

ISSUE 6 SUMMER 2021 HOARELEA.COM

The future belongs to the curious.

# Exploare®

A magazine from Hoare Lea



The future belongs to the curious.

**“If you want to build a ship...  
yearn for the vast and endless sea.”**

Antoine de Saint-Exupéry



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**People.**

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**Possibilities.**

FOREWORD

Designing the built environment puts us at a unique intersection. We span technology, economics, local and global regulation, environmentalism, and the health and wellbeing of society. We craft the stage where lives – billions of them – play out every day.

The privilege, magnitude, complexity, and responsibility of this role can sometimes feel daunting. With every innovation, every development in how we work, and each impactful project, the need for more, better, newer seems to follow. The world feels fast, vast, and often out of control. Despite the pioneering developments they may feature, when projects take years to come to fruition, it can feel as though there's always more that could be done.

So how do we combat that overwhelming feeling? How do we even begin to make changes that keep pace?

## We explore.

There is an undeniable connection between exploration and feeling our best. Is it a chicken and egg relationship? Certainly, the diverse and invigorating experiences we get from exploration boost our mood, but do we also need to feel positive in order to embark on a journey of discovery? Taking that first step feels easier when the outlook is sunnier – in all senses of the word. But pushing through that barrier – that urge to hunker down when things get tricky, to wrap our 'shells' around us and accept the status quo – is everything. It's where boldness and bravery lie...

### Exploration is a powerful drug.

The more we do it, the happier we feel. The more we do it, the more we want to continue...

So it's no surprise that it can be the antidote to today's stressful world. Comfort, inspiration, sustenance, and connection are powerful human impulses; exploration engenders them all.

The act of embarking, of emerging once more with positivity after what has been one of the hardest years ever for many of us, might feel Herculean. It might feel impossible. But it's how we'll re-energise ourselves, how we'll escape the ordinary, and how we ignite the flickers of future that, together, we'll rewrite.

# The trend report.

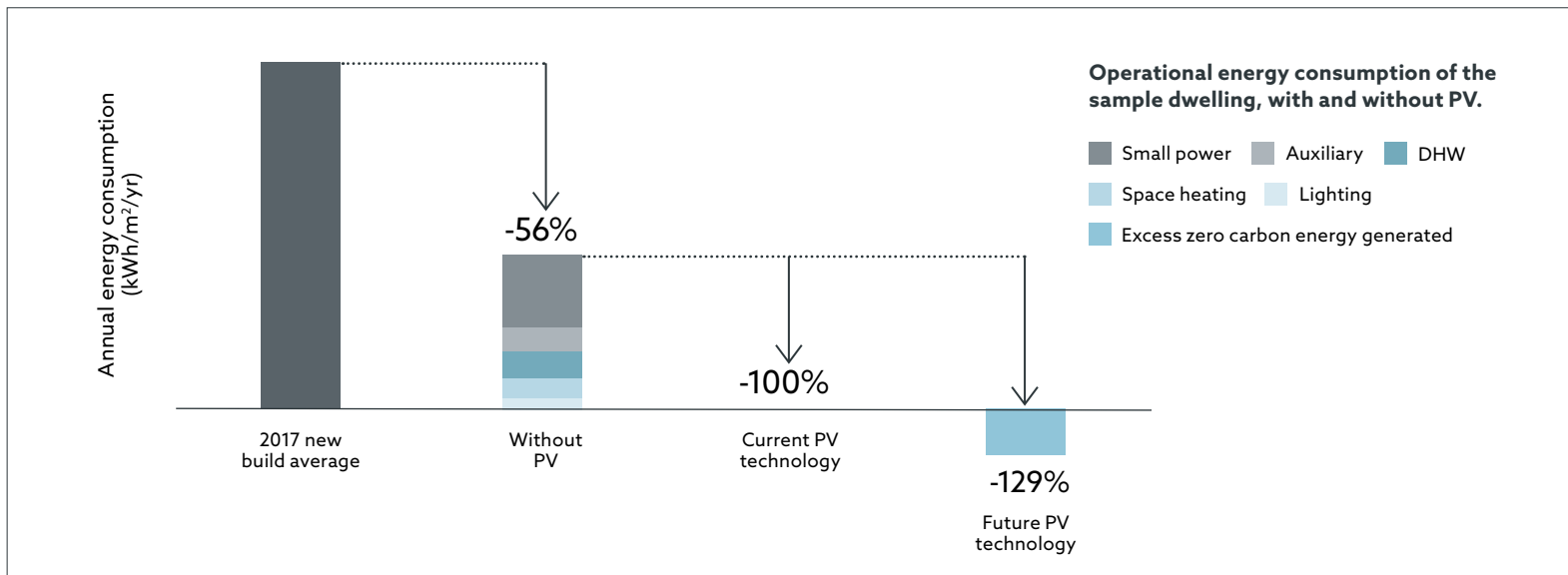
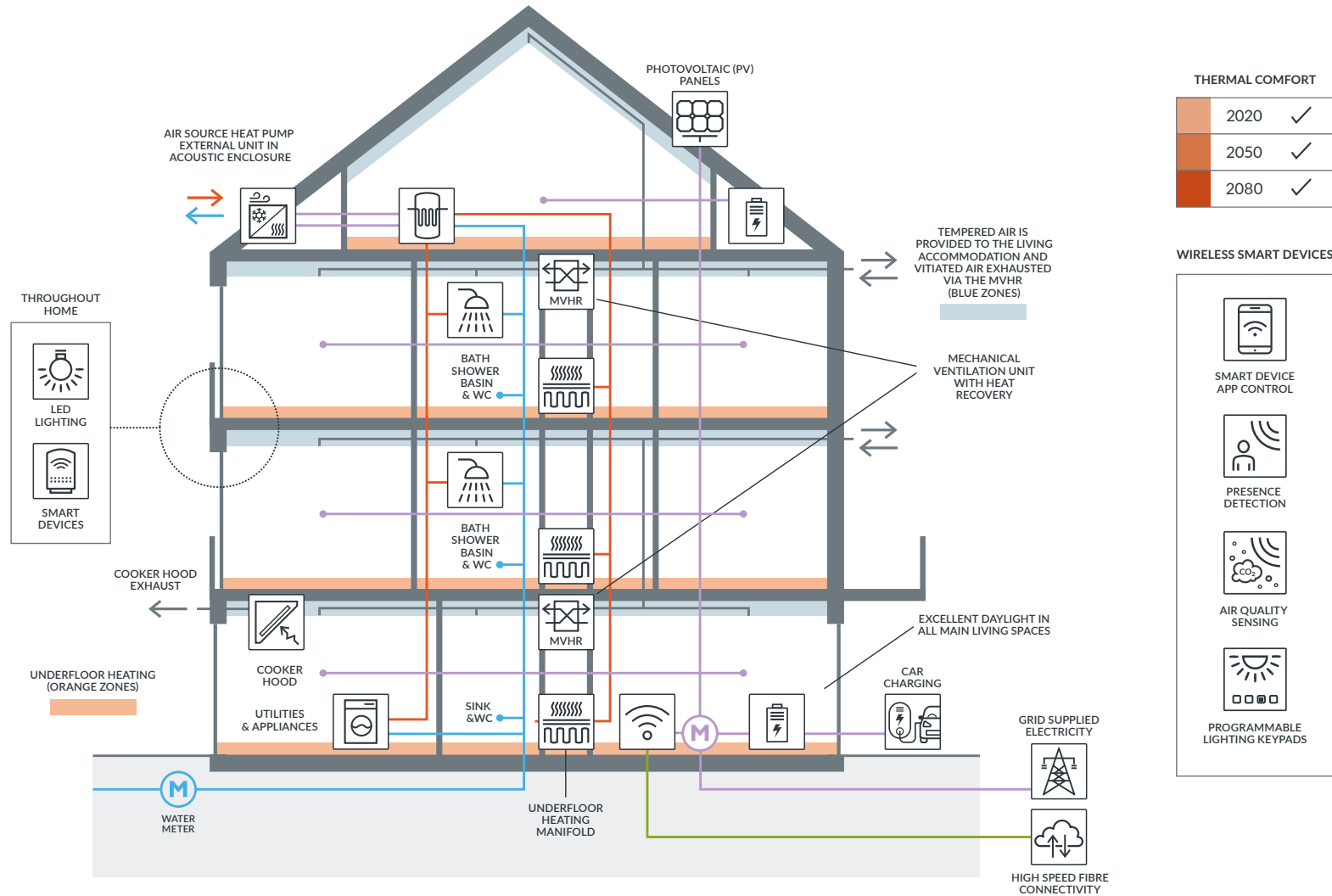
## RIBA Home of 2030.

