for London to pull talent from Frankfurt and Paris. It's harder to pull talent when you're based in Sydney. So they are possibly more aware of the war for talent and therefore, I think, are a bit braver.

54

Are they tuned into a healthier lifestyle than we are? Possibly. Some would say culturally they are, but I'm not convinced about that.

Over time, other cities will catch up, but at the moment on the health and wellbeing agenda and the engineering of the workplace there are some fabulous, progressive examples in Australia. US: There's a push for developers to use more sustainable products such as cross-laminated timber. Do you think the industry is in a position where it can start to experiment with those products on buildings of the scale we see at IQL?

KC: Definitely. It's something we've done in Sydney with a timber building that is very successful. The market in London is ready for it, and I'm quite sure we will see it coming through in design. Maybe not a complete timber structure, but components on the structure such as floor slabs and finishes for sure.

JS: Your job at IQL is to build some great offices, but more than that it is to contribute to the legacy of the 2012 Olympics and create a new sense of place there. What is your approach to that?

KC: There are two answers to that. One is we have an obligation to create jobs, which we are doing with the tenants who are moving here. So we already have in excess of 6,000 people working here, which has happened over the last 18 months, and that will continue to grow as Cancer Research and the British Council move in.

I think the second is the place that IQL will provide. Geographically, we sit on the Olympic Park in a very central position between the East Bank – where the V&A and Sadler's Wells will arrive in the next three or four years – and the Olympic Stadium and Westfield. So we have a responsibility to get that public realm right. We are putting a lot of time and resource into our pavilion building, which was recently granted planning consent. It's a very exciting and vibrant structure that we think will draw people in. For the rest of IQL, we're spending a lot of time to make sure we get the placemaking design right so it can be an afterhours location – a place where you can dwell and not just come to work. NATALIE SLESSOR Sydney General Manager of Workplace and Change, Lendlease "A product design mindset has not been in the property sector in the past. It is one of the few sectors where the customer was not at the table when designing the product."

We discuss... Product design, the role of the architect and the war for talent.

Natalie Slessor

JACK SALLABANK: What does your role mean in the context of the workplaces that Lendlease creates?

NATALIE SLESSOR: I help some of our biggest corporate customers get the most out of the workspaces they lease from us. I have a team of people who run a process to help businesses to use their workplace as a tool to communicate their culture and strategy rather than just talking about accommodation. While doing that we learn a lot about the businesses we work with, and we collate that information to help us design our next development and ensure it responds to what people want. That is the first rule of product design: make something that people want and need. In property it's too easy to do something that vou have done before.

JS: I'm interested to hear you use the word 'product design'. That way of thinking is a big shift for the property sector.

Ns: I agree. A product design mindset has not been in the property sector in the past. It is one of the few sectors where the customer was not at the table when designing the product.

These are not disposable products, and they should stand for a long, long time. Yet too often they are developed without input from end users. We are currently developing the tallest building in Sydney, and during the design process we decided to create a pitch deck and present it to some potential customers and ask them to tell us what we have missed. It was incredibly insightful for us. It was the first time I've seen building design done in an iterative way like that, and it is long overdue.

JS: From a product design point of view, it seems to be very difficult for the property sector to do minimum viable products (MVP) to test and learn.

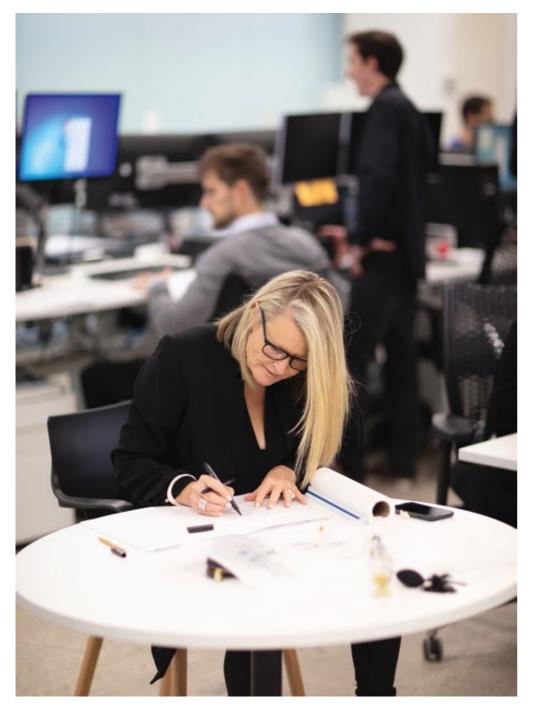
NS: I want to challenge the idea that we can't do MVP. We should be able to test and experiment more than we do; we just haven't found a way to do it yet. We need to get more of an innovative mindset into the sector, and that is something Lendlease feels like we can do.

us: What is the role of the architect in this context?

NS: It's an interesting question. Our responsibility is to create exciting and vision-led briefs of what we want our buildings to do, and that means we need to do the work to understand our customer. A great architect can then take that brief and help us understand how we can do what we want to do.

JS: Does your approach resonant with the market in Sydney?

NS: I think this is where Sydney and London are different markets. In Sydney we have a market that's very aware that the workplace is a powerful tool for your business. The workplace is the body language of a business – it speaks without words about what you stand for and how you do what you do. In Australia it is a progressive market; people are not frightened to fail.



SPACES FOR COMPLEX THINKING Make's Tracey Wiles at a breakout space in our Sydney studio.

Natalie Slessor

60

JS: I'm intrigued as to why Sydney has a market that enables it to be more innovative?

NS: I think we have a lesser sense of formality here. Most businesses pride themselves on more of a flat structure with less hierarchy. You can have very quick and honest conversations here, and I think there is something in that. NS: We have almost evolved into the next generation of the workplace. Activity-based working and shared workspace was the order of the day, but we are now moving on as a sector to the next generation. The era of open spaces and shared workspaces in Australia is finishing.

The workplaces that are now being delivered are about providing sanctuary for people. People need

"The property sector, tech sector, banks, insurance companies all want the same people."

There is also less of a hang-up about status symbols, which can often be a barrier to change.

JS: The workplace has changed significantly over the last ten years. What do you think are the drivers of that change?

Ns: I would suggest it is about attracting talent and being able to engage people in your brand proposition. I know we have always had a war for talent, but this is a really unusual time, because for the first time we have different businesses from different sectors competing for the same people. We all want digital talent, complex problem-solvers and design thinkers. The property sector, tech sector, banks, insurance companies all want the same people.

JS: What do you think we will see next in workplace design?

spaces where they can do complex thinking. That doesn't mean that cellular offices are flooding back, but we are now solving for the new ways of giving people private space.

The other change is the simplification of the workplace. If you go to an activity-based workplace or a co-working space, they are not especially intuitive in terms of how you use different spaces within them. We want people to walk in and have it be pretty bloody obvious what you're supposed to do. That means you offer two or three choices for workspaces but not the volume that you have in an activity-based workspace.

62

STEPHEN LAWRENCE CHARITABLE TRUST

As part of the Exchange series, Make is working with the Stephen Lawrence Charitable Trust to ask up-and-coming young architects for their ideas and perspective on the future of workplace, residential, hotel and retail design.

THE PARTICIPANTS



FROM LEFT TO RIGHT Yvonne Onah, Eniola Sonusi, Bola Lasisi-Agiri

62

"Like the Trust, we believe there should be no barriers to anyone becoming an architect."

Andrew Taylor Partner, Make The Stephen Lawrence Charitable Trust was set up in 1998 by Stephen's mother, Baroness Lawrence, in the hope of creating a positive community legacy in her son's name. One of the charity's core objectives is to inspire and enable young people from disadvantaged and underrepresented backgrounds to study and qualify as architects.

Andrew Taylor from Make explains how the practice and Trust have worked together: "Make has been supporting the work of the Stephen Lawrence Charitable Trust for the past few years, primarily through its student mentoring and school outreach programmes. Like the Trust, we believe there should be no barriers to anyone becoming an architect, and we want to do all we can to diversify the profession."

For this issue of Exchange, Make asked three young architects – Bola Lasisi-Agiri, Eniola Sonusi and Yvonne Onah – to respond to a brief to design the workplace of the future. To help inform their response, the young architects spent a morning exploring the South Bank in London. Andrew Taylor explains why the South Bank was the ideal location for inspiration: "With space in urban environments at such a premium, we need to look closely at how we can blur the boundaries between building typologies to make our cities more efficient, resilient and, above all, liveable. Nowhere is this more visible than at the South Bank, where a broad array of uses appear to seamlessly coexist and overlap."

The brief **NEW OFFICE DEVELOPMENT**

OVERVIEW

A tech start-up has recently raised significant investment to scale its business, and as part of its growth it wishes to invest in a new HQ. The start-up has identified a plot of empty land where there is the potential to build a new office suitable to its way of working.

OBJECTIVES

The start-up requires an office space that will enable it to attract and retain the best technology talent in London.

