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Transformation is the essence of architecture

Cricket pavilion

Rwanda’s cricket pavilion by Light Earth Designs enacts the track of a bouncing ball

Photograph

Keith Hunter seems to have two pictures in one to show different aspects of Glasgow

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KnoxBhavan brings the spatial and material depth that characterises its work to its new office

Louvre, Abu Dhabi

It looks like a Bond villain’s lair, and there’s a dark side as well as light at Jean Nouvel’s museum

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On the cover

Cricket pavilion, near Kigali, Rwanda by Light Earth Designs

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DESIGN & PLAN BY © CREATIVE
A house that was a big shed for apples, in Kent (p30). A cricket pavilion intended to help heal society, in Rwanda (p8). A colossal dome in an invented cultural quarter in Abu Dhabi that is also an art museum which can afford to buy a Leonardo (p20). And the ingenious studio of a firm of architects in London which had previously been a stationers’ shop (p14). Architecture is above all the art and science of transformation. Our projects this month may vary enormously in scale, location, cost per square metre and construction techniques, but all demonstrate this transformative quality.

We’re pleased to present these buildings as evidence of the rude health of architecture – in this, the first issue of our 125th year.
Buildings
Cricket pavilion

Bowling a bouncer

Robust clay tiling belies the fluidity of Rwanda’s new cricket pavilion which looks like a ball bouncing off to the boundary

Words: Isabelle Priest Photographs: Light Earth Designs

The trace of a bouncing cricket ball or the form of the surrounding Rwandan hills – that’s how Light Earth Designs (LED) conceived its latest building, a new cricket pavilion for the Rwanda Cricket Stadium Foundation and the first and only international standard cricket ground in the country. It’s a neat metaphor for the building, which drops in height from 15m to 12m to 8m as it tumbles down its sloping site.

Composed of three parabolic vaulted layered tile shells, the pavilion is in Gahanga, a suburb on the edge of the capital Kigali. To one aspect is the village, to the other are the lush green flood plains of the meandering River Nyabarongo and woodland savanna characteristic of this area near the equator and tropical rainforest belt of Africa.

Light Earth Designs was awarded the commission in 2012 through a connection made by co-founder Tim Hall who spent over five years in Rwanda with his partner, who was on a posting for the Department for International Development. The team had already completed a similar project using tiled parabolic structures for the Mapungubwe Interpretation Centre in South Africa on the borders of Botswana and Zimbabwe. That project positioned the shells in clusters rather than a string, yet was critical in showing this client that LED could mobilise local workers to learn new tile making and laying techniques.

The brief was relatively simple – a pavilion accommodating a restaurant, bar, umpire facilities and kitchens on the edge of a new pitch laid out on virgin land. The foundation has relocated here from a temporary ground in the city which had formerly been associated with the mass genocide of
Tutsi people in the 1990s. Rwanda’s difficult recent past forms the backbone of the charity’s very existence to develop cricket in the country, which has no history of the game. The building is part of a drive to encourage healing after all the atrocities. It will also help enable the nation to host international teams, in particular to participate in Commonwealth competitions – for which Rwanda is eligible as one of only two voluntary members, even though it was never a British colony. Yet because the client is a charity, the project had to be stopped at each stage of the design – initial feasibility, planning permission and construction – in order for the client to raise more money for the next phase. This explains why the 650m² project took five years from start to finish.

Light Earth’s design responds to the practical aspects of the brief as well reinforcing it with social responsibilities. While tiled vaulted arches are not a new invention – they have long traditions in Catalonia, France and Italy – LED co-founder Michael Ramage came to them at MIT through his tutors’ teachings on the late 19th century architect Rafael Guastavino’s Tile Arch System in America. Light Earth can be credited with adapting them for use for local material conditions in Africa and discovering site-specific ways of construction by, for example, training local skilled contractors and low skilled workers to build them, as it did here.

The Rwanda Cricket Pavilion uses 65,000 earth pressed (unfired) soil cement tiles of 140mm by 290mm. Light Earth’s goal is to create sustainable, low impact buildings that
are adapted to local conditions. Rwanda is a landlocked country so importing materials is expensive. Consequently, earth for the tiles was lifted directly from the ground on site, mixed with 10% cement and hydraulically pressed to form a stable brick, though Ramage explains that a sufficient strength could have been achieved with 5% cement. The bricks were then assembled into the arches in the traditional method – laid from the base upwards using a minimal timber structure as a guide. The first layer comprises tiles joined together using plaster of Paris for its rapid setting time, followed by two to four further layers of tiles, depending on the scale of the arch. These are laid in traditional mortar in overlapping directions – in perimeter rings or diagonal – building up from the sides until they meet at the top. The video above shows the technique in action on previous project for a conference centre in Kent called Pine Calyx.

In between each layer, Light Earth Designs has inserted Tensar TriAx, a geogrid subgrade stabilisation more commonly used in roads, to enhance the stability of the structures in what is a mildly seismic zone. The building’s double curvature also provides better structural rigidity than a single curvature, as seen at a house LED was involved in at Staplehurst, Kent, which featured on Grand Designs in 2008. Whereas that project was planted with a green roof, this one is finished with a crust of fist-sized granite stones – again local to the site – set in mortar, adding weight and stability, and helping the building evoke the geological qualities of the landscape.

Together the shells provide shelter for the various spectator and sports activities. They are left open to the sides, with the two larger vaults enclosing freestanding table-like structures, the tops of which are used for the bar and restaurant. The undersides of the tiled arches are left naked, while the floors and perforate bond balustrades are constructed using low carbon agro-waste-fired bricks developed by Swiss NGO SKAT Consulting. The pavilions do not contain spectator seating. Instead this has been embedded into a grassy bank surrounding the pavilion along one third of the oval. Visitors can sit either on benching or on the bank itself. The banking creates a wonderful natural amphitheatre with great views to the pitch and wetland valley beyond, and makes it certain that this will become a special place for the sport and the people.

Credits

Client Rwanda Cricket Stadium Foundation
Architect Light Earth Designs
Contractor Roko
Structural, civil and services engineering FBW
Vault specialist James Bellamy
Pitch and landscaping All Africa Golf
Earth tile equipment supplier Pan Mixers South Africa

Above The roof is covered with small granite rocks set in mortar. They add weight to the structures.

Left Workers on the project were trained in making earth-pressed tiles with hydraulic machines on site.
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North Gardner Street may not be the city’s highest point but it is Glasgow’s steepest hill, which accounts for the peculiarities of this view; if it weren’t for the tenement rising to fill the right hand side of the frame it would seem as if two separate images had been spliced together.

This strange juxtaposition is what thrilled Keith Hunter, who admits that it’s not so much the building as the composition that induced him to press the shutter.

And what he discovered through taking it is how Zaha Hadid’s museum, which looks so alien on the north bank of the Clyde, seems so much part of its context when viewed at city scale. It’s only from here, for instance, that the angular zig-zagging profile of its entrance canopy suddenly has formal legibility when seen against the roofline of the city’s tenements. Likewise, the reasonableness of her choice of stark zinc cladding alongside the grey industrial roofs of Govan and Ibrox to the south. Note too Hunter’s lining up of Ibrox church steeple with the canopy and the sunlit west side of Gardner St, creating an invisible crosshair to draw the viewer’s eye directly to the centre of the image.