THE MEP ELEMENTS OF THE 'CONNECTOR HOUSING' CONCEPT

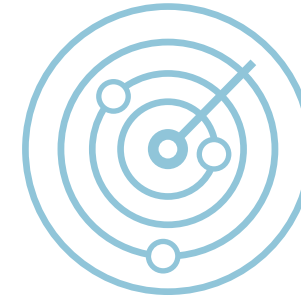
Joint winner of the Home of 2030 design competition

WHO? Designed by Openstudio, Hoare Lea, LDA Design and Gardiner & Theobald.

WHAT? An open system that provides zero carbon homes by using an architectural and landscape framework which can generate an almost infinite choice of designs.



## On the radar.



### 1.

#### THE FUTURE HOMES STANDARD

Earlier this year, the government released its official response to the Future Homes Standard consultation. It recognises that homes built now will be operational in 2050 and action must be taken now to decarbonise new dwellings.

Let's talk - [GregJones@hoarelea.com](mailto:GregJones@hoarelea.com)

### 2.

#### TACKLING TRADITIONAL THINKING

A new Product Based Building Solutions (PBBS) taskforce, comprised of companies across the industry, is aiming to quantify how a product-based approach from the outset of a project is more efficient than traditional methods.

Let's talk - [GonzaloPastorPenalba@hoarelea.com](mailto:GonzaloPastorPenalba@hoarelea.com)

### 3.

#### NET-ZERO WHOLE-LIFE CARBON ROADMAP

As part of the World GBC's #BuildingLife scheme, the UKGBC is leading an industry-wide project for launch at COP26 to develop a roadmap of agreed actions to achieve net zero carbon.

Let's talk - [TomSpurrier@hoarelea.com](mailto:TomSpurrier@hoarelea.com)

### 4.

#### THE GOVERNMENT'S TEN-POINT PLAN

The recently released plan identifies opportunities to reduce greenhouse emissions, create new jobs and drive economic growth - impacting energy strategies for new developments in a variety of ways.

Let's talk - [AndyCane@hoarelea.com](mailto:AndyCane@hoarelea.com)

## Conversation kickstarter.

**“The traditional boundaries for where care is delivered are evolving...and there is an appetite to co-design these spaces.”**

Dr Abdullahi Sheriff,  
BBDA STEM Leader of the Year 2020

**“How can we help people with learning challenges manage their daily tasks more easily using technology within their spaces?”**

David Adams,  
ADS Independent Living Solutions

Join the discussion at [hoarelea.com/insights](https://hoarelea.com/insights)  
Or listen via iTunes, by searching **Hoare Lea**

## Kaizen corner.

# 改善

“Change for better: one-time or continuous, large or small.”

We are always looking for evidence to support the stories we tell ourselves. Our brains find what we look for. What new stories can we tell ourselves to make unexpected discoveries?

## Hoare Lea is...



### Thinking about.

**#GrowYourKnowledge.**

Cross-discipline knowledge is more important than ever among our global built environment community. The CIBSE #GrowYourKnowledge webinar series is a great way to hear from experts in their fields spanning a range of disciplines, industries, and regions.

Let's talk - [NicolaBagshawe@hoarelea.com](mailto:NicolaBagshawe@hoarelea.com)



### Talking about.

**ESG: moving into value creation.**

The Times Sustainable Business report, created in partnership with The Institute of Corporate Responsibility & Sustainability, brings together industry leaders to discuss the latest trends and topics spanning sustainability. Our experts provided a unique insight into how ESG (Environmental, Social, and Governance) ambitions are shifting from risk management to value creation within the built environment.

Let's talk - [DianaSanchez@hoarelea.com](mailto:DianaSanchez@hoarelea.com)



### Caring about.

**Duty to protect.**

The government has launched a consultation into new legislation for a 'duty to protect' (known as Martyn's Law) on publicly accessible spaces. It aims to make the built environment a safer and more secure place, and will require the design and operation of most developments to address the potential consequences of terrorism.

Let's talk - [JohnTaylor@hoarelea.com](mailto:JohnTaylor@hoarelea.com)



**Fresh perspectives**  
 New voices of the built environment  
 Michelle Wang

# Healthy is the new wealthy.

## The great 2020 transformation.



Beyond concerns for hygiene and viral transmission, the lockdowns of the last 12+ months have meant most of us now viscerally understand how the spaces we inhabit impact on our wellbeing and productivity.



LET'S TALK  
 MichelleWang@hoarelea.com

**We are living through a major shift in societal thinking. For more than 12 months, people have had the time to see and experience what effect spending more time in certain environments does to their bodies, mental health, and human relationships.**

This psychological and behavioural shift is not something that can be undone. Thankfully, within the more forward-focused areas of thinking in the built environment, there has been a nascent wellbeing movement in recent years.

The rise in popularity of the WELL Building Standard and other similar wellbeing-focused building certifications serves as a harbinger for an industry-wide shift towards an increasingly user/occupier-centric approach, fuelled by research showing the impact of the spaces we inhabit on our health, mood, and productivity.

This shift is not just in building design, but also in the operation and management of built assets. At the same time, the rise in environmental monitoring and wearable technologies is creating better informed consumers and building users who can track the connection between indoor environmental conditions and how they feel or behave.

### Blurred lines

In 2021, collectively, we now have an evolved understanding of what constitutes a healthy building. It's one that is shared across society and not restricted to the technical domain or built environment professionals. Out of necessity, air flow rates and ventilation options have entered into everyday conversations. Beyond concerns for hygiene and viral transmission, the lockdowns of the last 12+ months have meant most of us now viscerally understand how the spaces we inhabit impact on our wellbeing and productivity.

### So what does this mean for design?

When designing homes we need to ensure they are more flexible and adaptable than ever. We need to be asking ourselves how easy it would be for people to reconfigure their internal spaces, or how they'll use tech to manage their smart appliances and control their comfort levels. In a wider sense, residential developments must be designed to grow and evolve to accommodate different demographic groups.

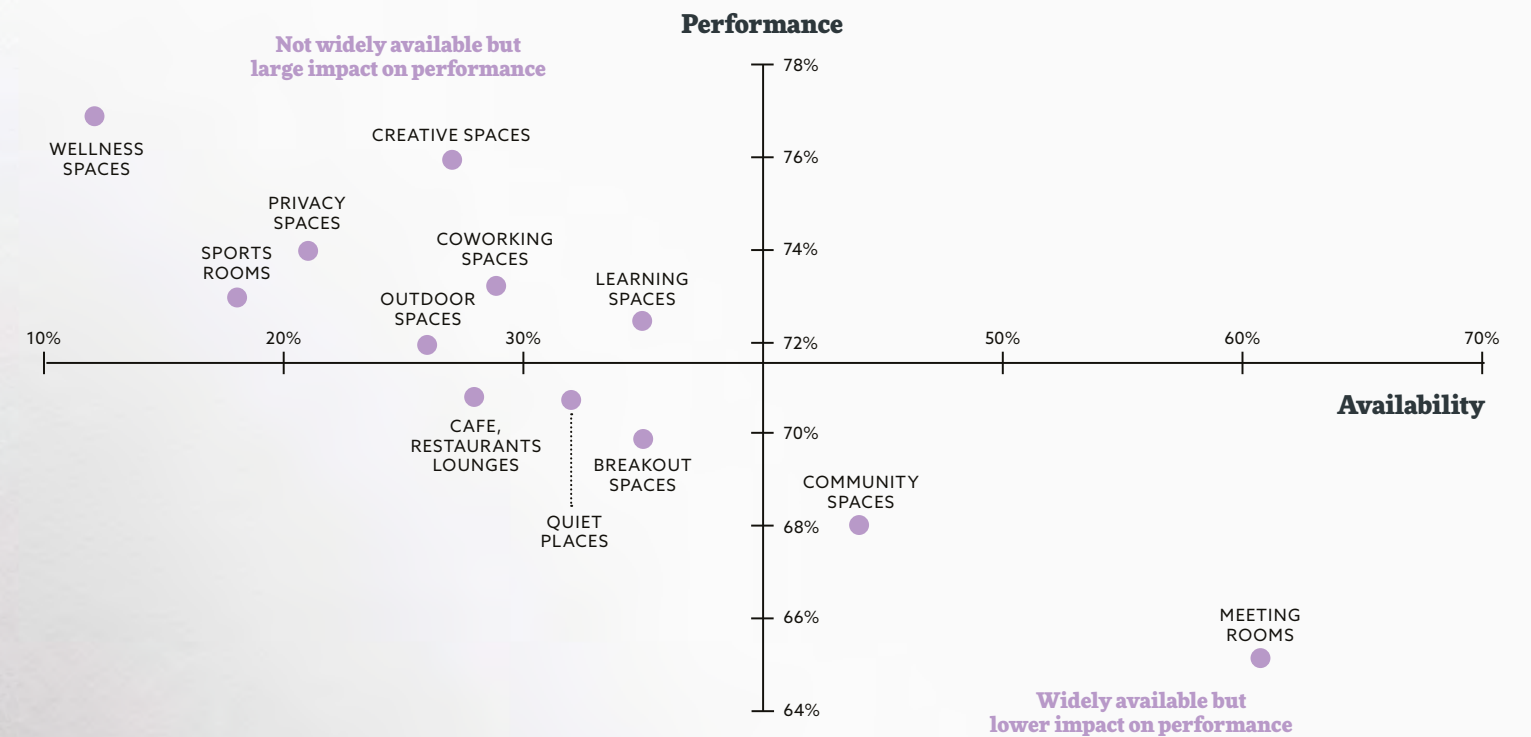
For the workplace, the same principles apply (as is so often the case when considering design from the human perspective). Flexibility and adaptability is everything. In the short term, it's collaboration and social encounters that people are likely to be craving and will respond most positively to.