The founders want their office to pioneer new ways of working, including flexible working and collaborative working. They wish to provide staff with a workspace that is enjoyable to work in and promotes health and wellbeing. Additionally, the founders want their office to have a relationship with the outside world, with a space the public can access to learn more about the business.

The founders would like to encourage as much natural light into the building as possible, and their preference is to have all employees working from one floorplate. The start-up has a number of young parents and is willing to look at providing a crèche facility. The office needs to be environmentally pioneering, with the lowest possible green footprint.

SPECIFICATIONS

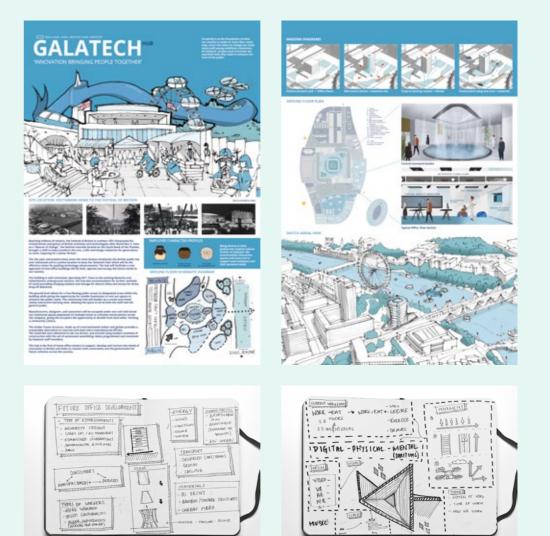
60,000ft² (building in total) 175 employees A mixture of spaces to work A theatre space for staff meetings and presentations Meeting rooms Space to eat, drink and relax Crèche space Space for the public to access and have a relationship with the business without compromising security and privacy Low carbon footprint

SUBMISSION

Your submission should include: A sketch diagram of the office taken from street level. The diagram should be annotated, detailing what the building includes. Any supporting material that you wish to submit, such as sketches and photographs.

Bola Lasisi-Agiri GALATECH HUB

"This office scheme creates a new identity based on the experiences of the past, using memories of the site as a catalyst for questions about how we can operate in work environments in times ahead. The Galatech Hub proposal resurrects a beacon of change inspired by the raw inventiveness at the Festival of Britain in 1951, embodying a flexible collaborative culture of merging manufacturers, designers and consumers all under one roof. From the fabric of the design to the spaces within, the structure aims to foster sustainable technological advancements and cultivate new conversations among the British community."

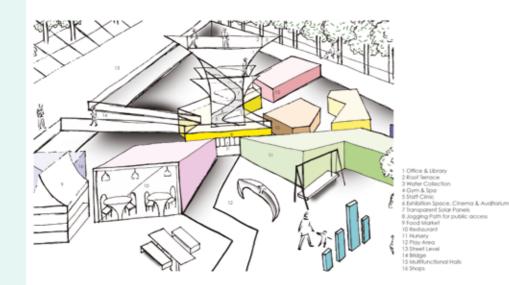


62

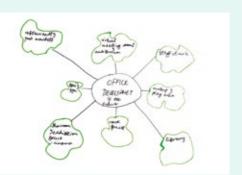
Stephen Lawrence Charitable Trust 63

Eniola Sonusi THE TREE OF LIFE

"Visiting the South Bank, an integrated cultural and creative hub, I was drawn to the permissive and communal nature of the space. The expansive hub is a place where people work, engage in the arts and unwind – a bustling atmosphere full of people of diverse ages and backgrounds. In my opinion, the South Bank has the ideal balance of work and play. This balance is what creates a conducive and productive environment. In 'The Tree of Life', I sought to reflect this fusion of work and play —the ideal workplace."



THE TIME OF LIFE | ENIOLA SONUSI



OFFICE SOLEDAHOND P the juture - 1 appice floor plate - tech start up HQ - 60,0003pm - 125 employed - mailtoning - messares - where - phicic access - low callon formint



Yvonne Onah PRODUCTION PROPOSAL

"This proposal is a reaction to how public and private spaces integrate with each other in the South Bank. There is a very intelligent balance between these two spaces, and I wanted to explore this further. It was important to make sure the public and workers using the building interacted in a way that is not distracting, yet some interaction is maintained. This was achieved by looking at how outdoor space can be used, taking inspiration from the Jubilee Gardens, as well as how mixed use spaces within the building are occupied."



s proposal has been made for a public Ading with private offices for a technolo impany.

Looking of the contrart between public or phytote species, endlated a program which explores the used of the building outside conventional working hours, and develop in ways which incorporate office and working press trans convenience (ready with necessary and devides excited as used.

A larger factor of this proposal is the necessity of green space and attempting to incorporating into building, to provide spac where work and entertainment can coincid

In order opheres these explorements with the proposal, initial diagrams have been produced to outline locations of specific spaces and how they interfwine together. Ham these pans of the floor spaces have been produced.







Ground

id floor

MAKE Proposal



62

Stephen Lawrence Charitable Trust 63







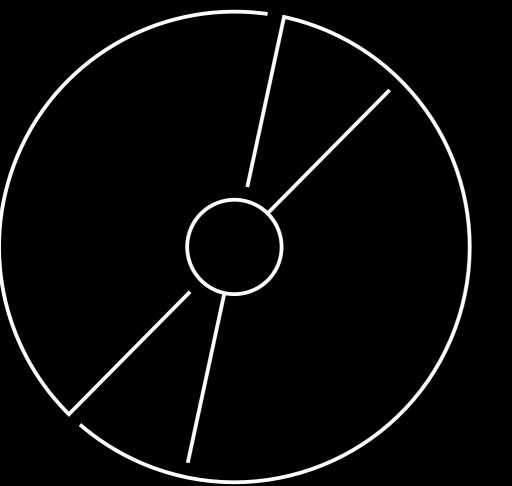






OPPOSITE Andrew Taylor from Make with Bola Lasisi-Agiri (top left), Yvonne Onah (right), and Eniola Sonusi (bottom left) at the South Bank.

MUSIC *and the* WORKPLACE



Music and the workplace

I've just read a new report published by Public Health England. Titled "Everybody Active, Every Day," the review once again highlights the serious health crisis that the UK is hurtling towards. As a nation the UK is 24% less active than in 1961, and if current trends continue the population will be 35% less active by 2030. This is not just a UK phenomenon.

Dr Julia Jones CEO, Found in Music

An international comparison of physical activity published by the World Health Organisation shows that 63% of the UK population is inactive. This is significantly worse than other countries: USA (41%); Australia and Finland (38%); France (33%); Germany (28%); Holland (18%).

66

I began my professional career as a sport and exercise scientist in the early 1990s. I've been prescribing music for cities, brands and organisations ever since. I spent more than a decade launching and managing health club chains and training a new generation of

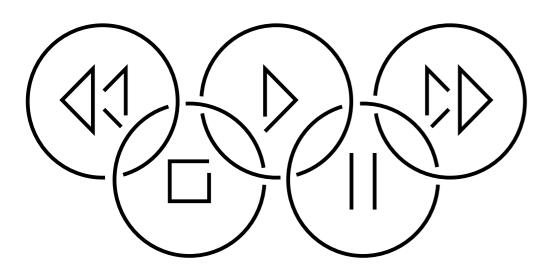
personal trainers and exercise instructors. We truly believed that we'd cracked it. Everyone was signing up to these new gyms, and a healthy nation seemed 'almost' guaranteed. However, decades later humans are more unhealthy than ever before, and this is almost a worldwide trend. Fitness industry revenues in the UK have continued to grow – but so have average UK waistlines. Customers join gyms because they know they should be doing more exercise (usually in January as a New Year's resolution). But they rarely go there. Because most humans don't actually want to be exercising. They'd rather be doing something more fun. Like socialising with friends in their favourite bar or restaurant, watching Netflix, or going to a music festival. Extended working hours, commuting time and working parents mean spare time in the modern world is more precious and scarce than ever before.

I've been working in this field for 25 years, and I can pretty much guarantee that no matter how much money governments put into advertising campaigns, this crisis is not going to be averted by encouraging the general public to do more exercise. The take-up rates are just too low and are unlikely to increase at the required level. We need to adopt completely new approaches. We need to rethink health and wellbeing and the ways in which health benefits can be delivered.

The workplace is key to this, because humans spend a considerable proportion of their day there. Employers currently take a very narrow approach to workforce wellbeing. It is almost entirely based on fitness-based principles: gyms in the office or a corporate membership at a local health club, maybe some healthy eating options thrown into the mix and some yoga or mindfulness for mental health. Imagine if we took an entirely new approach and focused on embedding music in the design of workplaces and wellbeing programmes.