Not just line and light, there are historical juxtapositions too in the 70s towers of Pollokshields, counter pointing the original ‘high-rise’ tenements in the foreground. But there’s a final irony that evades the reader, though not Hunter, who returned recently for a twilight shoot. This view no longer exists; lost to some bland student housing that obscured Hadid’s nocturnal blips of light with a solid, orthogonal dark all of its own. •
Like working from home

KnoxBhavan has separated its studio from its dwelling, but a relaxed feeling remains in the efficient new premises

Words: Eleanor Young Photographs: Dennis Gilbert

At KnoxBhavan Architects’ new Peckham studio, an outsized concrete picture frame draws passersby across a chequerboard of grass, the maker’s name perched on the canopy above – less signature or sign board, more a clue for the curious. That window to this converted house in a neat Georgian terrace offers more than most shop fronts; stairs drop away revealing a huge wooden table behind delicate lines of patinated steel banisters, models are set between doors to each side. If you bend down (is that too obviously nosy?) you can see what glitters under the ceiling, a geometric concoction of light and perforated bronze plates.

For the whole life of their firm Sasha Bhavan and Simon Knox have been nurturing their practice from their south east London home. Even when they built a studio for their close team it felt like a family enterprise with the main meeting room in their living room. It worked for their growing children, and seems to have worked for the clients whose homes they also designed.

But there was a bigger plan, perhaps like working from home a relaxed feeling remains in the efficient new premises KnoxBhavan has separated its studio from its dwelling, but for slightly larger projects but most of all to
The architects were bound up with creating every object – from prototypes to the concrete pour. They built their own home. Or more precisely two homes, one a house 10 minutes' walk away on the plot of their first studio; the second for the practice office. Here all the lessons from the first office would be put into practice – most noticeably how to create a temperate space which didn’t demand heavy jumpers and blankets in winter and fans in the summer – though provision for this is nigh on invisible.

The old terraced house, with its warren of rooms extending into the back yard, had been owned by KnoxBhavan's stationers. When the practice took over they started from scratch, digging down into the basement for a model room and kitchen, extending the full length of the building on the ground floor to create space for the team and splitting the top two floors between a meeting room and a flat.

Each space has a different character within the lexicon of spatial and material depth that characterises KnoxBhavan's works. A long work station runs back through the building, flanked by storage behind Douglas Fir doors. Each desk has a cupboard behind to store drawings and documents, a luxury in the modern office (one in the kink of the plan also hides away the MVHR unit). But the 8m long oak work...
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station itself is a magnificent piece of engineering that can be configured in many ways. It can be a single smooth surface like a dining table. But with each desktop in two parts it can be used sitting or standing or to raise the screen for the user, all smooth from the foot pedal with a gas lift, and wiring for monitors stashed inside the legs. For drawings an extra surface pulls out to give an L-shaped desk.

On plan the office space might look like a double runway but it is far more complex. A mirrored reveal peers into the meeting room and the deep, ducted, roof is moulded up towards bright rooflights. Dappled light fills the back as red and gold carp ripple in a pool the width of the building. South-facing windows are shaded with scalloped waves of stainless steel mirror-polished fins. Soft brick courtyard walls, ground and bench are unmortared in parts, ready for creeping green ‘mind your own business’ to take root, and pleached crab apples line the back wall. Two-tone glazed green slips sink deep into the carp pool. ‘We wanted work not to be a drudge,’ says Bhavan.

The circular concrete stepping stone came from KnoxBhavan’s old office. Other attempts at re-use were more tricky, the stationery shop’s wooden panelling covers the meeting room walls but cost almost as much to recondition as to make new, as did a nearly-new island unit in the flat that clients were going to chuck. Ideas are easier to re-use, so marble is in evidence in the office loo and shower. It is in their own home, so too are the invitingly generous tables for office lunches and for the flat upstairs, and doors slide into wall spaces.

Knox and Bhavan’s son Fergus, who is completing his Part 3 at the Bartlett, took the lead on the super-thin mezzanine that squeezes in an extra layer for a (slightly bouncy) meeting room at the front of the building – with structural engineer Tim Lucas of Price and Myers. Fergus water jet cut the steel straps and hook scarf jointed them as concentric squares. They act in tension to support ply joists mid beam and tie back to the ring beam. The shapes are picked up in light diffusers of folded brass plates.

KnoxBhavan was bound up with creating every object – from rudimentary prototypes of the lifting desks to working out details of the concrete pour of the frames at the front with their six workmen. You can’t clearly separate making from design here, nor beauty from the everyday. It is the sort of place you’d want on your street, to peer into and wonder about.
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Too much history

Spectacular interiors and bewitching plays of light at Ateliers Jean Nouvel’s museum can’t overcome a sense that, though subverted, colonial attitudes still linger

Words: Jan-Carlos Kucharek

Three thousand, two hundred and fifty miles west of Abu Dhabi, in Paris’ huge Bois de Vincennes, the remains of the 1907 first Colonial Exposition lie forgotten among the feral bamboo and rubber plants of its 1899 Jardin Tropical. Presided over by the overgrown stone ‘Monument to the glory of colonial expansion’, men and women brought from France’s colonies – Congo, Algeria, Guyana, Tunisia, Senegal, Niger and Guinea – were paid a pittance to occupy replica villages, wear mock costumes and dance and play in what was in effect a human zoo, built to edify the two million visitors who flocked to gawp at them in their ‘natural’ environments. While conceding that these ‘extras’ had come of their own free will, historian Pascal Blanchard says of this power relationship: ‘They were oppressed by the visitors’ gaze which forced them into a role that was not theirs. This role gave visitors the impression they were looking at someone who was a symbol of a race.’

The Palais de la Porte Dorée, built for the 1931 version, became in the 1960s the Musée des Arts Africains et Océaniens (MAAO); whose colonial art transferred to Jean Nouvel’s Musée du Quai Branly in 2003. The building may be new, but unsettling vestiges remain; the architect’s route through the collection denoted by ‘primitive’ dark clay walls and cave-like interiors – a post-colonial museum mired, to some eyes, in problematic, simplistic colonial readings.

In a strange parallel, over on Saadiyat Island in the United Arab Emirates, there’s been an analogous kind of cultural transplant going on in the form of the visitors’ gaze which forced them into a role that was not theirs. This role gave visitors the impression they were looking at someone who was a symbol of a race.’

Louvre Abu Dhabi, like a Bond villain’s lair, floating in the sea.

Opposite Nouvel’s ‘Arab village’ of galleries beneath Nouvel’s enormous fractal dome.
Nouvel’s Louvre Abu Dhabi. This new 19,000m² museum attempts to reappraise the West as the centre of history by presenting a collection that assesses it as relative to other great global cultures, states the official PR; to read it in light of anthropologist Jack Goody’s “theft of history”, perpetrated by the West. It’s doing it with the new museum building and a collection of artefacts spanning millennia – half of which have been loaned from the Louvre in Paris and 12 other major French museums in a £633 million, 10 year deal, while it amasses its own collection. Along with the stalled Guggenheim and Zayed National Museums, the plan remains to turn Saadiyat Island into an $18 billion, 21st century arts complex. With millions of tourists changing planes at Abu Dhabi airport, it’s intended to transform the city into one of the world’s great cultural hubs.

And of course, in the century since the Colonial Exposition, the terms of reference have shifted slightly. A patch of Arabian desert has become an oil-rich Emirati state; one keen to express its financial might and arriviste cultural clout. And that needed a big gesture; one delivered spectacularly with Jean Nouvel’s enormous, low, 180m diameter dome hovering like a space ship above his complex of 55 discrete white blocks of galleries, reception spaces, auditoria, restaurants and admin spaces. But if the dome form seems a crassly obvious Arabic symbol from the outside, nothing prepares you for its sheer power once you enter the open air public spaces beneath it. At 7m thick and built of eight complex arabesque-patterned aluminium layers between a steel structure supported on four enormous, hidden piers, it is engineering feat which, at 7,500 tonnes, weighs almost as much as the Eiffel Tower. Of course, it’s not the solidity that makes your jaw drop but its 2% perforate nature, allowing Nouvel to generate his ‘rain of light’ as sunrays eke their way down between the layers in shards to dapple the shaded museum blocks and public circulation between with polka dots of softened, filtered Arabian light. As the passage of the equatorial sun moves quickly over the architect’s gargantuan metal sieve, these myriad pools of light appear, grow and evaporate within minutes. Tracking the stone floors and white concrete walls over the course of the day, the effect is mesmeric.