Recent industry studies have also revealed that there are certain spaces in modern workplaces that greatly impact people's performance, such as wellness zones, creative spaces, and private secluded areas (see diagram below).

The workplace will be the answer to what we can't effectively achieve from home. Enhanced ventilation design and air quality monitoring in a mix of functional spaces rather than a blanket design solution across the floorplate is paramount. As air quality becomes increasingly scrutinised, natural building materials and low VOC-emitting furnishings will also need to be catered for.

Another potential area of innovation is in the treatment of entrance areas and better integration of cycle access and cyclist facilities. This needs to be key in new commercial buildings as people adopt more active modes of travel.

Ultimately, as the lines between our indoor environments become ever more blurred, our homes and workspaces must be designed with multi-functionality and health & wellbeing at their heart. It's a lesson everyone has learnt. □







PEOPLE

# Softly does it.

## A new generation of architectural storytelling.

**Charlie Luxton** is one of TV's most famous faces in architecture, fronting a range of shows on our screens for the past two decades. With a small but bold architectural practice dedicated to sustainable and sensitive schemes, he's deeply invested in doing things right. He joined us to talk latest trends, design-led thinking, and how creating his own home has transformed his outlook...

All photos courtesy of Charlie Luxton





Beanacre, Oxfordshire

**Q So how did your mix of architectural work and presenting come about?**

**CL** Scarily, 23 years ago now! While I was at the Royal College of Art I just answered an advert looking for a TV presenter. I went along to a screen test and then forgot all about it, until I got a call asking me to do a programme for Channel 5 on modern British architecture. At that time, I was training to be an art director, so I was focused on being behind the camera but was quite interested in the process so thought I'd give it a go. That then led to another opportunity with Channel 4 and I started making TV as a part-time career, before eventually leaving London to move into more sustainable architecture. We started Charlie Luxton Design in 2005 and it's grown brilliantly as my TV career has trundled along!

**Q How have you seen design approaches change since that time?**

**CL** I think what is exciting is that there's now an awareness of the role that low energy houses play in people's health. My practice focuses mainly on sustainable residential architecture, so people becoming aware of the fact that low energy homes are generally healthy homes is great to see. I think there is a massive shift away from oil and gas, and the way the prices are coming down around green technology is extraordinary. We're currently doing a project that will create 12 Passivhaus Plus homes and a community centre, one of our biggest so far, so I do feel the tide is turning.

However, I always feel like I know less now than I did 20-odd years ago. Every time you get to the top of a hill, there is another one... and it's often more complicated! Our latest thing is diving into embodied energy and doing some modelling around that for projects. It's an interesting challenge.

**Q Are there any other architectural trends that you're seeing at the moment?**

**CL** Arches are becoming a big thing – watch out for arches! But, also, beware... a rehash of post modernism is showing its face, haha! I just look at it and I can't believe it's coming back. Ultimately though, I like to think the era of the relatively inhumane 'mega blob' is going to go. Contextual sensitivity has gotten much better. It's about reconnecting with what exists and having a better conversation – reimagining the traditional.

My practice does work that's mainly around the Cotswolds and Oxfordshire regions and down to London. My goodness, there are some beautiful architectural traditions that we need to restore and rework in those areas. It's not about just building a house and putting some stone on the outside to make it 'acceptable' for its surroundings, you need to engage with a building to make it work.

**Q There's a humbleness to the projects you seem to be most passionate about, would you agree?**

**CL** Yes. I like that. I think 'speak softly and carry a big stick' is one of the greatest sayings of all time. I personally feel architecture isn't meant to be 'look at me, look at me' (a few exceptions of course: Hawksmoor and VanBrouck get away with that!). Ultimately, it should be more sensitive. The one thing I've learnt from following builds throughout my TV career is that the best money people can spend is on good design. I see a lot of projects where the design work to begin with wasn't great and it just creates a lot of problems that people then have to solve. It's a similar thing with sustainability – the best thing you can do is find people who know how to inform it from the very beginning. It has to be a driver from the start and not a lot of people fully understand that yet. Especially as there's now an urgency and a relevance to what we do on a worldwide scale.

On that point, I do worry that there is still a lot of talk and not enough actual action. Obviously so much of it needs to be driven better by government. Interestingly, I don't think there has ever been a designer that has been an MP! Until we get a designer – and I mean that in the broadest sense – into government and those kind of decision-making roles, I can't see that kind of disconnected thinking changing. I think Apple was one of the first companies to have a designer on their main board and look how it has transformed that industry. We need to bring that sensibility to decision making and have a more design-led approach – I feel very strongly about that. >>



**People becoming aware of the fact that low energy homes are generally healthy homes is great to see... I do feel the tide is turning.**



**Q** Are there any projects your team is working on that have especially inspired you recently?

**CL** Ditchley Park is a fascinating one – it's a place dedicated to hosting transatlantic conversations really. It was used as a retreat for royalty since the reign of Queen Elizabeth I and Churchill used it to meet presidential envoy Harry Hopkins in his efforts to win American support during the war. So since then, it's been the home of conversations around liberal democracy between England and America. The building hosts incredible discussion events, ranging from topics such as nuclear warfare to cyber security. Obviously now, for a variety of reasons, the Foundation wanted to have the option of inviting guests based in America to join via video conferencing.

The whole project has been about problem solving, and by having a dialogue early on, we realised we could actually solve a lot of their wider issues. Being a detective – understanding all the issues and moving the jigsaw puzzle around to make everything better – is an amazing task. In this case it was all done within the context of what the building can accept and what the building wants to do. It actually became more about evolving the organisation to fit this iconic heritage building, rather than the other way around! In a place like that, design decisions are a story that we have to carry on with the art of an adept writer... rather than just dropping in a clanger of a plot twist.



### Ditchley Park

**Being a detective – understanding all the issues and moving the jigsaw puzzle around to make everything better – is an amazing task.**



### Sustainability

**It has to be a driver from the start and not a lot of people fully understand that yet. Especially as there's now an urgency and a relevance to what we do on a worldwide scale.**



**Q** Is that ultimately what architecture means to you – a kind of artistic story?

**CL** Yes, so much. I also think it's a vocation, not a profession. You see a lot of architects still working in their 70s or even 80s, and it isn't because they forgot to save for their pension, it's because they enjoy it. I certainly do.

But it's also taken on a new element for me after I decided to create our family home a couple of years ago... I knew it was going to be tough, as I wanted to get it to as close as Passivhaus as possible, but my goodness it gave me a newfound respect for contractors! It's a light touch build, dug into the hillside with a grass roof and it almost disappears into the landscape. It makes me smile every day. I pinch myself that we managed to do it and that I actually really like it... you can never guarantee that will be the case!

It's funny because I grew up on a farm – making dens in haybales and tree houses etc – and I suddenly realised that I was doing a grown up version of that; apparently I just can't stop making dens! That might become the story of my life... but if, so, it's a pretty good story. □



<b>Gwynfaen Farm.</b>	
The clients	Pobl and Coastal
The architect	Stride Treglown
The expertise	Sustainability, Net Zero Carbon
The challenge	To set a new benchmark for residential projects by delivering low carbon, healthy and affordable homes that achieve a 91.3% reduction in residual CO <sub>2</sub> emissions.
The sector	Residential



Image: Stride Treglown





#### POSSIBILITIES

The importance of accelerating healing and healthy space creation has never been more at the forefront of our collective consciousness than today. But the past holds an abundance of knowledge that is often forgotten. What can the lessons our ancestors so intrinsically knew, along with the discoveries of the last century, offer up to us in this post-pandemic landscape?