The body of scientific evidence over the past 100 years regarding music's ability to automatically deliver a multitude of health benefits is now far too large to keep ignoring. Music works. It's proven. No matter where you were born, your brain processes music in the same way. It's the one language that every human on the planet can

> understand. It's coded into our DNA. The health benefits are broad. There's the automatic release of neurochemicals that increase the efficiency of our brain, control our anxiety, help us bond with other humans etc. Then of course there's the cardiovascular



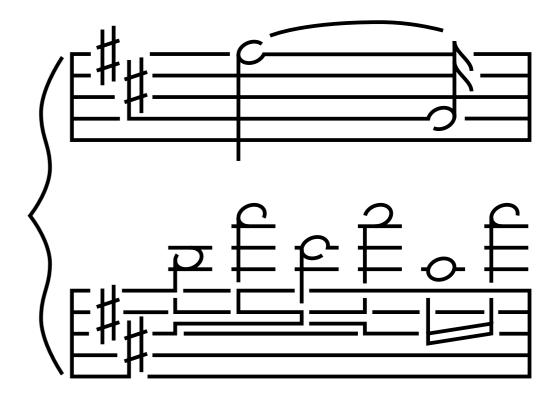
68

and musculo-skeletal benefits that singing and dancing can deliver. Also don't forget the lifelong impact on brain health that learning an instrument can have. Plus its power to help us get high-quality sleep. No matter how we consume music – listening, watching, performing, singing, dancing, learning - there are several positive health benefits attached. When I began working as a sport and exercise scientist I was lucky enough to be involved in the psychological training of Olympic athletes. We used music to control nerves and anxiety, to boost self-confidence, to aid concentration and motivation. It's no coincidence today that you won't find a single professional athlete who doesn't include music as part of their formal training programme. Because it holds phenomenal power. It works. Getting more music into our daily lives delivers a positive health impact. But most importantly it's fun, and humans are universally hardwired to enjoy it (provided its not a music genre they dislike).

Music and the workplace

So I believe that employers should take inspiration from Olympic athletes and formally write music into their wellbeing programmes, using it as a tool to help keep workforces happy, healthy and achieving peak performance. Here are five examples of how music could and should be woven into the design of a workplace:

1. Social spaces are absolutely vital in workplaces. This aspect has often been overlooked in years gone by. It's important to value areas where employees can take a break from their desks, get a drink, relax, chat with friends, both inside the building and outside. Creating areas where music can naturally exist – whether via live performances or streamed recordings – enables a relaxed and enjoyable social atmosphere to be nurtured.



2. Put a radio in the kitchen area. Just low volume is fine. Something as simple as this can provide a clear difference in atmosphere and environment compared with the desk area. It creates a proper differentiation and helps facilitate that break in focus that enables people to then go back to their desk and commence another focused spurt of work activity. Don't be afraid to let employees wear their headphones while working if they want to. In fact I would encourage it. It can help them maintain focus (especially in open-plan office environments). Encourage them to share their playlists and recommend songs to colleagues.

70

3. Create space to offer music tuition on site at lunchtimes. A soundproofed meeting room, for example, would be perfect. An eight-week programme of regular instrument lessons would enable employees to become proficient enough to be able to play numerous wellknown chart hits. This is an achievement that adults rarely succeed at when trying to fit lessons into their busy lives outside of work. You will have given them a gift (the ability to play an instrument) that they will have for the rest of their lives. This may well be key to the prevention of dementia in later life, according to research. It may even spark the creation of an office band or choir. 4. Instead of splashing out on a big Christmas party once a year, why not take the team to a music concert each month or quarter instead? Studies have shown that when humans experience music together, there are significant effects on social bonding and general feelings of wellbeing.

5. Think about the environment of your reception area. Play music there in the mornings when employees arrive and at the end of day when they leave. The right vibe can have an immediate psychological effect. Build in space for high-quality speakers or a small performance space, and invite local talent in to entertain.

Music is all around us. Harness it in your designs so it delivers its maximum potential in the workplace.

Case study Kernel Property

Kernel Property

Kernel Property, based in Sydney, sources premises and manages commercial office fit-outs for tenants. With an extensive track record of working for national law firms, Kernel has witnessed the legal sector in Australia slowly but surely adapt its workplaces to become more open and collaborative.

Paul Mead, co-founder of Kernel, explained the importance of the company's own workspace in providing his team with an inspiring place to work and also demonstrating to clients the possibilities of alternative thinking in workplace design.

"We wanted a signature place that would inspire everyone who walked in. Our space tells our clients who we are and what we stand for. We have created the most flexible space possible. Our monitors are mounted to a cable tray connected to a four-wheel drive winch that, at the press of a button, raises to the ceiling. Our desks fold up, allowing us to fit 80 people seated for seminar events and more for more social events. With a view over the harbour and balcony, we often lend the space out to charities and associations for events.

"We have proactively used as many recycled materials as possible, be it old scaffolding boards, off-cuts of steel, unwanted light fittings or furniture. We encourage our clients to recognise the value in the materials they already have and reuse what they can in their new premises. This reduces the cost of the fit-out and helps reduce the volume of material waste going to landfill."





RECYCLED AND FLEXIBLE The entire space is constructed from recycled and reused materials. With the desks removed, Kernel can seat 80 people for presentations and many more for social functions.



HEART OF THE BUILDING With up to 100 visitors a month, it's a busy office. First-time visitors remember their experience. Upon exiting the lift, they find themselves safely immersed among the operational machinery running the building.



REFRESHING VIEWS This hidden gem has views over Circular Quay and Sydney Harbour Bridge, with a shaded balcony providing outdoor meeting space and fresh air to the office.



OFFICE DRAMA By day and night, the views over the harbour are ever changing. The industrial internal structure, exposed building services and raw finishes are an inspiration to Kernel and its clients.

PETER CLARKE London

Vice President, Development, Brookfield Properties



"To engender creativity, people want to have a more interesting and relaxed environment."

We discuss... Creativity, floorplate size and the importance of public realm.

Peter Clarke

JACK SALLABANK: How have you seen workplace design evolve during your time at Brookfield?

PETER CLARKE: It depends on what sector you're in. If you look at lawyers, be them US or UK-based, they have a segregated approach to their office. The model they prefer is separate offices around the perimeter, with support staff in the middle. I think they will continue to operate on that basis.

In other sectors we're seeing people go for a more open-plan layout with fewer individual offices, more collaborative hubs and more breakout areas, there by offering different areas for

HOME TO AN INSTITUTION 1 London Wall Place is the new headquarters for British multinational asset management firm Schroders. different workstyles in the same office.

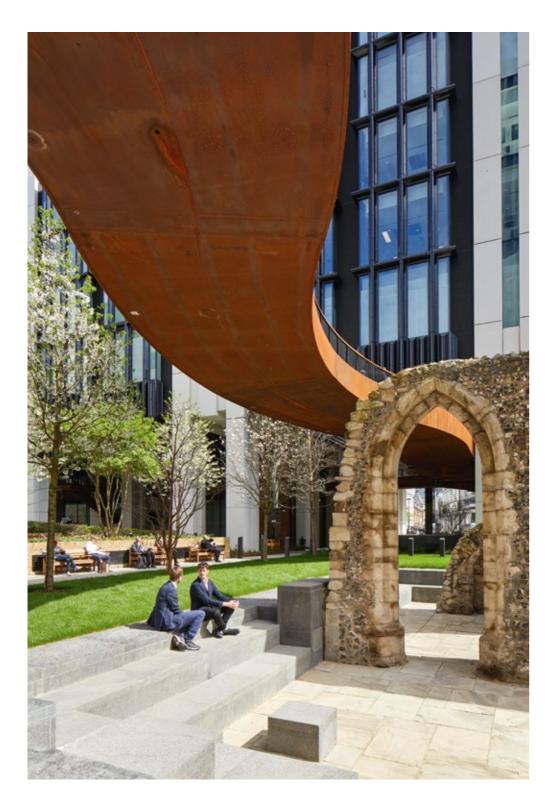
JS: What has driven that change?

PC: People. As new generations come into the workplace, they don't want to work at the same desk all day long or be stuck in an office. To engender creativity, people want to have a more interesting and stimulating environment. People look at the likes of Google and Amazon, and they themselves want something a bit different from your standard vanilla Category A office space.

JS: How do you as a developer respond to that change?

PC: At Brookfield we're driven to provide best-in-class office buildings that offer an occupier the flexibility





84

to utilise the space in any number of styles, and as a consequence we do not. We try to ensure the building's base systems can accommodate a range of occupational styles, densities and flexibility within the tenanted space. We will provide high-quality, well-designed reception areas, common parts and toilet facilities that set the tone for the building, but it will be for the incoming tenant to decide how they fit out their space, because each tenant will have their own needs.

JS: There's a demand from some sectors for bigger floorplates, with everyone on one floor as opposed to be separated vertically through a building. Do the high-density zones you build in restrict you in terms of delivering that?

Pc: To a certain extent, developing offices in a historic city such as London, with its controlled planning regime, you're always dealing with compromises and challenges. Although many occupiers may initially prefer a larger floorplate, we've been able to demonstrate that the introduction of inter-communicating showpiece staircases can offer occupiers the same levels of efficiency and communication.