The dome and everything beneath enter the realms of Ken Adam’s stage sets for James Bond. Doppelganger

**IN NUMBERS**

- 8,600m² gallery spaces
- 7,580 unique stars in dome
- 800 workers on site
- 30 year deal for Louvre name

*Below* Site specific art works fail to enliven the Medina’s paths and courtyards.
1 Entrance
2 Reception/Information
3 Ticketing hall
4 Shop
5 Main hall
6 Grand vestibule
7 The First Villages
8 The First Great Powers
9 Civilisations and Empires
10 Universal Religions
11 Asian Trade Routes
12 From the Mediterranean to the Atlantic
13 The World in Perspective
14 The Magnificence of the Court
15 A New Art of Living
16 A Modern World?
17 Challenging Modernity
18 A Global Stage
19 Plaza
20 Museum café
21 Temporary exhibitions
22 Restaurant
23 Auditorium
24 Children’s Museum
25 Admin areas
26 Cosmography

Credits
Client: Louvre Abu Dhabi
Architect: Ateliers Jean Nouvel
Concept engineer: Arup
Construction engineer: Buro Happold
Facade engineer: Andrew Snalune
Cost consultant: Mda Consulting
Museography: Renaud Pierard
Graphic design, signage: Philippe Apeloig, Kristian Sarkis
Lighting design: 8’18”
Scenography: Ducks Scéno
Landscape: Michel Desvigne, Jean-Claude Hardy
Interior design: Eric Nespoulous / Jnd
Acoustics: Studio Dap
Artistic commission: Jenny Holzer, Giuseppe Penone
reflections of light spring from the various pools that, sliding in beneath the dome, connect with the harbour to let VIPs purr their way into the museum complex by speedboat. Steps rise from the water to connect with the streets that run between galleries, exhibitions, auditoria and restaurant blocks, which allow visitors to freely wander between them. Lording journalists through their passages at the press launch like Bond arch villain Stromberg, Nouvel’s at pains to point out that his concept revolved around the creation of a cultural medina, a village shaded by the dome apart from where the main galleries pop out from beneath it to the south. This may work in so far as the basic ‘randomised’ nature of the blocks create passages and courtyards, but that’s where any semblance to a real urban quarter stops. Though impressive in their scale, Nouvel’s cubic white volumes have been stripped back and rarefied to the forms themselves and, in the galleries zone south of the plaza, are devoid of any relationship or engagement with the streets they create. Here, the blank walls might act as a canvas for the diurnal play of light, but the act of wandering has been reduced to exactly that; an act, with no intrinsic purpose. Nouvel argues that the interstitial spaces between each of the 12 galleries provide exits to these passageways – but to what end? Perhaps by way of addressing this, Ateliers Jean Nouvel commissioned artists Jenny Holzer and Giuseppe Pinone to relieve the concrete walls’ unrelenting nature – but with only three pieces from each artist installed over the whole site, it’s debatable how successful the strategy is; it certainly didn’t draw me off the gallery route once inside.

To express the museum’s curatorial perspective analysing the relativity of contemporaneous world cultures, the interconnected main galleries have been divided into 12 ages of chronological time, from pre-history to the modern age, with visitors passing consecutively from one into the other. Overall, it’s fair to say the approach reflects the limited breadth of the
collection; in comparison to the Paris Louvre’s 38,000 artefacts, Abu Dhabi has less than 700. A collection of this magnitude accords with a gripe of late art critic Brian Sewell that Tate Modern’s taxonomy was due to the fact that, unlike New York’s MOMA, it had no significant collection of individual artists’ work. And so it is here; in the ‘A Modern World?’ gallery, Whistler’s Mother and a self-portrait of Van Gogh sit self-consciously alongside a Josef Hoffmann teapot and a passable 1894 painting of Cardiff Docks by someone called Lionel Walden. And curation accounts for local sensitivities; fig leaves abound and the nearest you’ll get to a nude here is an inoffensive Titian. That said, the $450 million acquisition of Leonardo’s Salvator Mundi shows how much purchasing power the museum has.

But, in line with the building’s Bond villain credentials, Nouvel has entered into the spirit of things, creating stunning gallery interiors whose scale and intimacy better fit the notion of a fabulously wealthy

As the sun moves over the metal sieve, myriad pools of light appear, grow and evaporate within minutes

Right Ai Wei Wei’s 2016 Fountain of Light sparkles beneath one of Nouvel’s sparkling roof lights.
Stunning interiors, whose scale and intimacy better fit the notion of a wealthy and enlightened art collector

and enlightened art collector (which, if you think about the autocratic nature of the Emirate, is bang on the button) than maybe that of a world class museum. The dome’s filtered light is further refined in the galleries via roof lights fitted with 18 different kinds of glass panels; giving an overall effect of Secessionist delicacy. Minimal exhibits are indulged with room-filling, elegant, bespoke vitrines of glass, brass and granite. Floors are resplendent in brass-edged long planks of opulent stone; Italian Red Levanto like marbled beef, restrained Spanish Black Marquina, the shocking decadent orange-veined Black Saint Laurent flowing down from display plinths to the ground as cracking lava. And between, in the light-soaked break out spaces between galleries looking onto Nouvel’s deserted medina, luxurious floors of thick brown leather are the basecamp for his space-age black seating.

Of course mention cannot be made of the general high quality of the construction without acknowledging the hundreds of workers who built it; a silent majority in the Emirate; enticed over, paid little, denied rights and working under harsh conditions. When asked, Nouvel distances himself from the politics and actualities of his building’s four year construction, as most architects working here tend to. In his opening address Jean-Luc Martinez, director of the Paris Louvre, was at pains to say that worker conditions had been addressed on this project. But there is an irony that cannot be lost on the informed observer: a museum created in 1793, as a spoil of war for the liberated underclass of the French Revolution, continues – in its Gulf iteration – to be mired in accusations of worker oppression.

So despite the impressive nature of the endeavour, particularly its interior sophistication, there’s an unsettling literality in its language; as if Nouvel unquestioningly appropriated traditional Arabic forms, adopted, modified and sold them back wholesale to their own culture. In a reappraisal of Pascal Blanchard’s comments, that literality, reified by Nouvel, panders to the Emirati sense of identity, which itself seems dictated by the Occidental view of what the signifiers of Arab (and indeed Western) culture are; as if the architect’s uncomprehending gaze has been returned with mistaken comprehension. Built by a French architect and complicit, migrant workforce, this floating palace for art surrounded by stilled seas, with its faux medina, is a modern Xanadu, a piece of colonial history repeating; a spectacular mirage to which we are all accessories. •
Carron

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Lancashire has its mills, Northamptonshire its shoe factories; every region in the UK has a locally specific type of former industrial building that has been latched onto as ripe for conversion to residential use. Kent has oast houses of course, but as the orchard of England, and as fruit farming changes to lower, more tightly packed trees and refrigerated storage, perhaps there is a new local building type on the horizon: the apple packing station.