**Let the  
light back in.  
The healing  
hand of light  
in hospitals.**

Image: Ryder Architecture / Laing O'Rourke



**“Second only to fresh air... I should be inclined to rank light in importance for the sick. Direct sunlight, not only daylight, is necessary for a speedy recovery.”**

This quote from Florence Nightingale, writing in 1859, is more prescient than ever in 2021.

Together, fresh air and natural light are some of our main weapons in the fight against the spread of Coronavirus.

Daylight, in particular, is fast becoming understood as a way of disinfecting buildings (helping to prevent damp, mould and bacterial growth). Add this to the fact that it enhances our levels of Vitamin D (significant in helping battle the impact of the virus on our bodies), as well lowering the risk of asthma and other respiratory diseases, and it's clear lighting has an untapped yet vital part to play in our post-pandemic world...

Yet while our knowledge of how daylight supports our health, wellbeing, and recovery has been understood since Florence Nightingale and the Crimean War, it still feels like an untapped resource when it comes to buildings and – in particular – healthcare environments.

### **A short history of sunlight.**

From the birth of human civilisation, we have revered the sun as a giver of light and of life. From as early as the 14th century BC, the sun god Re was worshipped and solar temples were erected in his honour from the 24th century BC. These sun temples were designed with an understanding of the orientation of sun movements and focused around a central obelisk.



Sun god Re

By the 12th century BC, the ancient Greeks were worshipping Helios as the personification of the sun and, later, the Roman Empire used daylight to great effect within their buildings: from the central atriums in Roman villas, to the use of glass to create heat and solar energy for homes and greenhouses.

“The Roman’s had an intrinsic understanding of the importance of light,” explains Jonathan Rush, Partner for Lighting Design at Hoare Lea. “The central oculus of the famous Pantheon in Rome allowed sunlight to penetrate the space in dramatic ways, but it also trapped the solar energy within the building, heating the space. The use of this ‘heliocaminus’ became so popular in buildings within Rome that people started demanding protected views of the sky, which led to what can be described as an early form of ‘right to light’ legislation familiar to us today.”

As civilisations developed, the use of daylight within buildings became ubiquitous. As early as 1550BC, nearly all civilizations had an almost inherent understanding of the value of daylight and sunlight in healing. Our understanding of our natural ‘body clock’ and the benefits of a healthy sleep and awake cycle likely developed from seeing the impacts of sleep deprivation or lack of exposure to light.

Yet, it wasn’t until people started considering the science of healing and humans spent the majority of our time indoors that the use of light became more prominent in healthcare facilities. >>

Central oculus of the Pantheon, Rome.  
Photo by Tony Grady



**While our knowledge of how daylight supports our health, wellbeing, and recovery has been understood since Florence Nightingale and the Crimean War, it still feels like an untapped resource when it comes to buildings and – in particular – healthcare environments.**





The **Hotel Dieu hospital** in Paris was one of the first to use the pavilion style and was built between 1867 and 1878. The central courtyard provides an attractive Parisian garden with large accessible colonnades at each side for patients. Around the central rectangular building a series of smaller wings branch off – each with their own access to daylight and views.

### Pavilion popularity.

“The benefits of daylight within hospital design grew around the time of Florence Nightingale,” notes Ruth Kelly Waskett, head of daylight design at Hoare Lea. “This was most notable in the ‘Pavilion Plan’ hospital layout, which became popular in the mid-19th century. Designed around a central courtyard, this layout and orientation was about achieving good daylight and fresh air throughout the hospital wards.”

The pavilion style of hospital design became prolific across Europe, with John Robertson and George Godwin popularising the method in the UK.

### A brighter future for fighting disease.

Once there was an improved standard of general healthcare available to the masses, attention turned to the use of light for other medical issues and diseases. Tuberculosis (TB) had become part and parcel of life in the 19th century, but as it drew to a close, a series of important scientific breakthroughs had advanced understanding and tracking of the disease. This included the building of large TB Sanatoriums so that sufferers could be isolated and cared for until the condition had passed. The drive for good design within these buildings saw many top architects become involved in their creation. Buildings such as the 1932 Paimio Sanatorium in Finland (a seven-story building designed for daylight and sunlight orientation, with access to balconies on each level) became a benchmark for great use of daylight.

Whilst daylight rooms or areas where patients could get some light treatment became commonplace in these sanatoriums,



**Paimio Sanatorium, Paimio, Finland. Alvar Aalto 1928-1932.**

The vast sun deck on the top floor allowed patients to bask in natural light while enjoying the surrounding forest landscape. Daylight penetration was also considered throughout the interior, with large windows in all areas.

Solarium Terrace.  
Photo: Gustaf Welin, Alvar Aalto Foundation. 1932

the use of artificial light therapy also grew. The work of Niels Finsen – who in 1903 won the Nobel Prize in Physiology or Medicine for his work on artificial light sources as a treatment for various diseases – inspired light rooms that utilised filament lighting.

“For most of the history of healthcare, the importance of light on our wellbeing was not supported by scientific research,” explains Jonathan. “It was just something that either worked or was perceived to work because of an intrinsic understanding about our physiological needs for light.”

It was not until the 1980s that some of the first empirical evidence of the positive impacts of light became known. In his 1984 study, environmental psychologist Roger Ulrich demonstrated that patients who sat near a window, received daylight, and had a view of nature suffered fewer clinical complications, reported reduced pain, and healed faster than those who did not.

What followed was a flood of studies that built upon Ulrich’s work and – ultimately – have proved the anecdotal ideas suggested by Nightingale back in 1859. >>



**Buildings such as the 1932 Paimio Sanatorium in Finland, designed for daylight and sunlight orientation, became a benchmark for great use of daylight.**



#### DAYTIME

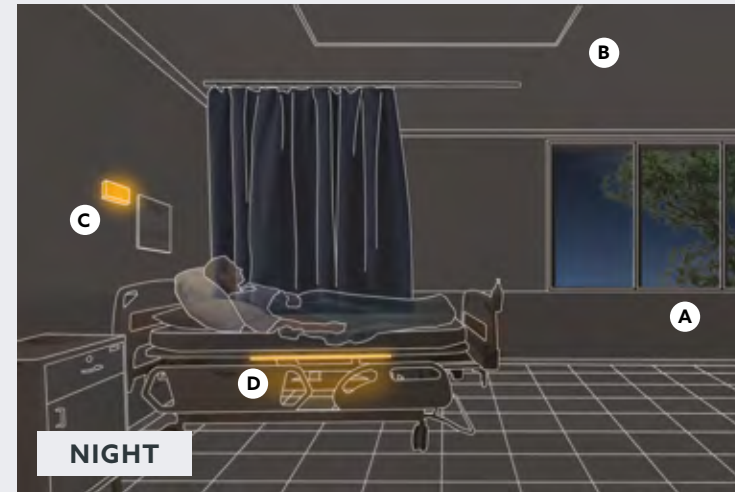
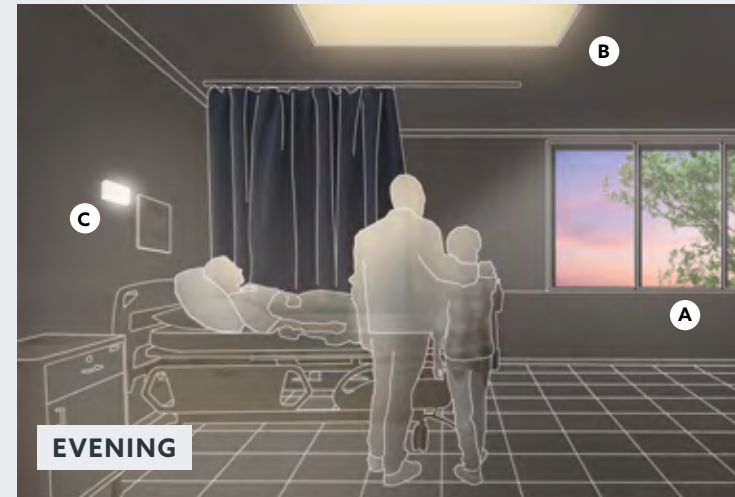
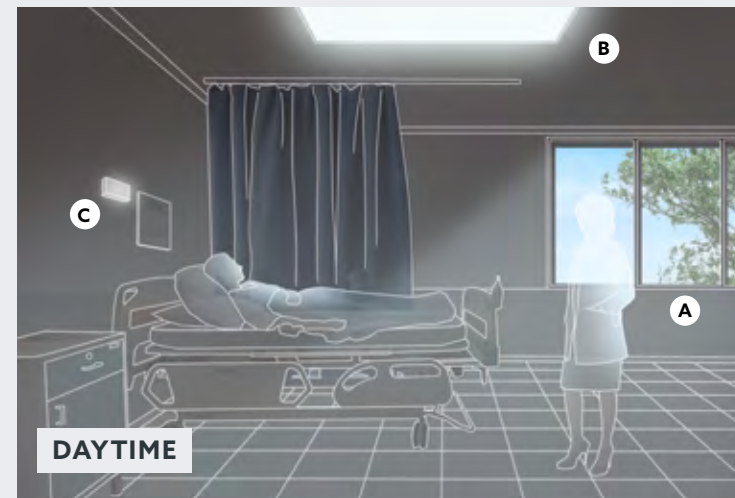
- A – Quality daylight & a view of the exterior provide the primary source of wellbeing for patients and staff.
- B – On duller days or deeper floor plates, artificial light replicates aspects of daylight through illuminated simulated “skylights”.
- C – Personalised light provides additional illumination and a more “domestic” feel.