JS: Some of the defining features of your development at London Wall Place are the walkways and the public realm outside. How big a role does public realm play in your office schemes?

CELEBRATING HISTORY The new public garden features ancient Roman and medieval ruins.

PC: It's an interesting question. The nature of the site at London Wall Place is such that we were restricted on the height of the buildings. Because of the existing buildings and the rights of light and daylight and sunlight to the Barbican, the buildings couldn't be massive square blocks. So we chose to incorporate a public realm environment that created a destination. At London Wall Place, it is the quality and extent of the landscaped areas and walkways that define the scheme, rather than just the office buildings themselves.

STUART HARMAN Sydney Head of Design, Brookfield Properties "Australia has been an early adopter, if not a leader, in how we use our ground planes in terms of integrating our lobbies into the city environment."

We discuss... Sydney vs London, placemaking and the future of activity-based working.

Stuart Harman

JACK SALLABANK: How have you seen workplace design change in Sydney in the past decade?

STUART HARMAN: It has been a very interesting last ten years, with an awful lot of change in Australia, and in many respects Australia has been an early adopter of new workplace thinking. There has been a push where the workplace has become front and centre of tenant requirements.

I have seen a trend towards activity-based working (ABW),

SH: The competition for talent is driving organisations to think differently about their workplace. There is a general cultural shift, with new generations coming through who think differently and approach things differently.

JS: Have you seen any changes in the base build?

SH: In Australia there has been a shift towards a side core diagram, and this has been driven by the idea that the bigger, more continuous

"I am seeing a trend back to people having their own space within the workplace."

and Australia has been an early adopter of this. But we are now seeing a shift away from ABW to more of an agile workplace model. The challenge with ABW is arriving in the morning and struggling to find a desk across what could be a broad area of workplace. What we have experienced is a shift back to people having their own desk but more flexibility about the zones in which they can work.

One of the great things that came out of ABW is the spaces we created as a result of it. We now have more breakout spaces and community hubs for people to gather. Gone are the days when all you had was a kitchenette and a water cooler.

JS: What is driving this change?

workspace you can get across a floorplate, the better. We have found that is trending a bit the other way. The opportunity to bump and connect on big floorplates is in some respect lost.

Also, interestingly, in Sydney the ability to find sites where you can build big floorplates is getting less and less. We now have more vertically integrated offices with slightly smaller floorplates. That is driven by land constraints as much as anything else.

US: What differences do you see between Sydney and London in the workplace?

SH: I lived in the UK for nearly six years, and you walk into office lobbies in London and you can't get past security without a pass.



NEW HEIGHTS Make's first scheme in Australia, Wynyard Place will house the new National Australia Bank headquarters.

Stuart Harman

90

"When I came to Australia, I recall being surprised by how you can just walk freely through an office lobby, get into a lift and go to the floor you want."

When I came to Australia, I recall being surprised by how you can just walk freely through an office lobby, get into a lift and go to the floor you want.

Australia has been an early adopter, if not a leader, in how we use our ground planes in terms of integrating our lobbies into the city environment. As an extension of that, we have led the way from a placemaking perspective. When we think about the office, we don't just think about the office space; we think about all the things that go with it. How do you arrive at a building? What are the placemaking elements of the ground plane? Do we have rooftop terraces? Can we host interactive cultural events? These are the types of questions we ask when designing an office.

JS: Looking ahead, what do you think we will see in workplace design?

SH: If you look back a few years, people were saying that we would have half the amount of people coming into the office, with everyone working from home one or two days a week. That was a nice idea, but in reality I don't think it is playing out that way. There is a lot more flexibility to allow that to happen, but in some respect I am seeing a trend back to people having their own space within the workplace. How far that moves back in the other direction will be interesting to see.

The challenge in workplace design is balancing the requirement to create spaces that enable people to be productive and have quiet time while also providing space that enables collaboration across a work floor.

Make case studies 32 Cleveland Street The Hiscox Building London Wall Place 5 Broadgate

92

Workplace design has long been at the heart of what Make does best, starting with 55 Baker Street, a 52,000m² central London development completed in 2008. The way we think about office buildings, and the people who use them, however, has continued to evolve over the last decade. In the last three years alone, we've completed ten office schemes, all of which evidence our ever-adapting approach to creating world-class workplaces.

Here we look at four that embody some of our most recent thinking on considerations such as the importance of public realm and placemaking, reflecting a client's values and business needs in the design, and responding to local context.

32 Cleveland Street

LOCATION	London, UK
STATUS	Built
SECTOR	Office
AREA	1,500m²/16,150ft²
CLIENT	Derwent London
PROJECT TEAM	Akera Engineers, Exigere, GDMP, KKS Strategy, MLM, Rougemont, The Thornton Partnership
ΜΑΚΕ ΤΕΑΜ	Sean Affleck, Charley Lacey, Ken Shuttleworth

32 Cleveland Street

Make transformed a former NCP car park in the basement of the Middlesex Building in Fitzrovia – a beautiful example of Art Deco architecture – to create our current London studio. As both architect and future occupant, we felt it was important to reflect our values in the design. This included retaining and refurbishing many original features, from the Crittall windows and concrete pillars to the yellow paintwork details.

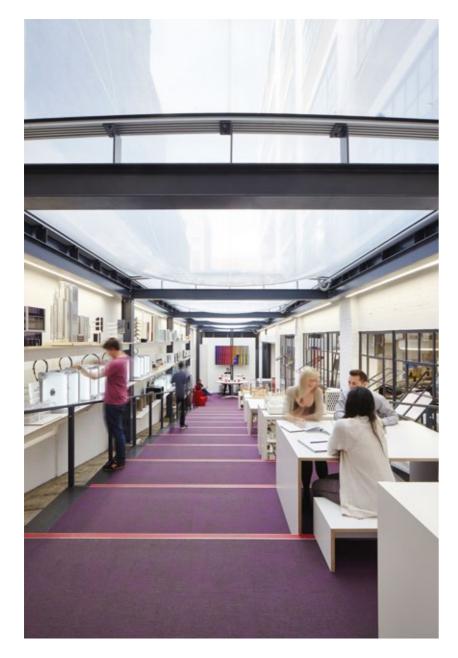
Reflecting our democratic culture, the open-plan layout has no hierarchical desk arrangements or private offices.

The underground space receives natural light via a new ETFE roof over the entrance ramp, a new glass block rooflight and three lightwells, one converted into a courtyard for staff.

Working with developer and client Derwent, we delivered the project in under three years and £5 million.



96



WELCOME TO MAKE Entrance ramp with 3D printers, model displays, breakout space and ETFE roof.



AN OPEN ENVIRONMENT Central circulation space with rooflight. High chairs and bespoke circular desks promote easier interaction.

The Hiscox Building

LOCATION	York, UK
STATUS	Built
SECTOR	Office
AREA	4,700m²/50,600ft²
CLIENT	Hiscox
PROJECT TEAM	Access=Design, Allen & Overy, Arup, Asset Building Consultancy, BAM Construction, CBRE, Chapman BDSP, Charles Funke Associates, FMDC, Gerald Eve, Gleeds, KKS Strategy, MLM Building Control, Schumann Consult, The Brand Experience Consultancy
ΜΑΚΕ ΤΕΑΜ	Robin Gill, George Guest, Jason Parker, Ken Shuttleworth

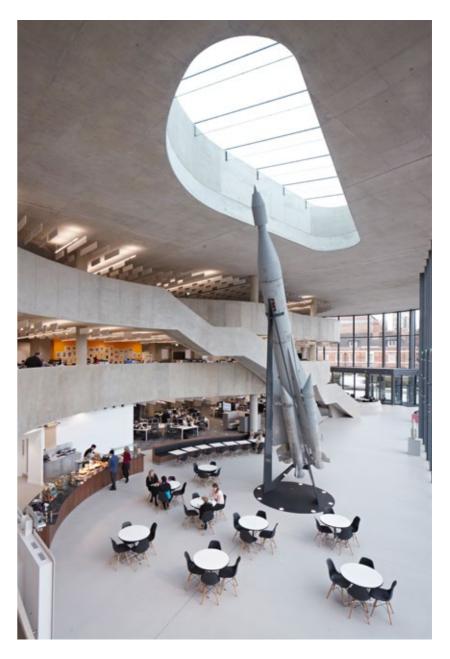
The new underwriting and customer experience centre for global insurer Hiscox sits in the heart of historical York. The building's design takes its cues from the city's rich heritage, with a ribbon-like central staircase inspired by the Roman city wall and a brick weave facade that references the area's 19th-century wool market. The deferential massing creates space between the neighbouring 15th-century pub The Black Swan and allows for a new footpath towards the River Foss. Inside, the 3-storey glazed atrium houses a 12m decommissioned Soviet rocket – part of the extensive art collection found throughout the building, including the roof terrace. Hiscox intends for these artworks to provoke and inspire.

Meanwhile, the open layout and plentiful breakout spaces are designed to create a strong sense of community and collaboration.