Andy Puncher of pH+ Architects certainly believes so. His practice’s ‘Apple Store’ conversion of a former packing station into a 1,000m² five-bed house with swimming pool and yoga studio in the Kent Weald, near Goudhurst, won planning permission three years before the arrival of permitted development rights for agricultural to residential buildings. Until now, apple stores have been more likely to become little business centres.

‘It’s not the sort of building you’d usually convert,’ explains Puncher, as we draw up to the newly painted grey structure behind a huge sliding gate surrounded by rolling hills, spinneys, hedges and open fields. ‘Tonbridge Council was very dubious about granting consent because it’s outside the village boundaries and in an area of outstanding natural beauty.’

Built in the 1950s to serve the orchards – when the working classes still used to come down from London for the harvest – the interior was a large open area for sorting and packing with three thick brick-walled cold stores along the southern elevation. The process was fairly linear, with fruit trucks entering the station from the fields at one end and lorries collecting the apples for sale at the other by the road. But as the farmer dug up and replanted orchards on the other side of the wood that butts up to the site, he no longer needed a large packing station here. He sold it in 2010.

‘That became quite important,’ explains Puncher. ‘In arguing that the agricultural use was redundant [the former orchard fields were bought by a neighbour to protect his view], we won planning permission for a house – but only if it kept a B1 business-use element.’

As well as containing residential spread, the council wanted to keep an element of community business on the semi-industrial site. At first planning permission was obtained for a house with an adjoining series of maker spaces to let out to local craftspeople and artists, but then the client changed and the brief became about wellbeing and studio spaces to

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Core values

pH+ Architects won the planning argument for this residential conversion of an apple store but lost to the client on spending

Words: Isabelle Priest  Photographs: Tim Soar

The Original building was built in the 1950s in red brick and asbestos.
bring in customers rather than tenants – for the new owner’s yoga classes and her husband’s film studio where he sometimes brings his assistants. The building also became one huge unit, rather than several smaller ones.

As expected, the structure itself had to remain largely the same on the outside, with planning restrictions extended to the garden too – one side has permission for a small orchard, the other must remain utilitarian in look and cannot be planted with flowers and shrubs. The structural frame was retained, along with the two brick elevations, while the corrugated asbestos roof and wall profiling has been replaced with a similar contemporary product made of aluminium.

Outside, the roof follows the form of the original building with even the ventilation chimneys remade. The only substantive changes have been to fill in the single storey porch that had previously stored pallets, the painting of the red brick walls grey and the insertion of new large spans of glazing – some at either end where the barn doors would have been, and others newly punched in to create picture windows and let in light.

Inside, there is a restrained palette of materials, partly because the building is so big. There wasn’t the budget for anything fancy; instead it’s painted white plaster walls, concrete floors downstairs, grey carpet upstairs and plywood for the doors, fitted furniture, stair and children’s slide. With the main structure left intact but repaired in places, the plan also follows the basic outline of what was there before, with the rhythm of bottom chords in the lightweight structural steelwork providing new natural boundaries between rooms. Two cold stores remain for more cellular spaces (garage and hallway), while one has been broken through between two trusses to create a huge, long kitchen, dining, games and living room crossing the depth of the house.

These new separations are connected by large double sliding doors that can be opened...
all the way from the pool to the film studio in memory of the former single, linear space of the packing station. A secondary rhythm on this axis is provided by the alternate two-storey/single-storey ceiling height from the high swimming pool to the low studio.

The clever part of the project is to have done so much for so little. Economies have been made by hiring industrial contractors and using commercial-project processes and products where possible. The glazing systems are commercial, the floor is a new concrete slab polished up and fitted with underfloor heating, the plaster was sprayed onto the walls, as was the paint. The architect even persuaded the winning contractor to use telehandlers in lieu of scaffolding. These initiatives made the project possible, as well as sparing valuable time.

The methods are appropriate to the project, but feel more about getting everything done and in than making it delightful. Very little of what identified it as a former packing station remains – none of the huge metal doors to the cold stores for example. It would have been more interesting architecturally, and less dated in the long-term, to have retained the original rather red brick on the exterior too. For me, it comes down to the super strained budget rather than the architect and, unusually, it strikes you walking around that the project suffers because the client wasn’t able to spend enough to make it really good. At 1,000 m² for £1.1m it’s an incredibly low ratio. The architect has done well to manage. Everything except the pool bar and sauna is there, but in the most basic way possible and that method ultimately feels incongruous with the scale of the building and trappings of luxury it contains – although it shows a budget can go a really long way when tested. In the end, it’s just too big and sparse.

What’s my business in that? Well, Puncher summed it up himself in two ways. The first is that when the owner comes to sell, it will probably apply for planning permission to remove the B1 use clause and make it fully residential, thereby losing those initially cherished and no doubt hard-won by the council benefits for the community and the idea of a working landscape. The second is by thinking about what could have been here. The average UK home is 80m². You could fit 12 of those in here with room to spare. The architect’s skills and approach would have worked exceptionally well for that but that’s 12 we’ll have to find space for elsewhere – again. Still, Puncher seemed to acknowledge that, and suggested that a better building could be achieved by the clients if they didn’t try to do it all at once. But they refused. There’s always next time – and for pH+ perhaps this emerging typology could be extended to that other orchard of England – Herefordshire – too.
Ulster Hospital, Belfast.
Ceilan Marfil Ston-Ker Ventilated Facade from Butech by Porcelanosa
The world’s thinnest inverted roof insulation.

ProTherm Quantum®'s advanced Vacuum Insulation Panel system has been specifically developed for inverted roofs, balconies and terraces or wherever depth is critical to the overall construction. Quantum® can dramatically reduce the depth of a finished roof system, providing the solution to counter low upstands against the increasing thickness of traditional EPS & XPS products specified in order to meet more stringent thermal demands. It delivers an exceptional thermal performance with a 75mm threshold clearance and is the world’s first inverted roof insulation to achieve BBA Certification.
So you're expanding into the building behind you. Isn't this a case of same same but different?

And the subterranean passage he's designed?

Why do you need this extra space?

Why did you think Chipperfield was the man for the job?

But we have to wait until the end of May for the big reveal?

Not at all! David Chipperfield might have gone on record calling it a ‘series of subtle interventions’ but the collective effect is structural for how the Royal Academy will be able to work in the future. After a number of tenants had messed around with Burlington Gardens, from University College London and the Civil Service to the Museum of Mankind, he's returning it to its original design intent. He's removed floors, opened out gallery spaces and revealed its lost auditorium in its full glory.

That's the biggest thing. The RA's Burlington House faces south and Burlington Gardens north. The passage connects both buildings so you can enter from either Mayfair or Piccadilly. It will run straight through the RA schools, revealing them to public for the first time. There'll be a special gallery running along it showing the artists' work; a free to enter private space that links those two parts of the city. The concrete link bridge is classic Chipperfield – well detailed but understated.

Burlington House was a city palace, so its rooms have a domestic quality, whereas Burlington Gardens, built by UCL, has spaces that were originally built for the public. The RA's ticketing hall for instance proved much too small, especially for blockbuster shows. The new building will increase capacity by 70% with larger galleries, including one for architecture, the Clore learning spaces for schools and a 260-seat lecture theatre. It reinstates the RA as a centre for public debate.

It was the simplicity of his proposal that captured our imagination; a compelling scheme that did away with the former accretions of the old building and re-revealed its grandeur, connecting in a subtle way back to Burlington House. You can now see the old spaces coming alive again.