#### EVENING

- A – As daylight dims, artificial light is needed.
- B – Light that is softer and warmer in colour creates a more relaxed environment for patients and visitors. The light gets warmer and dimmer as night falls to enhance sleepiness in patients.
- C – A localised light provides more light at the bed head for reading and clinical inspection.

#### NIGHT

- A – Black Out Blinds stop ingress of light from outside.
- B – Other artificial light is off to help settled sleep.
- C – If clinical inspection is required the localised light is amber in colour.
- D – A low level amber floor wash reduces falls and helps staff read catheter bags without disturbing patient.



#### Circadian cycles.

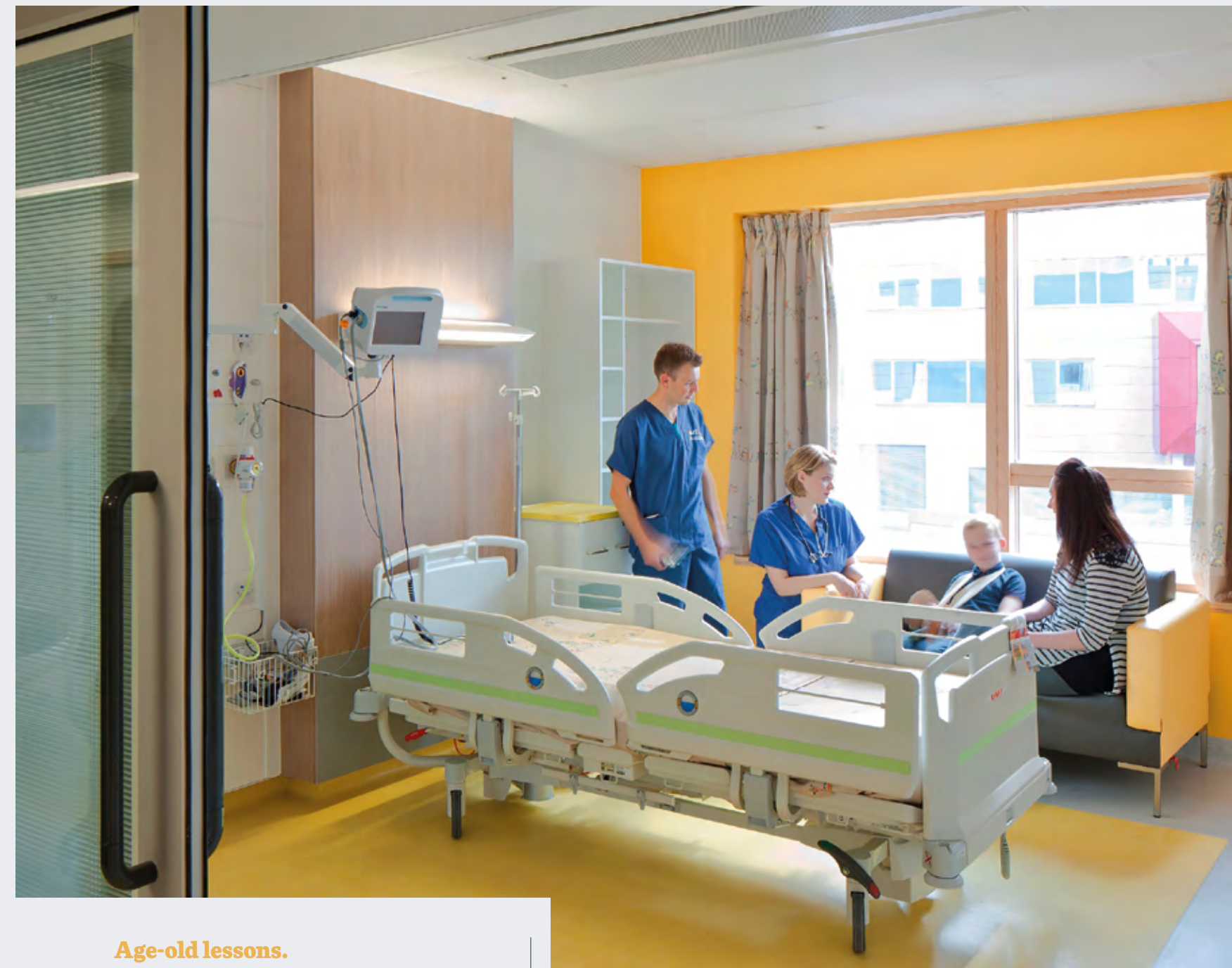
The understanding that light plays a vital role in our body clocks was finally clarified with the confirmation that the hormone Melatonin (originally discovered in 1958) is released and suppressed via the Pineal gland in the central nervous system, which forms a trigger for our sleep/wake cycle.

Fast forward to 2002, and Samer Hattar, David Berson and colleagues found what are known as the Intrinsically Photosensitive Retinal Ganglion Cells. These cells use light (particularly blue spectrum light) to send messages via hormones through the brain to trigger sleep or wake cycles.

We now know that the key to an aligned and healthy sleep cycle is good exposure to light throughout the day and reduced light at night to support healthy sleep. A healthy circadian rhythm can reduce illness, help recovery and improve wellbeing. As Ruth notes: “Light, but most simply, natural light regulates our body’s circadian rhythms. In fact, studies have shown that exposure to natural light during the day leads to an average of 46 minutes more of sleep each night, and sleep obviously has a major impact on our overall health and the healing process. Within a healthcare building, insufficient light exposure or exposure to light at night is likely to disrupt patient and staff circadian rhythms, making it more difficult to maintain healthy sleep patterns. Considered use and exposure to light offers amazing opportunities for most healthcare environments.”



**There is solid evidence that managed light exposure can support recovery rates, aid sleep, improve drug efficacy, reduce stress and make better, more comfortable environments for patients, visitors and clinical staff.**



#### Age-old lessons.

More than 150 years on since the importance of daylight and light exposure was postulated by early medical pioneers, we now have the understanding, research and tools to create natural and circadian-led lighting environments within hospital spaces, but are we seeing this as much as we should?

As noted in the recent World GBC Health & Wellbeing Framework report: “The focus on productivity in the built environment has left other areas of health & wellbeing underdeveloped. The financial co-benefits of a healthy built environment have created such a powerful driver for sustainable buildings that the focus of design interventions for health have inadvertently shifted into one sector of society (in many cases, the people who may not have been most in need of dedicated health interventions).”

Will it take the Covid-19 outbreak for society to re-remember what we previously prioritised about light and wellbeing?

Ruth for one is passionately committed to promoting a resurgence in this understanding:

“There is solid evidence that managed light exposure can support recovery rates, aid sleep, improve drug efficacy, reduce stress and make better, more comfortable environments for patients, visitors and clinical staff. And yet it feels that rarely do modern hospital designs consider use of light over a 24-hour cycle.