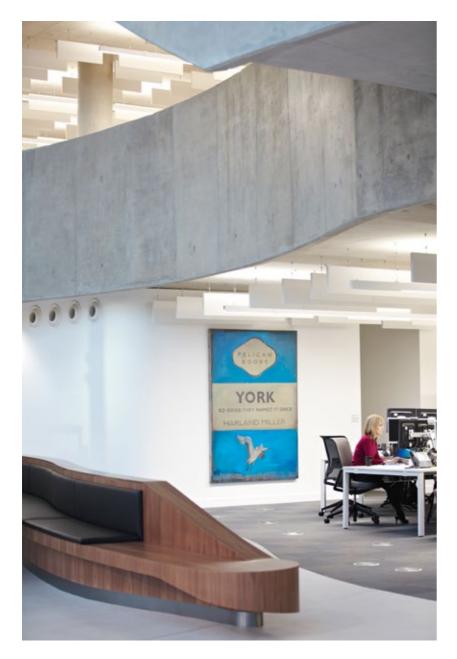




A PART OF YORK Main entrance and neighbouring Tudor-era Black Swan pub, viewed from the north. A new footpath runs between them.



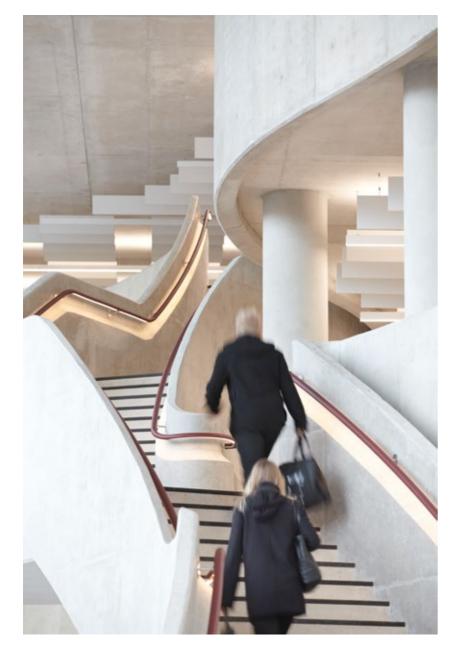
MAKING A STATEMENT View towards reception. The building is made with 5,000m³ of concrete – enough to fill two Olympic-sized pools.



CELEBRATING ART AND LOCALE Ground floor workspace with artwork by Yorkshire-born writer and artist Harland Miller.



A BRIGHTER WORKDAY First floor workspace with an 'art wall' that conceals staff locker space.



CREATING CONNECTIONS The central staircase helps promote movement, visibility and personal interactions.



A UNIQUE VISTA The rooftop terrace is open to all and offers a fantastic view of the York Minster.

London Wall Place

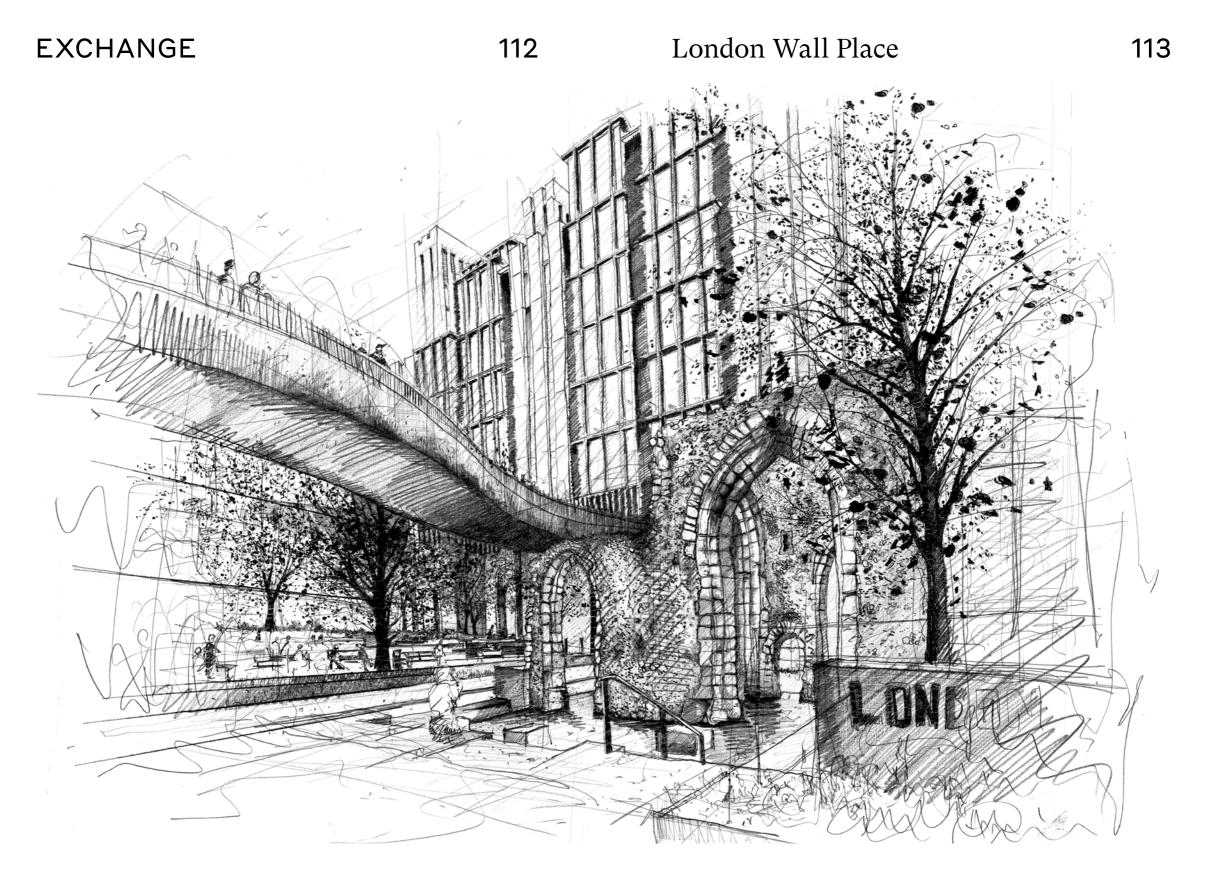
LOCATION	London, UK
STATUS	Built
SECTOR	Office, retail
AREA	46,450m²/500,000ft²
CLIENT	Brookfield Properties and Oxford Properties
PROJECT TEAM	AECOM, BB7, David Bonnett Associates, DP9, Fountains Direct, Gardiner & Theobald, Hurley Palmer Flatt, Multiplex, Reef Associates, Site Engineering Surveys, Spacehub, Studio Fractal, VT Studio, WSP Building
ΜΑΚΕ ΤΕΑΜ	Matteo Boldrin, Eleanor Brooke, Jason Chan, Sam Clagett, Imogen Coates, Tim Davies, Adam Grice, Chris Jones, Yianni Kattirtzis, Justyna Lewandowska-Harris, Ian Lomas, Graham Longman, Rashmeeta Matharu, Sebastian Nau, Alejandro Nieto, Lara Orska, Sangkil Park, Sam Potter, James Redman, Ken Shuttleworth, Paloma Strelitz

London Wall Place

This development is part of a vanguard of new commercial schemes with public realm at their heart. The 2-acre campus includes a new 1-acre public park – the largest in the City of London since the post-war Barbican estate – that has become a new destination in the City. It comprises a series of multi-level pocket gardens and 350m of reimagined pedestrian 'highwalks' threading through and beyond the site.

The buildings, clad in elegant bands of concrete and dark blue ceramic, offer over 500,000ft² of premium office space and over 35,000ft² of roof terraces.

1 London Wall Place is now home to asset management firm Schroders, while 2 London Wall Place is multi-let. At full capacity, the scheme will host 5,000 employees and over 1,000 visitors a day.



London Wall Place



REIMAGINING LONDON WALL The staggered 1 London Wall Place replaces what was once an imposing row of 1960s podiums and towers along London Wall.



HISTORY AT THE HEART Remains of the original Roman city wall and medieval St Alphage Church tower are central features of the new gardens.



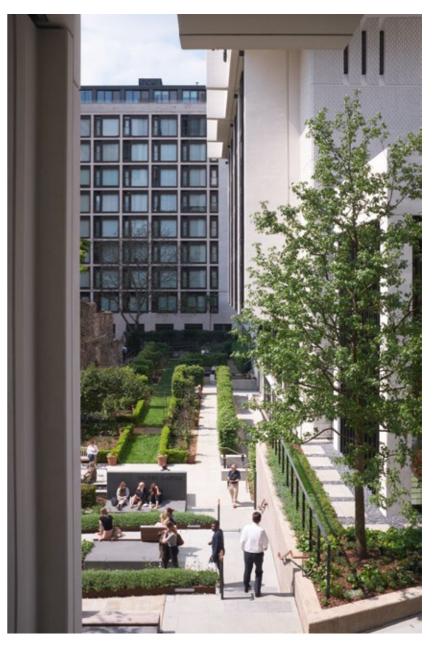
ELEVATING THE SPACE The raised walkways of the 1960s have been reimagined and reinstated. They cover 350m and house a pocket garden.