So far the only bit of the expansion that's open is the new loos in Burlington House, but even in them you can see the level of Chipperfield's detailing and material choices. They're marvellous!
A new view of London

Group London into streets and villages and it could densify well on many levels

Set against a backdrop of a growing city – and one which is thirsty for sites needing intensification – Allies and Morrison was commissioned by Historic England to undertake a piece of research into London’s character and density. The work reveals a finer grain picture of urban character across London, moving beyond traditional – and simplistic – land use definitions to inform a more nuanced framework for planning and development. Amid major densification of the city driven by the absence of land for new homes, the research was a proactive contribution to the debates which shaped the new London Plan launched in November 2017.

The research reveals the need for a more context-led approach to intensification. Establishing a pan-London picture, it could allow character and heritage qualities to better inform all scales of planning in the city while also drawing together existing work and data. It is hoped it will also encourage finer grain characterisation work at borough scale, in particular studies that go beyond documenting existing character to inform the direction for future borough local plans.

The greater the existing variety of character, the greater flexibility it held for future development

Character and density

The study challenges a previous assumption that London has three broad character types: central, urban and suburban. Using geographic information software, a comprehensive mapping through London – taken as a transect from one end of the GLA boundary to the other – uncovered a rich tapestry of previously under-appreciated typologies, which have developed relatively independently of central, urban or suburban categories. In this, the report identifies finer grain character types that reflect a deep and variable history of London’s 1,000 year evolution. These types have been defined using a series of detailed information layers, including historic maps, historic and current land use, street structure, transport

Above Density by residential land area (excluding non-residential land)

Cities & Community winner
Jane Manning, George Garofalakis, Antony Rifkin & Geoff Noble
London’s local character and density
Allies and Morrison LLP, UK
Infrastructure, existing densities and heritage designations. This resulting map is set at a broad enough scale to be useful to strategic planning, but is supported by detailed information to allow more area-specific interrogation. These newly understood character types include designations such as Georgian planning and growth, Victorian suburbs, medieval market towns and high road edges – a much more sophisticated understanding of London’s places.

The more nuanced character typologies have evolved from a range of sources – from historic market towns to centres of Victorian industry. The new neighbourhoods have also been shaped by factors including transport links, ever shifting planning regulations and history. For each type, the prevailing characteristics are outlined including typical street widths, block dimensions, size of public spaces and density measurements.

**Contributing to growth**

The research has shown that all character types can absorb growth subject to a clear understanding of values and existing qualities. It is simply not true to say that historic areas cannot accommodate intensification. Indeed, many of the oldest parts of London have been the densest throughout history – and continue to accommodate new typologies and levels of intensity. A critical finding was that the greater the existing variety of character, the greater flexibility it held for future development.

Character areas which have seen many layers of development and infill – many of which are the most historic with a fine grain, have shown their ability to accommodate intensification and change. Where an area has a variety of characters evident, a greater range of typologies and density can be accommodated. Indeed, small fine grain plots can support surprisingly high densities and floor area ratios without recourse to large increases in scale. Equally, opportunities arise where post-war intervention, often with a coarser grain and less variation, has developed land in an inefficient way. The spaces in between these areas are ripe for intensification.

**It’s all about the streets**

The study has demonstrated that street morphology is more important than anything, and that it is the streets that endure the waves of history. The principle of prioritising street structure is important. In each character area there are parameters which will steer or limit the level of intensification, but the single common denominator is street morphology and its role in shaping the relationship between street width and scale.

**More rounded understanding**

The study re-iterated other research and think pieces that a fundamental review is required into how density is measured, and parameters are set. We recommended that a review of the previous London Plan’s density matrix be undertaken, drawing on the findings of this research. It is important that future guidance on densities is nested within a robust policy framework which recognises the subtleties of density calculations and local character. A greater range of categories must be used to inform density measurements, and a more nuanced understanding of local character is essential in this.

**Uniformity and change**

An area’s uniformity can be a stumbling block to intensification. The suburbs are an important example where the homogeneity of an area makes it difficult to introduce new typologies or greater densities. Areas of uniformity are sensitive to changes in building height, as are historic villages which have been protected. Here, the ‘natural’ change that might have occurred has been steered elsewhere, leaving a character area more sensitive to such changes.

**A resilient city**

The grids of terraces and squares that characterise so much of the inner London boroughs have resulted in a diverse urban typology, accommodating a wide range of uses and activities operating at different scales and intensities. The inherently legible and permeable pattern of the block structure, with its public fronts and private backs, has supported the adaptation of buildings and spaces to a wide range of uses and subdivisions. The suburban development of the inter-war period has also proved an enduring model, albeit now much more car-dependent and therefore less able to support local shops and services.

The flexibility of much of London’s historic building stock will endure to support future changes. London’s position as one of the greenest global cities will also prove important in the face of climate change. The classic streets lined with plane trees provide a comfortable public realm capable of adapting to more extreme weather. These trees will provide shelter and shade, both to the pavements and squares, but also to the buildings they grow next to. They are an important means of carbon sequestration.

When similar administrative areas are compared, London shows itself to be the greenest of global cities – with over a third of land area as green space. While the private gardens of suburbia contribute significantly, it is the public parks and public open spaces which make the greatest contribution to character. Indeed, it is interesting that there are more parks and public open spaces by land area in central London than there are in inner London and more here than in outer London. Strong public parks and green spaces are integral to London’s being.

Looking across all the character areas it is the prevailing floor area ratio ranges that give the strongest indication of how sensitive an area is to intensification. Where the range is small, the scope for appropriate intensification may be more limited to sub-division, small scale extensions and infill schemes.

These findings could assist in better use of heritage assets in the future, alongside a more sophisticated understanding of street morphology and urban grain and how these can accommodate change. By embracing the true diversity of London’s character typologies, this work provides a contextually-rich reframing of the way London could plan for intensification.

*The winner of the President’s Awards for Research Medal were Edward Denison and Guangyo Ren for Ultra-Modernity – Architecture and Modernity in Manchuria (RIBAJ December 2017, p46)*
The development of the building envelope using Welsh-grown timber

Welsh School of Architecture, Cardiff University

The UK wood revival of the last 30 years owes a lot to the influence of the unbroken tradition of timber construction in Scandinavia, the Alpine countries, Japan and North America. The publication of the work of architects such as Burkhalter and Sumi, Gion Caminada, Hermann Kaufmann and Peter Zumthor, who reclaimed their regional culture through the use of new wood building techniques, is now inspiring architects in other European countries. In the Graubünden, Switzerland, and the State of Vorarlberg, Austria, designing and manufacturing with timber has cultural connections linking back to material, craft, sustainability, architecture and ‘way of life’.

Use of Welsh-grown timber in the external building envelope remains minimal compared to the volume of imported softwoods and timber products. Experiences of the use of UK-grown timber are often based on negative perceptions related to poor timber properties, sourcing, limited skills and access to innovative technology and products. However, it is possible to use home-grown timber in the sustainable building envelope.

Wales has roughly 306,000ha of woodland, covering 15% of the total land area – considerably lower than Europe (45% average), Japan (69%), North America (34% average). As a result the construction industry in Wales relies heavily on imports, with many considering the crop to have limited commercial value and use. But Welsh-grown timber production is stable, and meets demand in markets such as pulp and wood fibre for paper, wood-based panels, pallets and fuel.

With forest cover and production likely to remain significantly below self-sufficiency levels for many years, if the use of Welsh-grown timber in the sustainable building envelope is to rise, there must be fundamental change to the local industry.

Pre-empting this, the Design Research Unit Wales at the Welsh School of Architecture at Cardiff University spent 15 years, in collaboration with the timber industry, exploring the use of Welsh-grown timber through a diverse range of prototype projects in the design and construction of building envelopes with a clear tectonic language. Projects focussed on its use in structures, external finishes and joinery and led to the following key observations.