“Ultimately, exposure to daylight and to darkness is arguably our most basic natural form of healing. In my mind, there’s no better approach to the design of our healthcare spaces than utilising it effectively to support the mission of all health providers: helping people heal. It’s time we shed more light on what’s possible.” □

#### LET’S TALK

JonathanRush@hoarelea.com  
RuthKellyWaskett@hoarelea.com

Alder Hey in the Park Photo: David Barbour



Image: Callison RTKL / Tomorrow AB



**Station Hill, Reading.**

The client	Lincoln MGT
The architect	Callison RTKL / Gensler
The expertise	Acoustics, Fire Engineering, MEP, Sustainability, Vertical Transportation
The challenge	Creating a 'best in class' destination comprising contemporary living, working, leisure, and open community space that helps unlock Reading's potential as a high-density urban centre.
The sector	Mixed-use



PEOPLE

The stage is set for theatre's much-needed return in the coming months. But how has this year been for those at its heart, and what might we expect from its future? We chatted with Jez Bond, Founding Artistic Director of Park Theatre, and a certain national treasure named Joanna Lumley, to find out...

Joanna Lumley and Jez Bond

# The next act.

Photos courtesy of Park Theatre, London





Jez Bond and Joanna Lumley



**Theatre, and all the connected industries and skills that come with it, is so vital to supporting creativity and community.**

Jez Bond

**You can't escape on a theatre stage... It's terribly scary, utterly thrilling, and completely vital.**

Joanna Lumley

**"It's extraordinary how human beings are pack animals; we are herd creatures. We love things so much more when we are with people." The wise words of Joanna Lumley will strike a chord with many of us, especially considering the events of the last 12+ months. If one thing is clear, the thrill of 'live' cannot be ignored.**

"Look at football crowds, rock concerts, Glastonbury! The joy of theatres when they're packed and all seats sold out... Your heart just leaps with excitement," says Joanna. "You arrive, maybe grab a drink, you find your seat, shuffling along the row ("excuse me, thank you, excuse me") and squash down, clutching your coat on your lap... the curtain goes up and - ah - something you've been desperately waiting to see starts. You're shoulder to shoulder with the masses. Together, you can cry into your hanky, hold your breath in anticipation, or roar with laughter."

### **The mother of performance**

Joanna is a passionate champion of this much-needed medium: "Theatre is the mother of performance art," she enthuses. "If you can make it there, you can make it anywhere, as the New York saying goes! A substandard performance on screen can be helped out in the edit, but you can't escape on a theatre stage... It's terribly scary, utterly thrilling, and completely vital."

It's no surprise that one of the country's most beloved actresses is also a strong supporter of small theatres, one of which is north London's Park Theatre, which has stood as a beacon for affordable and accessible performance for the past eight years. With West End transfers, five Olivier Award nominations, and title of *The Stage's* Theatre of the Year, Artistic Director Jez is focused on ensuring that reopening to audiences goes as successfully as possible.

"As a small charity with no regular government or Arts Council funding, the closing of theatres has hit us particularly hard," he explains. "As we brought the shutters down in March 2020, we had no idea if we would be able to open again. Thankfully the support from government eventually came in and we were also lucky to receive financial help from a great many individual donors. We're looking at a proper opening in October when we can operate at full capacity - it's simply not feasible to open with social distancing."

Joanna adds: "Theatres simply can't run on 50 percent. Like many venues, if they're operating at half capacity, the money will quickly run out. Looking to the next few months, I think support will be needed more than ever. Especially, as the thing that really broke my heart was how we lost so many talented people - those who weren't able to 'wait it out'. Many of those lovely hard working people who would be behind the scenes making performances happen have just fallen through the cracks."

Jez, who knew from a very young age that he wanted to be involved in the running of a theatre, agrees. "Theatre, and all the connected industries and skills that come with it, is so vital to supporting creativity and community. I was lucky enough to not only be exposed to a variety of performances as a child, but also actively get involved in theatre production." >>







**We have had time to reflect on what matters, and strategise in a way we never would have been able to do when open... the distance of time and being able to listen is so valuable.**

Jez Bond

"Back then, theatres would travel nationally much more, and our school theatre's philosophy was 'the kids run the building'. So - unbelievably - as a 14 year old, I was told 'the National Theatre are coming tomorrow, here's the lighting plan, let them in and help them tech the show' and now here I am. It's such an example of how, when you can give young people the opportunities to learn, they just thrive. It's so important to me that Park Theatre champions that approach as much as we can - so the closing was just as much of a loss to the community as it was to the industry itself."

#### A new direction

So how positive is the pair feeling about theatre's return? "Oh, I do think we can count on the generosity of audiences," insists Joanna. "There'll no more debating whether to see something; now we'll all be saying, 'oh absolutely yes!'. As a society, we are very good at deciding: let's make this work. We all know that if we lose entertainment, we lose everything. After all, what has gotten people through this past year is reading, listening to music, watching television, film nights, live streams of shows and performances, or binge-watching the latest show we're addicted to - all of it. We love to be entertained. I think we need it back as fast as safely possible."

Interestingly, this first wave of somewhat limited performances (and even those that follow) may help pioneer new concepts that could change performance culture in Britain forever. In the world of the arts in particular, creativity can often thrive in constraint.

"While we've been so busy holding down the fort, the past couple of months have also provided the opportunity to step back and look at what we're doing objectively," explains Jez.



**We love to be entertained. I think we need theatre back as fast as safely possible.**

Joanna Lumley

"We've had the chance to do much needed maintenance and repairs to the building itself. I think people often forget, but when a show runs for five weeks and finishes on the Saturday, the next show comes in to set up on the Sunday morning. So, as a small theatre that needed back-to-back runs to stay afloat, we hadn't had a break for five years. Having time to do upgrade work is definitely one of the silver linings in all this."

Jez also believes that there's a positive feeling running through the industry that people are committed to doing things differently when they return. "The Black Lives Matter movement, for instance, has been transformative. It got us all thinking about how theatre, which is a great vehicle for societal shift and championing voices, can diversify itself even further. Like many other arts and performance organisations, we have had time to reflect on what matters, and strategise in a way we never would have been able to do when open... the distance of time and being able to listen is so valuable. At Park Theatre, we're looking at evolving the way we run and operate, and how to drive more diverse work." >>



Photo: ©Peter Mould/The National Trust





### Spotlight on sustainability

Looking to the future of theatre more broadly, the sustainability of these (often heritage) spaces is coming to the fore. Having led the £2.6m conversion of Park Theatre – which created a bespoke building from the ground up between 2009 to its opening in May 2013 – Jez is a big believer in pushing for what others think is impossible.

“With Park Theatre, we were trying to build something from scratch during what was still a time of recession – everyone said we were mad. But with clever cost engineering, we managed to get a truly brilliant scheme on an exceptionally restrained budget. Of course, as an established charity, sustainable choices always have to be balanced against cost, but eight years on there are so many more opportunities. Our green committee, set up pre-lockdown, is going to help steer what we do in a holistic way, and we’ve already been able to embrace LED lighting in the theatre’s architectural and social spaces, which is a fantastic step.”

As many will know, Joanna is also a strong voice in the wider sustainability movement, lending her high profile to everything from the Gurkka Justice Campaign to Survival International, Tree Aid and the Born Free Foundation to name just a few.

“I think for me, awareness of the planet’s vulnerability is something that has developed over the years,” she explains. “It was initially instilled in me by my parents; my mother used to lead us little ones in our village to school picking up litter as we went. My parents were brought up in India and I was born and brought up in the Far East – so you get used to respecting things that this country would just chuck away. Even before recycling started here, it broke our hearts to see how casual we were in the UK; how indifferent we were at that time to the effect we were having on the planet.”



**Our green committee, set up pre-lockdown, is going to help steer what we do in a holistic way, and we’ve already been able to embrace LED lighting in the theatre’s architectural and social spaces, which is a fantastic step.**

Jez Bond

**When you care about things, the more you hear about what’s going on, and the more you connect the dots...**

Joanna Lumley



“So gradually, simple sustainable behaviours sort of settled into my way of being. I found that I was naturally reducing, reusing and recycling. I was always darning jerseys and socks and turning hems up; respecting things is so important – especially when you’re skint as it’s the only thing you’ve got! I had a thrifty way of living, I suppose. But even so, back then, we still did think the world would go on forever, untouched. Our collective lack of empathy for the natural world was fighting the hand that feeds us. Thankfully a jolt has now happened. For me, certainly in terms of protecting wilderness and wildlife, a lightbulb moment came when I realised that the planet knows how to do it. It so often knows how to make things better. If we can try to leave it alone when possible or encourage it a little, at the moment it will restore itself; it knows how to bring the butterflies back to a region, or to grow its forests back.”

So how does one of the country’s still-most-in-demand actresses balance her campaigning alongside her creative endeavours?