RESPECTING THE NEIGHBOURS Extensive engagement with residents of the adjacent Barbican Estate was fundamental to the scheme's success.



OUTDOOR ROOMS The building's triple-height cantilever creates spaces for refuge, respite and delight.



GROWING GREENERY Together with the adjacent Salters' Hall Garden and St Alphage Gardens, the new park will be over 1.5 acres.

5 Broadgate

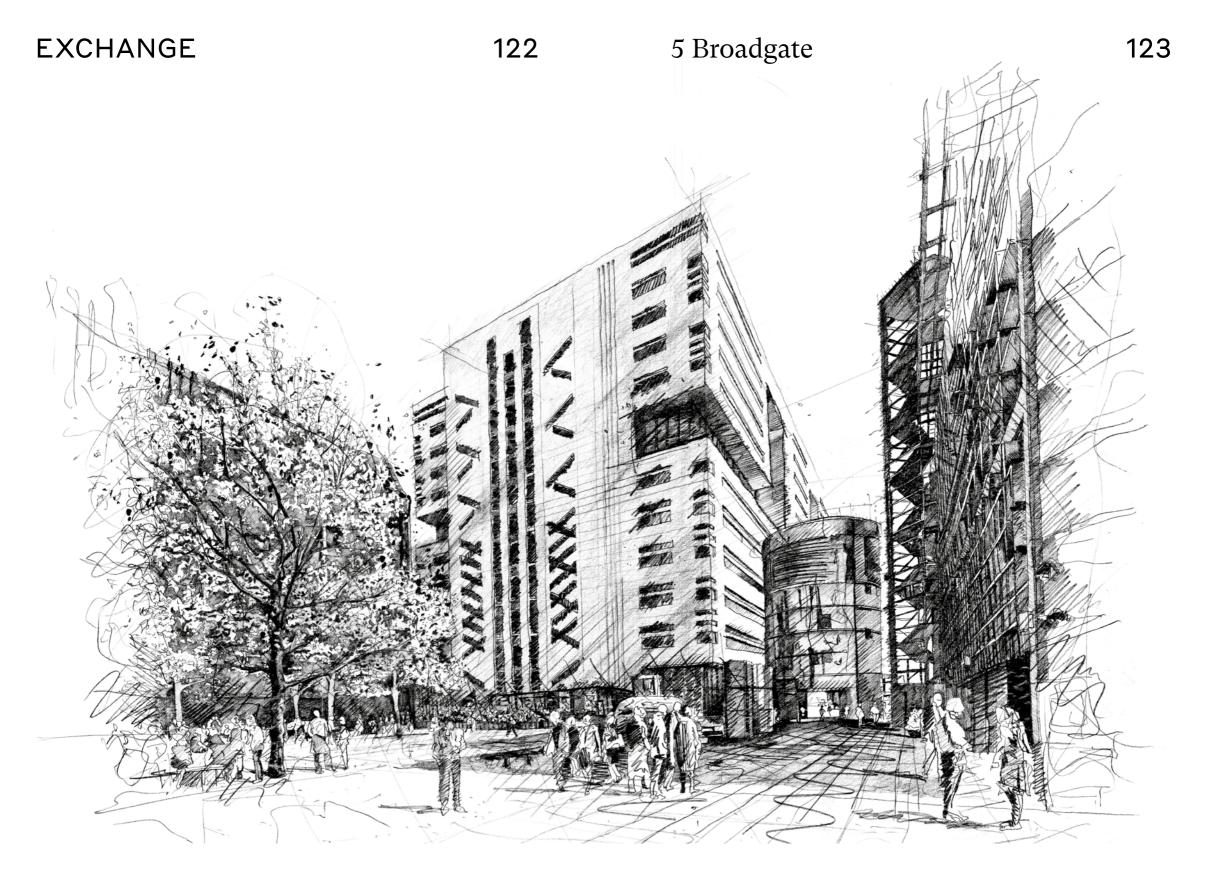
LOCATION	London, UK
STATUS	Built
SECTOR	Office
AREA	65,310m²/703,000ft²
CLIENT	British Land
PROJECT TEAM	Arup, BuroHappold, DP9, FEDRA, Francis Golding, GIA, Hilson Moran, Hyland Edgar Driver, Jefferson Communications, M3 Consulting, Millerhare, Mace, Mace Cost Consulting, NDYLIGHT, Space Syntax, Steer Davies Gleave, URS, Watkins Payne Partnership
MAKE TEAM	Michael Bailey, Matthew Bugg, Philippa Drinkwater, James Flynn, James Goodfellow, George Guest, Jane Hall, Robert Hall, Myoungjae Kim, Jason McColl, Craig Mundle, Jason Parker, Joanna Pilsniak, Ken Shuttleworth, Oliver Sprague, Ben Stuart, Georgina Walker, Bill Webb, Simon Whitehead, Charlotte Wilson

5 Broadgate

Our world-class headquarters for Swiss investment firm UBS are raising the bar for modern workplace design. The building is the first of a series of new developments redefining and regenerating Broadgate Estate.

Every aspect of our design is tailored to the bank's needs, from the 4 football pitch-sized floorplates, which can accommodate up to 750 traders each, to the increased ceiling height, which allows views across a busy floor (a must for traders). The bold stainless steel cladding accounts for 65% of the building's envelope, making it one of the largest of its kind in the world.

At the time of completion, its BREEAM Excellent score of 84.6% put it in the top ten highest-scoring office buildings in the UK.





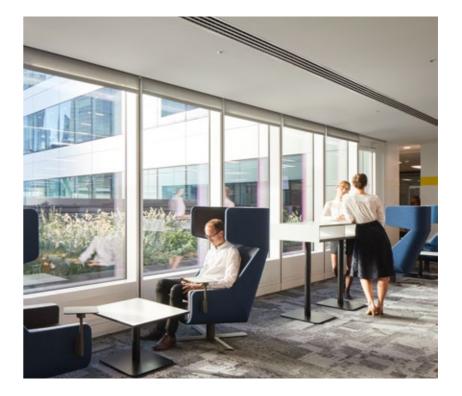
A NEW BROADGATE The building is a defining feature of the rapidly redeveloping Broadgate Estate.



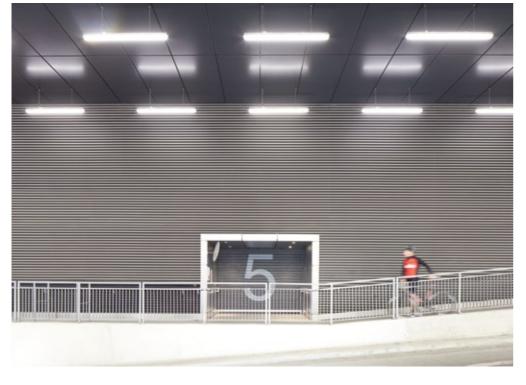
AN EXPRESSIVE FACADE The cut-outs in the building's envelope reveal internal functions such as stairs and lifts.



WELCOMING THOUSANDS The building welcomes 6,000 traders, management and support staff each day.



VARIED SPACES The non-trading floors have a mix of open-plan workspace and breakout areas.



TWO WHEELS GOOD Cyclists have use of a dedicated ramp into the basement-level cycle store and showers.

Make case studies

WITH SPECIAL THANKS TO Gavin Mullan for the sketched illustrations of 32 Cleveland Street, The Hiscox Building, London Wall Place and 5 Broadgate.



The advancement of prop tech and artificial intelligence is changing the way that we use and interact with our buildings. In the home, we are becoming more accustomed to controlling the heating via our phone or being notified by an app that we are running low on milk. But what innovations are being introduced to the workplace?

HEATING AND LIGHTING

Digital infrastructure is enabling a much greater connection between employees and their office than ever before. Smartphone apps, for example, can enable users to manage their own heating and lighting.

GYMS

State-of-the-art gyms such as the one in the Edge in Amsterdam, one of the most technologically advanced building in the world, can recycle the energy burnt off by users into the running of the bigger building.

DESK OCCUPANCY

Sensors built into workstations can enable businesses to collate data about when and how often desks are occupied, enabling them to manage office efficiency and better understand their space requirements.

CHATBOTS

Robots at the reception desk can welcome and register guests, and through facial and voice recognition software even remember individual visitors and what drink they had on their last visit.

Iris scanners are being developed to quickly scan an employee's eye and grant them access to a building to help improve security.

GAMIFICATION

Gamification can be used to encourage recycling and healthy behaviour among employees.

PEOPLE LOCATOR

Apps can enable workers to quickly locate colleagues in their building or find available meeting rooms and workplaces.