The crop

UK silviculture has been dominated by mono-species coniferous plantations and clear felling. In recent years, woodland...
organization Coed Cymru and others have promoted continuous cover forestry methods, with dispersed selective felling and thinning, allowing woodlands to regenerate naturally. The remaining straight trees are left to keep growing, thus developing a mature growth forest and a supply of hi-grade, large section, quality timber for future generations. As this approach is adopted more widely, the output from woodlands is more likely to be high-yield softwood species generally limited to a C16 strength grade class and supplied in standard lengths and section sizes from large sawmills; and small sections and lengths of hardwoods (max. 150mm by 150mm by 1200mm).

Timber industry
Further reflections on the prototype projects provided the following observations on the woodland, crop and processing industry. Many species of Welsh-grown soft and hardwoods are appropriate for use, providing that their properties are understood and respected in the design. The industry is often willing to consider innovation by other means. Low-tech construction methods can be used in small local workshops, reducing risk and upfront costs. To improve the structural performance, durability and stability characteristics of the crop, low-tech engineered components can be modified. But, crucially, the industry lacks a ‘centre of excellence’ to provide advice and showcase research and development – which is essential for knowledge transfer, from forester to end user.

Function and design
The small and standardised timber sizes, based on 300mm and 600mm dimensional co-ordination, are best used within identified rules, grids and systems for structures and compositions of 1,200mm, 2,400mm, 3,600mm etc. The grids provide clear ordering, structural and/or constructional control and design logic that are integral to the use of timber, avoiding unnecessary complex details, form and material wastage. This co-ordination of timber properties, design and performance may be best expressed as elemental, modular and layered approaches to manufacture and construction.

This offers potential for the development of an architectural language specific to the use of Welsh-grown timber.

The industry is often willing to consider innovation

An additive timber tectonic
The design of standardised, prefabricated timber systems based on repeating species, components, elements and spaces draws inspiration from Jørn Utzon’s notion of additive architecture: ‘A consistent exploitation of industrially produced building elements is only achieved when these elements can be added to buildings without the components in any way needing to be cut or adapted.’

The development of a Welsh-grown timber industry is best based on standard lengths and section sizes either determined by sustainable woodland management and sawmill processes. These will form the base timber components from which all products and elements can be manufactured. These lengths and sections as supplied or in exact divisions or multiples of standard lengths, can be used to maintain material efficiency. This, in turn, influences the sizes of elements, panels and volumes to be composed into modular units. The result is a tectonic expression unique to Welsh-grown timber but flexible enough to allow for material expression and a contextual response.

FIVE STEPS IN ADDITIVE WORKING
Five aspects of an additive principle have been identified from woodland to architecture. The principle operates both as a bottom-up approach to timber use and fabrication and a top-down expression of Welsh-grown timber in the building envelope, generating an indigenous, tectonic timber architecture.

The species: Woodland management and the extraction of small-medium diameter roundwood of all species for processing provides the limiting factor dictating to the industry.

Sawnwood, veneer and waste: The reduction of roundwood into standardised sizes is determined by the needs of the construction industry and an efficient exploitation of roundwood that form the basic components or modules.

Engineered components: These come from multiple short lengths and small sections to manufacture rational, planar and rectilinear products. This additive approach suggests the engineering of all timber through layering, cross-layering, sandwiching, finger-jointing and orienting to enhance the performance of the basic sawnwood, veneers, chips, strands and sawdust.

The building element: Sawnwood, engineered timber and timber products are incorporated into a range of modular and/or prefabricated building envelope elements.

The tectonic module: These may be elemental, panelised, volumetric or a hybrid combination but are repeated in logical grids to provide structure, enclosure, finishes and define space. The resultant tectonic is honest to the use of Welsh-grown timber to provide an efficient, low-energy building envelope. Space, composition, form and timber materiality are all expressed and respected as a tectonic timber architecture.
Truly accommodating

A team at Bath looked at how to create appropriate housing for the displaced and dispossessed

Over 60 million people are currently displaced due to conflict or natural disasters. Refugees and internally displaced people are often housed in camps deemed temporary, but can end up staying in them for decades. Unfortunately, the housing solutions provided by humanitarian agencies are generally lightweight, uninsulated, and ineffective against high summer temperatures, or winters where temperatures can plunge well below freezing. The struggle to cope with such conditions only adds to the psychological burden of people coming to terms with the loss of loved ones, community and property.

Part of the reason for this situation is that the provision of food, water, sanitation and medical care are attended to as matters of emergency. By contrast, providing shelters that are suited to the local climate and the socio-cultural needs of inhabitants is often far down on the list of priorities. It is common practice for displaced people to be given tents in the first instance and for these to evolve gradually into ‘transitional’ structures made from more solid material. However, resource limitations may inhibit the process of shelter design. Moreover, those responsible for the provision of housing may have to negotiate the sensitivities of host governments anxious about the use of certain materials, such as bricks or concrete, since they can signify permanency to the local population and thus exacerbate inter-communal tensions.

Healthy Housing for the Displaced is an interdisciplinary project that aspires to develop a new science of shelter design. Our approach is, first, to explore with occupants their priorities with regard to shelter, then to study a variety of ways to deliver solutions that the host government finds suitable, and finally to complete post occupancy surveys to close the design cycle. Our ultimate aim is not to produce a single structure that could be
used in all settings but to articulate the process through which shelter that suits each individual climatic, political and socio-cultural context could be identified.

Our initial work has focused on thermal comfort in camps in Jordan, where we have found surface temperatures in homes in excess of 48°C and completed a wide-ranging critical analysis of existing structures. With limited access to electricity, people often resort to inadequate and degrading strategies in order to keep cool in such temperatures; such as soaking themselves and their clothes with water several times a day. This is not only undignified but also unsustainable, especially in locations where water may be scarce.

We have shown that designs with low-level windows do not provide sufficient privacy in this cultural context; designs with no windows but small high level openings, provide little ventilation and result in higher temperatures in this physical context. Moreover, it was evident that ignoring local social and cultural aspects in shelter design means that refugees are forced to adapt their shelters to suit their cultural norms in haphazard ways – for example, using tent fabric and metal sheeting to create private shaded outdoor spaces in which they could socialise with neighbours, or create a kitchen large enough for an extended family. Such strategies add to the difficulties faced in upgrading the camp infrastructure and can increase risk of fire.

Using a mix of building physics and anthropogenic based analysis has allowed us to define a suitable range of temperatures that the occupants find comfortable year round and to develop a series of new designs which are being tested at the University of Bath.

We hope that our work will inspire architects, designers and all of those involved in shelter design to re-evaluate the current design approach to ‘temporary’ shelters. Shelters need to provide much more than just a roof; they should be thermally comfortable but also cognisant of the culture in which they will be used.
BIM reaches the courts

Withholding access to a common data environment was an inadequate response to a flawed contract

Stacy Sinclair

The first reported UK BIM case has arrived: Trant Engineering Ltd v Mott MacDonald Ltd.

The Ministry of Defence employed Trant in May 2016 to provide a new £55 million power generation facility in the Falkland Islands, the Mid-Atlantic Power Project. During the tender period, Trant had engaged Mott MacDonald to provide design consultancy services, including preliminary design, detailed design, design co-ordination, preparation and implementation of BIM and procurement support and principal designer responsibilities.

In July 2016, after Trant had notified Mott MacDonald that it had been given the green light to go ahead with the project, Mott MacDonald emailed to Trant a proposed contract and associated schedules regarding its scope of services and terms of payment. Trant did not respond to Mott MacDonald’s proposed contract, nor did it sign and return the contract.