“Oh what I like to do is just cram my days, darling! It all works in parallel. Being passionate about one thing doesn’t stop you doing another thing. If you love one person, it doesn’t stop you loving another. In fact, the more you love people, the bigger your love capacity gets. The same goes for any passion or cause.”

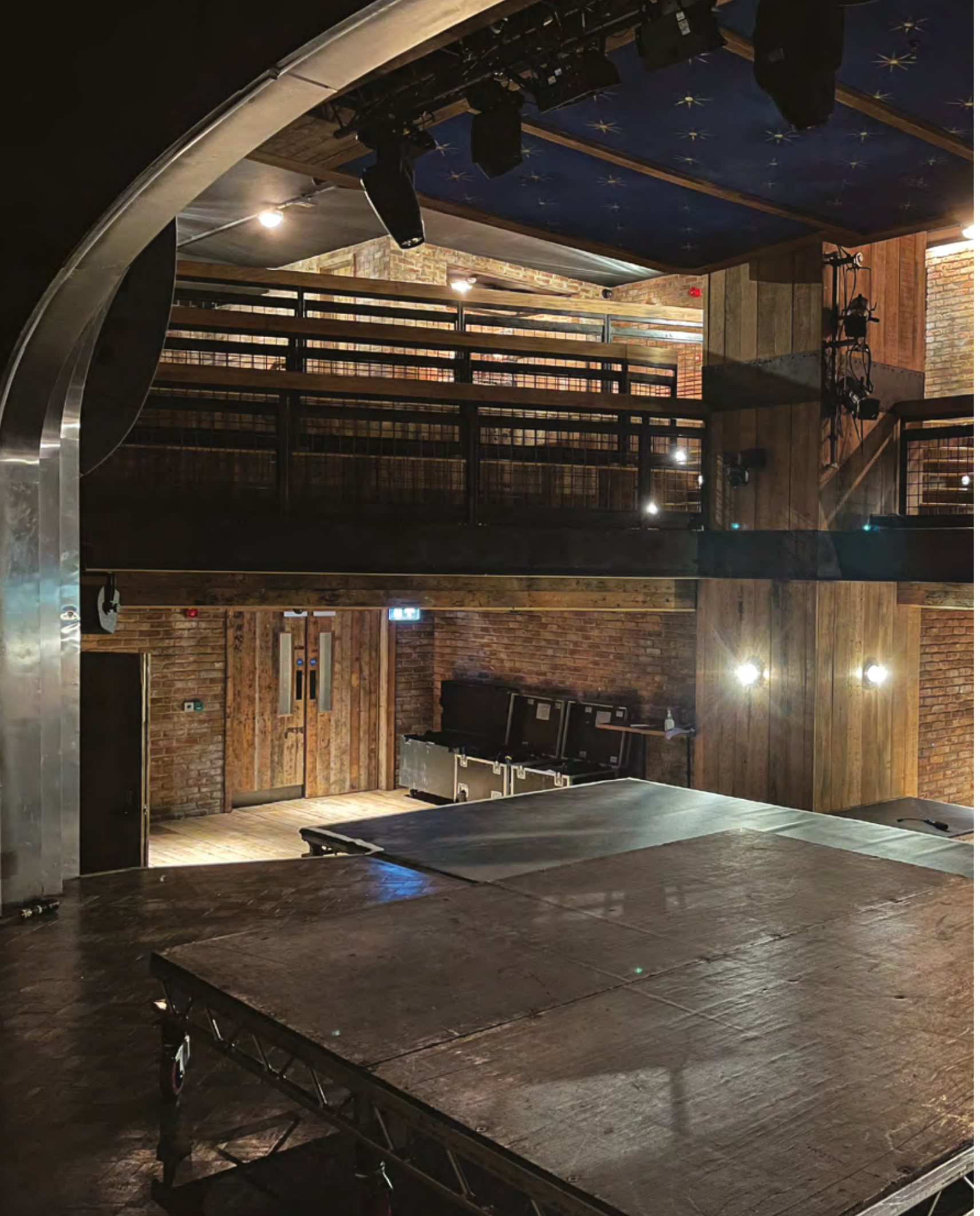
This big-hearted approach is certainly something we could all benefit from in the coming months. Indeed, for those who form the lifeblood of theatre and live venues in particular, it will be a lifesaver. As Joanna notes: “When you care about things, the more you hear about what’s going on, and the more you connect the dots. Because for all of this sad news, there is much more great news. There are creative minds out there. People who are determined to make the planet a better place. People who are working immensely hard and making all sorts of exciting things happen. Frankly, I am thrilled by what’s to come.” □

Find out more: [www.parktheatre.co.uk](http://www.parktheatre.co.uk)



### Lafayette, King's Cross.

The client	Argent
The operator	Venue Group (Ben Lovett of Mumford & Sons)
The expertise	Acoustics
The challenge	Creating a bespoke 'box-in-box' design that allows a vibrant venue to operate at unrestricted sound levels by containing noise within the space.
The sector	Arts & Culture



Photos: Matt Brown



## From the city...

1

### Heath Hospital and Children's Hospital for Wales.

This was the first dedicated hospital for children to be built in the country. We were involved in both phases of the build, which spanned a decade. The client's challenge to us was to deliver world-class services in keeping with the vision for a truly child-friendly environment. They also needed us to do this in a way that was as environmentally conscious as possible. Wellbeing was absolutely central to our solution. Our services and acoustic design was dedicated to creating reassuring spaces, without 'scary' or loud equipment - with child-focused systems. This meant creating easily

controlled heating, ventilation, and lighting features, allowing children and their families to adjust their environment - ensuring they feel as secure, comfortable, and relaxed as possible. Alongside this, we were able to achieve a BREEAM Very Good rating, an Outstanding rating in Energy Credit Ene 01, and a 50 percent carbon reduction. The Phase 2 space opened an incredible eight weeks ahead of programme, under budget, and exceeding the required quality standards... and went on to win the Constructing Excellence Project of the Year Award 2016 - what a project!

2

### Principality Stadium.

Known to the world as the Millennium Stadium, this is one of the UK's most prestigious sporting venues. In the past 12 months, it also took on arguably its most important role to date, temporarily becoming the Calon Y Ddraig (Dragon's Heart) Hospital to help respond to the Covid pandemic. Back in the 90s, the project was a fast-track build, with the immovable deadline of

the 1999 Rugby World Cup. As the biggest ever stadium with a retractable roof - and the first in the UK - we defined exactly what the MEP and environmental parameters were, visiting the most innovative facilities at the time and researching technologies to understand how we could enhance the visitor experience.

I remember watching the official opening rugby match there with Wales beating South Africa for the first time! I've never felt pride like it... until last year of course, when the team handed over the space to the NHS after working around the clock to transform it from stadium to temporary hospital in just a matter of months.

3

### Admiral Insurance HQ.

Our relationship with leading Welsh based FTSE company Admiral Insurance goes back more than 20 years so it was fitting to become involved as client advisor for its major new HQ 'Ty Admiral'. At the time it was the largest pre-let commercial office space in Cardiff, with the potential to house circa 3,000 employees. We advised on all matters relating to MEP engineering and Acoustics, along with preparing detailed fit out specifications for incorporation into the base build works. In response to Admiral Insurance's 25 year lease period, our solutions reduced the risk of excessive plant replacement costs over the term. Since completing this flagship HQ, we've helped support the technical design of the company's new call centre in Newport, a fit out at Capital Quarter Cardiff, and various refurbishments at its Swansea offices.

4

### No 1 & 2 Kingsway.

No 1 Kingsway was my first project for Hoare Lea when I joined some 27 years ago and has probably stood the test of time far better than yours truly! It's funny that after all these years I still remember some of the technical challenges, such as building next to the historic dock feeder and how to get enough supply air into the carpark. Meanwhile, the more recent No 2 Kingsway boasts fabulous views across to Cardiff Castle and is an excellent example of a refurbished office scheme, designed for multiple office tenancies. It was completed more than 20 years after No 1 - I wonder whether there will be a No 3? Alas, I don't think I will be around in any further engineering capacity in another 20 years!

# Shaping my city.

## Cardiff.

### HOARE LEA & CARDIFF

Our Cardiff office opened approximately 30 years ago, providing us with a hub from which to grow our work in the Welsh capital and surrounding areas. Today it's a welcoming community of creative engineers, along with specialists in acoustics, lighting design and sustainability, who are passionate about projects that shape both Cardiff and Wales for the better.