The smart workplace

DAYLIGHT

Sensors can inform occupants via smartphone where in the building has the most natural light at a given time in the day.

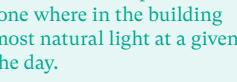
THERMAL

Photovoltaic panels and thermal energy storage systems can enable buildings to provide all of the energy required for heating and cooling.

BIOMETRICS









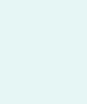














132

DONALD CHOI Hong Kong

CEO, Chinachem Group



"In Hong Kong we are seeing a lot of changes with how work and life are merging together."

We discuss... The local community, what cities can learn from Hong Kong and what Hong Kong can learn from other cities.

Donald Choi

JACK SALLABANK: How has office design changed in Hong Kong?

DONALD CHOI: We have seen a lot of change in office design. Office is no longer about just being a corporate office; it is now about catering for a work-life balance. Even in more traditional sectors such as banking, we are now seeing a more entrepreneurial mindset, with companies recruiting for an innovative and creative workforce. That all translates into an environment that is less uniform and less corporate.

JS: Are there any trends that you think are specific to Hong Kong?

Dc: In Hong Kong the workplace is very much mixed in with the daily life of the community. It's not only about working in an office but how that office is integrated into the public realm around it. For example, meetings are not just in the meeting rooms; we hold a lot of walking meetings and out-of-office meetings in a more informal setting. In Hong Kong we are seeing a lot of changes with how work and life are merging together.

JS: You deliver office, hotels and residential developments – does that make it easier for you to respond to these changes?

DC: I think it does. We have a lot of insight into the consumer behaviour of the community.

JS: Are we getting better at designing offices for people?

Dc: Consultants are studying a lot of data around the workplace environment, and this isn't just related to the layout of space. They are looking at colour, air, sunlight etc. These factors all become part of the design language, which is an important part of creating wellness and people-centric design.

JS: What can other cities learn from workplace design in Hong Kong?

Dc: I think we have something to offer in terms of efficiency and how we manage to develop in a very compact city. Hong Kong also has a very resilient workplace, with innovative flexibility that facilitates collaboration.

JS: What can Hong Kong learn from other cities?

Dc: We don't have the green spaces that you do in London, so we can do more to bring green into our city.

JS: What will we see in the next ten years of workplace design?

DC: We will continue to see the blurring of boundaries between office, living, leisure and entertainment. Also I think in the future, because of technology, location will become less important in the traditional sense.

JACOB LOFTUS London

CEO, General Projects



"If you walk into 90% of office buildings in London, they will feel very much as they did in the 1990s."

We discuss... Demographic change, the definition of creative workspaces and standing out from the competition.

Jacob Loftus

JACK SALLABANK: You have positioned General Projects as a design-led developer that is responding to the changing demographics of the workplace. What does that mean in practice?

JACOB LOFTUS: Our entire thesis is underpinned by demographic change. If you look at the figures, 50% of the global workforce will be made up of millennials by 2020. By 2025 that number will be 75%, and most of these people will be living and working in urban areas. That generation has grown up in very different circumstances from generations before them. They are more technologically enabled, more socially connected, and they have much higher expectations about what the workplace and world around them should be like in terms of design, service and experience. So for us it's about creating buildings and workplaces that are going to inspire that generation. That means treating people more like consumers rather than tenants and creating environments that are far more engaging and humanistic in how they are designed.

JS: Is your design ethos a response to what your clients want, or is it driven by you and your team saying let's create a space that we would work in?

JL: The two are inextricably linked. The primary goal of most businesses is to attract and retain staff and to keep them engaged and motivated. Our role is thinking through how the workplace can help them achieve that, and a design ethos is fundamental to that. But ultimately I have never been involved in a project where the starting point hasn't been how do we make this an amazing place that we would want to work in?

JS: The workplace has changed so much over the last five to ten years that the design-led approach is becoming more and more the norm. Do you find it harder to stand out from the competition?

JL: When we started doing creative workplaces, it was like trying to push water uphill with investors, agents and others to convince them that the product we were creating was what people wanted and a product the investor market would value at the end of the process. The benefit of the creative workplace becoming more institutionalised is that it has moved from being a fringe, slightly quirky asset class much more into the mainstream. From my perspective, I therefore see the competition as far less of a threat and more of an opportunity to keep innovating.

We have seen some great examples of the bigger institutional developers evolving and trying to do more interesting things with their buildings, but I still think if you walk into 90% of office buildings in London, they will feel very much as they did in the 1990s, so the market opportunity is very much there.

JS: Is the type of tenant occupying creative workspaces changing?

JL: What we have seen over the last six to seven years, which came as a result of the 'Google effect',



THIRD FLOOR OFFICES General Projects, alongside owner Northern & Midland Holdings, has received planning to transform 132 Goswell Road – a former printing press and gin distillery in London's Clerkenwell – into a new 76,000ft² office hub for the creative industries.

is Silicon Valley doing ultraoutlandish things with office buildings to foster a feeling of innovation and creativity for their workforce. This has created a big step change in what people believe their workspace should look like.

However, I don't think that means every bank is going to start installing multi-coloured slides in its office. The definition of 'creative workspace' needs to be carefully defined in the context of the business. What we are seeing is businesses across the board embracing the general idea that their workplace needs to be much more focused on creating different areas of engagement for employers to collaborate, socialise and feel creative in.

142

US: For this publication we have interviewed various developers in Sydney, and they have outlined the difference in how they use the ground plane of an office building compared with London. Those differences centre less on security and more on creating a public space.

"Our entire thesis is underpinned by demographic change."

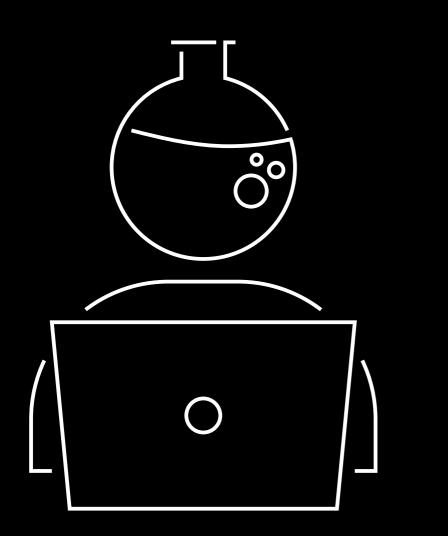
Do you think London should adopt more of this?

JL: The answer to that question is quite context-specific. In different parts of London and in different circumstances, integrating an office building into the wider community can be more or less important or appropriate. In general, our approach to the office lobby is much more akin to a boutique hotel lobby. Our aim is to make the lobby a public space, and that's about creating an amenity space for our tenants but also an amenity space that can be accessed by the public. A lobby is a way to activate a building and create a sense of place and a piece of culture that reflects the spirit of the building.

US: Sydney has been described to me as five years ahead of London in office design. I've been told the flexible workspace and activitybased working phase is over, and instead people want their own space and solitude to do complex thinking. Are you seeing that in London?

JL: If you go back ten years, there was a very formulaic way that offices worked. Everyone had their own desks, and senior management had their own rooms. In the last six to seven years, we have seen this fundamental revolution where co-working, flexible working and activity-based working have all completely altered and radically reshaped what the office looks like and how it functions. We have gone from one very rigid model 180 degrees to a completely different way of working. My view is that there are merits of both of these models. and the co-working revolution has pushed organisations to move further into that field than maybe they are comfortable with. We are now seeing companies naturally gravitate back towards somewhere in the middle of the two models. Therefore, what the office will look like in two to three years is much more of a balance between individual space and flexible space.

THE WORKSPACE of the FUTURE



Jack Sallabank Future Places Studio

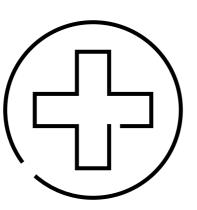
The workspace of the future

Over the last 50 years, the developed world has witnessed incredible advances across science and technology. From wonder drugs to new limbs to artificial hearts, science and scientists have enabled us to live longer and healthier lives. But over the coming years those advances will be the equivalent of comparing the Nokia 3210 with a modern-day iPhone.

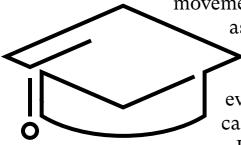
In his fascinating book *The Industries of the Future*, Alec Ross describes some of the advances we can expect to see: "In the years ahead, we will live in a world where we'll be able to target cancer cells with true precision, breathe air out of lungs transplanted from farm animals, and deliver medical treatment from the best hospitals in the world to the poorest, most remote corners of the earth."