The relationship between Trant and Mott MacDonald eventually broke down. In April 2016 Mott MacDonald had issued an invoice claiming the sum of £475,000. Trant did not pay it or issue a pay less notice. It did pay Mott MacDonald £500,000 on account in early 2017, and in May Mott MacDonald issued a further invoice for £1,626,000. Trant did not pay that and in June Mott MacDonald denied Trant access to the servers hosting the design data (ProjectWise) by revoking its passwords.

The dispute concerned what services Mott MacDonald was to provide, their value and what sums Mott MacDonald was entitled to. In addition, the parties disputed whether a contract existed and whether the terms of any such contract entitled Trant to access the design data Mott MacDonald had prepared which was stored on ProjectWise.

Ultimately Trant applied to the Court for an interim injunction that Mott MacDonald should provide access to the design data.

Trant argued that a contract did exist which included the obligation for the BIM preparation and implementation. While it had not responded to the proposed contract in July 2016, Trant considered that it had accepted those terms and conditions by performing in making payments to Mott MacDonald. Further, it argued that Mott MacDonald carried out its services in accordance with the schedules attached to that contract.

Mott MacDonald argued that a contract did not exist. It made the point that there was no express acceptance of the contract and that the fees, contract terms and scope of its services had not been finalised or agreed.

On the documents before it, the Court was not able to determine whether or not a contract existed between the parties – that was to be decided at a full trial. But it was satisfied that there was a serious case to be tried, that damages would not be an adequate remedy and that there was a high degree of assurance that Trant was entitled to the design data that Mott MacDonald had already carried out. The Court noted that even if there were no contract, Mott MacDonald had already accepted payment on account in respect of the work that it had carried out.

The Court also considered that the balance of convenience lay firmly in granting the injunction. It therefore ordered Mott MacDonald to make available the design data that had been procured to date.

As this case reminds us, careful consideration should be given to the identity of the co-ordinator of the common data environment (CDE) and the terms on which each participant has access to it. To avoid disputes halting a project, parties may want to put in place, where possible, procedures for alternative access to backup copies or otherwise.

This case also highlights the importance of agreeing fundamental obligations (such as scope of services) at the outset. Parties need to embrace dealing with these issues in their appointment. Here, denying access to the CDE was a by-product of a wider dispute about scope of services and payment.

Stacy Sinclair, Fenwick Elliott

IN PLAIN ENGLISH

BALANCE OF CONVENIENCE

In Trant v Mott MacDonald, when deciding whether to order the injunction, the Court had to consider the question of the ‘balance of convenience’: which course of action was likely to carry the least risk of injustice if it turned out to be wrong. The Court must weigh the relief given to Trant against any inconvenience or injury to Mott MacDonald if it did grant the injunction.

Trant argued that without restoring access to the relevant database on ProjectWise, the project could not be progressed: Trant would be forced to start the project over again, losing a year of progress. Trant also argued that there would be little harm to Mott MacDonald in providing access to the design data that it had already provided, particularly in circumstances where Trant was prepared to pay compensation, whether by way of outstanding fees or damages that might subsequently be ordered.

The Court considered that the balance of convenience lay firmly in granting the injunction.
In defence of our dépense

There’s more to life than the strictly necessary – thank goodness

Have you had it up to here with calls for bringing back the fee scale, reforming education, and the endless rhetoric about the marginalisation of architects?

Perhaps you’re a selfish, whiny brat. Or perhaps what you’re picking up on is that identified in the 1940s by French intellectual George Bataille: the notion of dépense.

Dépense is the spending of excess energy not required for the conservation or reproduction of life. The theory goes that living things only require a limited amount of energy in order to survive, yet additional energy is available and so this must be used up on non-essential (or as Bataille would put it, non-‘servile’) activities. Examples of dépense or expenditure include funerals, pyramids, cathedrals, and music. Some might define these as culture. The key is that they are not means to some other end, but ends in themselves. Dépense diffuses the stress connected with shouldering this excess energy and enables the non-utilitarian expression of society.

The problem is that dépense, or indeed anything non-utilitarian, is difficult to justify in today’s society. Austerity, political uncertainty, the housing crisis, climate change, etc etc conspire to create a sense of emergency where things must be expended only with utmost consideration and necessity. Proponents of dépense point out that the expenditure of excess energy is not curtailed by these moral imperatives; it is privatised. The act of burning off this excess energy is left to individuals who, to varying degrees depending on personal wealth, splash out on exuberant luxuries.

This, however, won’t do. Not only is it horribly unfair but unless the energy is expended socially, it fails to diffuse this stressful burden. According to the theory of dépense, contemporary society desperately needs to find festive social outlets into which to pour our excess energy and in so doing bond with each other.

Is dépense an action architecture should play a part in? Can architecture be a form of social ritual, of expending energy, of sacrifice even?

Is our frustration with the marginalisation of architects actually a fatigue with the patronising idea that we’ve lost our foot hold in an industry that grew to complicated for us silly creatives to navigate?

Is our discomfort – even distaste – for business as usual a fatigue with the naivety or immaturity, but this could be dangerous. Perhaps this suspicion and squeamishness points to something important; perhaps to a transition that we architects could play an important role in bringing about.

Maria Smith is a director of architecture and engineering at Interrobang

Proponents of dépense point out that the expenditure of excess energy is not curtailed by these moral imperatives; it is privatised

Are you fed up with being told you don’t value your time or skills? Are you fed up with everyone you meet at parties thinking that you must earn swathes of cash for parading god-like around huge models of tower blocks?

Do you sit at your desk churning out designs for developers while dreaming of public libraries and concert halls? Do you feel uncomfortable on the frontline of capitalism?

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Do you sit at your desk churning out designs for developers while dreaming of public libraries and concert halls? Do you feel uncomfortable on the frontline of capitalism?
Kerakoll brings ingenuity to Project Beagle

When problems arose with the floor of a new headquarters building Kerakoll products came to the rescue

Project Beagle was the code name for the construction of Ingenuity House, the new 12,000m² Interserve headquarters close to Birmingham airport. Due to open early in 2018, the building was designed by Sheppard Robson targeting a BREEAM excellent rating. Kerakoll products' environmental qualities and the documentation which accompanies them will go towards justifying this rating.

The Kerakoll UK team was called in to provide technical advice and support, including comprehensive site specification and full support during installation of the flooring both on and off site. The need to overcome certain issues in the building dictated the choice of products used. Foremost among them was that the heated screed in the main atrium floor had sporadic day joints and a large number of shrinkage cracks from the way it had been installed.

The cracks were stabilised using Kerarep Eco, a repair product which was poured into the gaps. Next Keralevel Eco LR was used to fill in any areas of the screed that needed repairing and/or levelling. This mortar hardens really rapidly so that further work could carry on after just two hours.

Once the floor had been stabilised and levelled, H40 Eco Rapid adhesive was used to fix Idrobuild Tex over the entire area of the screed, including all day joints. Idrobuild Tex is a reinforced anti-cracking sheet which evens out tensile and shear movements between the tiling installation and the substrate. It also helps create an aesthetically pleasing finish for the expansion sections within the floor makeup.

Porcelain tiles measuring 600mm by 600mm by 10mm were then fixed using Kerakoll's Biogel No Limits adhesive. This new type of gel adhesive can be used for any type of screed. It is pleasant and easy for the installer to work with because of its extended pot life and open time, and superior wettability. Its technical characteristics also reassured the client that the installation would be long-lasting and problem-free.