5

### St David's 2 Shopping Centre.

This is now one of the best places to shop and socialise in the UK, not just Wales... The scheme represented a huge investment in the city centre at the time. We dedicated a full-time local experienced design team to develop an MEP approach that was integral to the success of the space – both its functionality and user comfort levels. By basing ourselves onsite from summer 2007 to spring 2010, we could collaborate really effectively, and ensure the strict budgets and stringent timescales were kept to. It's a beacon of retail-led mixed-use urban regeneration in the city – with a fantastic atmosphere found throughout the contemporary and

relaxing environment. We are still continually involved in this ever-evolving development, acting for the Shopping Centre owners to support changing tenants and their associated fit outs. I certainly think there will be ongoing re-purposing in the coming years to reflect changing shopping habits and continue to be the vibrant destination it is today.

# Shaping my city. Cardiff.

Illustration: Claire Huntley



## To the bay...

6

### Scott Harbour.

Having always been mesmerised as a young boy with tales of exploration to the Antarctic and, in particular, Scott's famous expeditions to the South Pole, it was great to be involved in a project just a stone's throw from where Terra Nova set sail for that famous but fateful trip. These five workplace buildings that make up the 150,000 ft<sup>2</sup> development have each been named after elements of Scott's expedition, honouring the history of the area.

7

### Crickhowell House /Ty Hywel.

Crickhowell House (now Ty Hywel) was originally designed as a backdrop office building that would be masked by future surrounding developments and therefore, at times, attracted some architectural critique. But it's certainly held more affectionately in the eyes of most residents now, as a practical building that houses some of the most important decisions for the city and country. Over the years it has been the administrative HQ for the Welsh parliament (Senedd), as well as being offices for the Welsh Government.

8

### National Credit Mutual (now Atradius).

This is a very architecturally pleasing building, with its 'pink' granite hues that shimmer in the changing light conditions throughout the day. It was also ground-breaking, as the first building in Wales to be comfort cooled via chilled beams in combination with displacement ventilation via floor mounted air supply grilles. It's a wonderful example of how we were pioneering healthy buildings more than 25 years ago, and I'm proud to say the amount of fresh air introduced across the office floor plates in this building are more than double that of many new offices being built today. With the events of the past year in mind, and the implications to health we will inevitably see, I think it's likely we'll see a return to more fresh air and better air distribution in many workplaces.

9

### Oval Basin.

The Oval Basin is synonymous with some of the best views and vistas in Cardiff Bay. The imposing columns are strategically located to define the mini amphitheatre and create a multi-functional social outdoor space that can become the stage for a concert, a place for pop up shops/stalls, an area for families to enjoy a picnic, and even simply act as an enjoyable pathfinding route to other destinations. We were so pleased to be involved in this fun project, lending our expertise to the lighting, electrical power distribution and water feature design for this iconic piece of Welsh public realm.



TWO EXPERTS: ONE BELIEVER - ONE SCEPTIC

# X files: Will building intelligence dominate the next decade?



## The believer.

**STEPHEN WREFORD**  
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Spaces around us are changing, from our homes, to our workplaces, leisure destinations and cities in general. Technology is offering a unique opportunity to improve our user experience in buildings and help us better design and operate our real estate assets. As modern lives increasingly interweave with cyberspace, there are calls for systems to open up to share information, and for people to build a closer connection with physical space. By helping our buildings become more intelligent, we unlock opportunities that open new ways to experience life, improve efficiency, and achieve business excellence.

## Different users, different uses

Building intelligence will allow us to enjoy an increased feeling of wellbeing as building users, not only by providing a comfortable environment, but also by simplifying interaction with the building touch points so everyone can focus on doing what they need to do. Imagine a future where we all have more control over our environment, are able to gain useful insights, and plan ahead for daily activities (e.g. reserving parking spots, booking meeting rooms, getting notifications etc).

For building operators, it means improved and streamlined building maintenance processes. Systems are enhanced by the sharing and analysis of data, creating an environment that is constantly learning, adapting and evolving. They'll have a new generation of connected systems with a high level of information granularity to allow meaningful decision making, thanks to automatic tracking against energy performance benchmarks, and building usage analytics.

Meanwhile, smart technology can give building owners more transparency over their portfolio's performance and building managers have the opportunity to be more data intelligent when it comes to decision making. With the decade's biggest challenge being climate-centric, the data gathered can support wider business drivers such as sustainability.

Ultimately, the built environment is a complex organism. Enabling intelligent buildings to continuously learn during the next decade and beyond will make our environments more liveable, workable, and sustainable.



## The sceptic.

**FREYA YANG**  
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Before building intelligence can reach its full potential, there are perceptions around risk and opportunity that need to be addressed. For decades within the building industry, systems have been operating in silos. There have been many attempts for more connected and open systems, but with very limited success. The main concerns are over the higher costs for unnecessary equipment, when the current systems do an adequate job. The transition to more connected built-environment ecosystems is not only restricted by cost, but also people's perception - the fear of a short-lived enthusiasm for technology that will fade away when no concrete benefits are realised.

## Obstacles and opportunities

When it comes to public perception of smart IoT products, people often go straight to ideas such as "an internet-connected fridge that orders beers for you". Smart products can often be conceived as gimmicky or novel, and the design of smart products and services were often centred around technology, with the human application being merely secondary. However, the industry is becoming increasingly aware of the tangible benefits that technology can bring, and the shift from technology for technology's sake to a human-centric design is proving to be a game-changer. The appropriate design, tailored to the needs of the users, and a proven Return of Investment case are key to a great technological deployment.

There are also challenges to overcome in terms of typical ways of working within our industry. Intelligent elements are often brought in at a later stage of the project, with stakeholders struggling to fulfil their requirements within the design, making the implementation process laborious and costly. A more streamlined process, with stakeholders and manufacturers on board, is needed to lower the complexity for integration, and consequently bring down the cost over time.

As we get better at tackling the challenges brought by the implementation of smart technologies, we're also discovering new opportunities they can bring. We're just starting to see the benefits that a more connected built environment can bring... so the future of building intelligence is certainly looking bright.

Photo by Mike Konovo, Unsplash



# Helping every child reach their full potential.

## SEN school design in 2021.



**Schools are more than just places for learning and personal development. Particularly for special educational needs (SEN) pupils, they are often a dedicated environment tailored to their specific needs... somewhere they can feel safe, learn about their emotions, and develop life skills.**

Images: Noviu Architects

### Senior Architect, Noviu Architects Zane Putne:

"During the past year or so, it's been important to re-assess and reflect on the best approach to school design for children, staff, parents and the community. While many students were keen to go back to their school to re-gain social interaction, for SEN pupils who stayed home, this came with increased anxiety. These pupils have also been more susceptible to mental health issues due to the loss of the structured school day.

"Everyone perceives the world differently, and this is particularly true for pupils in SEN schools - where the environmental needs of one child might be at odds with another. School



staff need spaces to be as adaptable as possible to allow for distancing and safety measures in parallel with putting the needs of each child first. Anxiety can also be caused in pupils moving between spaces; designing simple routes - that promote empowerment and routine - is more imperative than ever, as well as the clever use of texture, imagery, and light to create a calm environment that assists with wayfinding.

"With one in eight British homes not having a garden, the need for SEN schools to have quality outdoor spaces and biophilic design has only increased in the past year. Considering the orientation of SEN buildings can also create a calming connection to outdoor areas. Spaces where children can be surrounded by greenery and natural life provide some of the most enriching experiences and learning opportunities.

"Ultimately, the future generation of SEN schools require an environmental engineering approach to design. Optimising aspect, orientation, daylighting and natural ventilation will allow the best wellbeing, and opportunity to thrive, for all." □

**LET'S TALK**  
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**Engineers of human experiences**  
Hoare Lea is an award-winning engineering consultancy with a creative team of engineers, designers, and technical specialists. We provide innovative solutions to complex engineering and design challenges for buildings.

Irrespective of the scale or complexity of a project, we provide a full range of MEP, environmental, and sustainability services, bringing buildings to life and ensuring that they perform in operation as well as they look.

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**Exploare.**  
**The future belongs to the curious.**  
**Challenge accepted.**

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## **Exploare.**

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THEATRE'S NEXT ACT  
WITH JOANNA LUMLEY

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THE ART OF ARCHITECTURE  
WITH CHARLIE LUXTON

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H&W TRANSFORMATION  
WITH MICHELLE WANG

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HEALING HOSPITALS WITH  
DAYLIGHT DESIGNERS

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SEN SCHOOL POTENTIAL  
WITH ZANA PUTNE

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BUILDING INTELLIGENCE  
WITH INDUSTRY EXPERTS

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