146

The innovations described by Ross are often developed in high-tech laboratories on science parks located on the outskirts of towns. In the UK such locations include the science parks near Stevenage, Oxford and Cambridge. But now, driven largely by talented young people wanting to live and work in lively

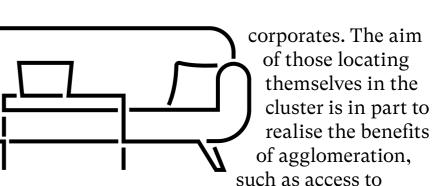


and vibrant cities, we are seeing an 'urbanisation of innovation' across science and technology. London is a prime example of a city experiencing this



movement of science into the city as areas such as King's Cross, White City, Whitechapel, Stratford and Sutton all evolve into what are being called 'Knowledge Clusters'. Knowledge Clusters are

geographical locations that attract organisations from the knowledge economy – that is, sectors based on knowledge-intensive activities such as science, healthcare, technology and creative services. At the heart of a Knowledge Cluster is a strong research base such as a university, hospital or a research institute. This research base is regarded as the 'anchor institute' around which others will cluster. A cluster is typically made up of a mixture of startups, scale-ups and large anchor



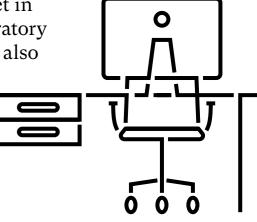
talent, networks, investment or opportunities for collaboration.

The growth of London's Knowledge Clusters creates a number of interesting planning challenges for local councils, developers and architects. Do we have enough affordable and flexible workspace for start-ups to locate in the cluster? Do we have enough space for successful start-ups to scale into? Do we have enough office space for large corporates to move to the cluster? And do we have commercial laboratory space in the cluster?

The answer to the latter is, invariably, no. Since the turn of the century there has been a shortage of commercial laboratory space across London. A number of factors have influenced this shortage, including the success of out-of-town science parks

and a booming office market in London. Developing a laboratory in an urban environment is also expensive, typically

20–30% more expensive in the base build than developing an office building. When building laboratories,



148 in addition to a high base build cost, there is expensive equipment to accommodate, a high turnover of tenants, complex regulatory challenges, health and safety issues, and operational expenses to be factored in. Despite these challenges, we are set to see a significant volume of commercial laboratories built in London over the next ten years. In King's Cross the developer Stanhope of 'lab enabled' space as part of its new development in between the University of London, and the Department of Health with a developer to create a

is planning to build 400,000ft² British Library and the Francis Crick Institute. In Whitechapel, Barts Health NHS Trust, Queen Mary and Social Care will be working 400,000ft² life science campus. In Sutton, as part of the London Cancer Hub, the council is currently looking for a developer partner to build 1,000,000ft² of laboratory space. These developments are just the start for London, as more developers and local councils

explore the opportunities that developing laboratories can bring to their area. Juliette Morgan, Head of Campus for British Land, was quoted in a recent research report on Knowledge Clusters saying "the property industry has a chance to make a material difference in human wellness if we provide the right spaces for London's research industries to flourish." At the same time as we are seeing science talent move into our cities, we are seeing vast amounts of money spent by the world's leading nations on the industries of the future. Genomics is tipped to be the next trillion-dollar industry, and Artificial Intelligence is being referred to as the new space race. For the UK to be a part of the race, London will have to be a city where the technology and science innovations of the future can be born. The workspace of the future, therefore, will be a laboratory...

Conclusion

Driven by people and enabled by technology, the places where we work have changed. Over the last ten years we have seen the workplace become flexible, healthier and in general a more pleasant place to be.

While many workplaces still lag behind, those that have embraced the change have done so with a greater appreciation of the role the workplace can play in attracting talent, harnessing productivity and making people happy. It could be argued that over the last ten years we have simply been recalibrating the relationship between the workplace and people.

Issue No. 1 of our Exchange series has explored these changes. A roundtable with architects discussed the drivers of change and how this has influenced their work. Interviews with developers from London, Sydney and Hong Kong explain what workplace design means in these cities. Essays from industry experts have analysed the role of wellbeing, health and music in the workplace, while case studies have helped us document best-in-class examples of workplace design.

If the last ten years has seen the recalibration of the workplace, the next ten years could be about reimagining the workplace as we harness innovations across robotics and artificial intelligence and look to create refuges for people both on a macro and micro scale. This could be even more pertinent in light of the mounting challenges of climate change – as set out in the most recent IPCC (Intergovernmental Panel on Climate Change) report – which will have to be met by everyone head on, regardless of role or sector.

Nonetheless, we are at an exciting stage in the ever evolving world of workplace design, but if we are steered by the people using the buildings and the demands of sustainable design, then that is a great starting point.

Credits

Exchange team Tom Featherby, Martina Ferrera, Daire Hearne, Ben Hutchings, Emily Lauffer, Gavin Mullan, Jack Sallabank, Ken Shuttleworth, Andrew Taylor, Giuditta Turchi, Sara Veale, Sarah Worth

With special thanks to Josh Artus, Kevin Chapman, Donald Choi, Peter Clarke, Felicity Francis, Stuart Harman, Dr Julia Jones, Jacob Loftus, Bola Lasisi-Agiri, Paul Mead, Yvonne Onah, Nick Searl, Eniola Sonusi, Natalie Slessor

Printed by Pureprint Group, a Carbon Neutral Printing Company

Edited by Future Places Studio www.futureplacesstudio.co.uk

Make 32 Cleveland Street London W1T 4JY

www.makearchitects.com info@makearchitects.com @makearchitects

© 2018 Make Ltd

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including by photocopy, recording or any other information storage or retrieval system, without prior permission in writing from Make Ltd.

152

All photography by Martina Ferrera, Zander Olsen and Make unless stated below.

p. 4: 72 - Kernel Property
p. 5: 130 - Chinachem Group
p. 26-27 - Polly Tootal
p. 36, 39-41 - Polly Tootal
p. 51, 53-54 - Lendlease
p. 60 - John Madden
p. 74-79 - Kernel Property
p. 90 - Factory Fifteen
p. 135 - Chinachem Group
p. 142 - General Projects

seven years at Resolution Property where he first ioined as Principal and subsequently became Head of UK. Jacob holds an MSc in Real Estate from London Southbank University and a BA in International Relations from Boston University. PAUL MEAD is the co-founder of Kernel Property based in Sydney. Paul has held various senior positions in building surveying, project management and tenant representation. Paul has a BSc (Hons) in Building Surveying and is a Member of the Royal Institution of Chartered Surveyors and a Member of the Association of Project Management. YVONNE ONAH is 24 and currently studying for her Master of Architecture Part II at University of Westminster, and is working part-time at **Baynes and Mitchell** Architects. Prior to that, Yvonne studied **BA** (Hons) Architecture at Canterbury School of Architecture (UCA)

and graduated in 2015.

JACOB LOFTUS is the

founder of property

developer General Pro-

jects. Prior to General

Projects Jacob spent

JACK SALLABANK is the founder of Future Places Studio, a design, research and strategy studio based in London. In 2018 Jack was nominated as a Rising Star in the property sector by the Estates Gazette. Jack chairs the White City Developers Forum and is a guest writer for Monocle on cities.

NICK SEARL is a partner of both Argent and Argent Related. Nick is leading Argent Related's Brent Cross South development in north London. Nick previously worked with Chelsfield and European Land at Paddington Basin, where he delivered The Point and Waterside buildings for M&S and Orange respectively. Nick is chairman of the BCO London awards panel.

KEN SHUTTLEWORTH founded Make in 2004 and oversees the design development of all of Make's schemes. Ken recently served as President of the British Council for Offices, and is a Fellow of the Royal Society of Arts and a member of the UK Government Advisory Group on Professional and Business Services.

NATALIE SLESSOR joined Lendlease in

2012 and is the General Manager, Workplace & Change. She is one of Australia's verv few environmental psychologists. Natalie has over 15 years of experience in property strategy and managing design processes. She has specific expertise on workplace design of the future and is considered a 'place user experience' expert. Prior to joining Lendlease. Natalie was the Director of Consulting, Australia at Woods Bagot.

ENIOLA SONUSI is 25 and currently completing her fifth year (Part II) at University of Portsmouth. Eniola completed Part I studies at University of Lincoln.

ANDREW TAYLOR ioined Make Architects in 2012, and has since worked on a variety of residential and commercial projects in London and Mumbai. He is currently overseeing the facade design and delivery for The Madison, Make's 53-storey residential tower on the Isle of Dogs. In his spare time, he assists with the third-vear architecture studios at Central Saint Martins.

Long live the office, Felicity Francis	6
Make roundtable	
The British Library	. 24
Nick Searl, Argent	
Wellbeing and the workplace, Josh Artus	. 42
Kevin Chapman, Lendlease	
Natalie Slessor, Lendlease	
Stephen Lawrence Trust	
Music and the workplace, Dr Julia Jones	
Kernel Property	. 72
Peter Clarke, Brookfield Properties	. 80
Stuart Harman, Brookfield Properties	
32 Cleveland Street	. 94
The Hiscox Building	100
London Wall Place	110
5 Broadgate	120
The smart workplace, Jack Sallabank	130
Donald Choi, Chinachem Group	
Jacob Loftus, General Projects	138
The workspace of the future, Jack Sallabank	144
Conclusion	150