The final steps were to grout the new floor with Fugabella Eco Porcelana 0-5 and fill in the perimeter expansion joints with Fugabella Eco Silicone.
Brace yourselves

... to meet Pontius Pikestaff

Hugh Pearman Editor

With the aim of hearing views from outside my echo chamber, I maintain sometimes strained social media contact with people way off on the libertarian fringe whose views radically differ from mine. These are not quite the ones who use Union Flags for avatars but almost. So let me introduce you to Pontius Pikestaff. He is an amalgam of several like-minded people, all of them real and not all of them male.

Pikestaff is by no means stupid, though more than somewhat obsessive. He is a hard Brexiteer who thinks any deal with the EU is tantamount to treason. He is vehemently anti-immigration. He admires Trump, Farage and Boris Johnson among politicians, James Delingpole and Katie Hopkins among commentators. Climate change denial is part of the deal with Pikestaff, because he sees environmentalism as inimical to free trade and unfettered capitalism. He has no truck with the post-war consensus from the mid 1940s to the mid 1970s, and holds, for instance, that all the problems with council estates are the fault of socialism.

In vain do you point out that council estates were built by authorities of both left and right, that the Macmillan government built more than any other, that despite well-known problems of some, many are fine and successful buildings, several are listed and indeed – because of right to buy which he enthusiastically supports – flats in them sell for large sums of money. For him, council estates must be either hideous environments that betrayed the working classes by destroying their traditional streets, and/or places where refugees and criminals get free homes at the expense of taxpayers like him.

You get the picture. Pikestaff is not big on nuance or detail or inconvenient facts, though he is very big on stereotypes. And I think you know what is coming. He’s no great fan of contemporary architecture, either.

He thinks architects are an elite bunch (‘elite’ is a term of abuse now). He takes the mid 1970s view that architects are privileged types who live in nice old houses while inflicting those hideous environments on ordinary people. You have to try to separate his taste from his vivid political stance, which is not easy, but he’s not keen on anything much postwar. This goes with his nostalgia for the past, his keen sense of a lost national greatness. He has strong NIMBY tendencies that sit oddly with his libertarian views, which oblige him to favour a development free-for-all, build over the countryside, etc.

You may think I am joking, or exaggerating wildly. I am not. Pikestaffs may be a minority but they exist in considerable numbers, they are firm in their often contradictory beliefs, and tend to be vociferous. Why am I telling you this? Because you need to be prepared to find them on the planning committee or neighbourhood forum. The only way to prove Pikestaff wrong is by designing delightful, clearly successful places and then pointing to them. It’s that simple, and that difficult. Because ideology is never objective.
Battle of the bulge

The baby-boomers’ stuffberg is creating a crisis of storage

The edge of the city is often where changes in society are seen earliest and soonest. Space is less expensive, and less cherished, than in the town or the country, so it can be more flexible. The bumps and shifts beneath the surface show through there before anywhere else.

In George Orwell’s under-appreciated 1939 novel Coming Up For Air, the western fringe of London is used to show the changing face of the country as a whole. The narrator is seeking the deserted semi-rural idyll that he remembers from the turn of the century. But it is gone, replaced with suburbs and light industry, advertising and swimming pools. A new world has arisen, sweeping away the Edwardian age, and – barring destruction in the war that casts its shadow over the book – the rest of the country will soon follow.

Journey along Western Avenue today, and you’ll see another new world, one that sits on the fringes of any large British city. It often makes use of buildings erected for the 1930s consumer manufacturing that features in Coming Up For Air, or the blander distro sheds of later economic shifts. A new world has arisen, sweeping away the Edwardian age, and – barring destruction in the war that casts its shadow over the book – the rest of the country will soon follow.

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What’s behind the self-storage boom? The fact that British homes are small and getting smaller is surely no coincidence. In this respect self-storage begins to look like another hidden cost of the housing crisis, further undermining the evergreen idea that micro-housing might be some kind of solution.

But there must also be a social explanation, based on the way the population is changing and ageing. The UK’s demographic profile resembles an anaconda swallowing a piglet. The distinct bulge that the country is slowly digesting comprises the baby boomers, the generation born in the years immediately following the Second World War, whose passage into retirement is one of the strongest currents stirring our society and politics. And the Boomer Twilight has material and spatial consequences. Not only is this generation more numerous than the ones born before and after, it is also considerably richer, and enjoyed postwar consumer society to its fullest extent. Put more plainly, it acquired an awful lot of things, a great historical wave of possessions that is now poised over the heads of its children and grandchildren. Those things are also often quite durable, at least in comparison to the Ikea furniture and short-lived gadgetry that Millennials live with.

I’ve been experiencing this phenomenon first hand all year. In the spring, my grandmother passed away, and ever since my family has been dealing with the emotionally delicate job of clearing a home that has been with us for 90 years and four generations. At the same time, my retired parents have decided to downsize into a smaller house. Asked about the logistical questions involved, my mother said ‘we’ll just get a storage unit’, gladdening the heart of the SSAUK.

Whether it’s in our own home or reshaping our urban hinterlands, the Boomer Stuffberg looms for us all. Architects may find this a profitable moment to consider the problem of the boxplexes on the bypass. After a decade of ‘visionary’ proposals for shipping container housing, we may find that the best use of containers is containing things, not people. •

Will Wiles is a journalist and author. Read him here every other month and at ribaj.com

WRITTEN OFF

So far, my folks have not hired a storage unit – they have been unexpectedly ruthless. What of my writing desk, where I decided that writing was how I wanted to waste my life? (This piece is brought to you, as they all are, from a sheet of MDF supported by a filing cabinet and an Ikea trestle.) ‘The movers said it had woodworm,’ my mother said, bluntly. Nevertheless, I persisted. No good: ‘It’s been left outside ever since.’ I suspected foul play, but the body had disappeared long before I was on the scene to perform an independent post mortem. Anyway, it’s for the best. Where would I put it?

Will Wiles is a journalist and author. Read him here every other month and at ribaj.com
Research and develop

Extending our knowledge through research will benefit the profession and society

Ben Derbyshire

In my campaign for election as president of RIBA I acknowledged the important contribution of past president Frank Duffy: that we must build a body of knowledge of more value and that is more accessible to society and our clients. By increasing the perceived value of our service, the advice we give and the design solutions we create, we can expect in due course to receive a more valuable return for that contribution. We must be able to predict relevant outcomes from our work – for what surgeon will not, nowadays, inform their patient of the statistics in relation to clinical procedures with reliability and confidence?

As concern for design quality grows among politicians at national and regional levels, the profession must start building on our shared knowledge to win the arguments about investment for lasting value that many of us hold dear.

The RIBA is centrally placed to broker, stimulate, aggregate, communicate and in due course fund research. Our strategy, Advancing Architecture, emphasises the importance of knowledge, innovation and research. We must build bridges between clients, academia, constructors, the supply chain, other professionals and practising architects to ensure that research and development addresses the pressing issues of our time. To this end, I have created a post of vice president for research, which, following a planning phase, will be supported with an appropriate budget and a well-connected and appropriately skilled steering committee.

The rise of robots and automated systems is a challenge to the architectural profession. To demonstrate our cultural, social and intellectual value we must work together and strive to create feedback loops where our shared body of knowledge is continually accessed and updated. Post occupancy evaluation (POE) is a generative feedback loop that guarantees collaboration in the process of producing knowledge. I commend the RIBA’s recent paper on POE, but am concerned that only a small proportion of RIBA chartered practices offer it. I am committed to overlaying POE processes on our standard Plan of Work to enable all architects and their clients to agree the measurable outcomes they seek in their development projects, and test for success and feedback on completion.

UN Sustainable Development Goal #11 – the making of inclusive, safe, resilient and sustainable cities – is one of the most pressing issues of our time and we must make the case for the deployment of our skills and knowledge to address it. Innovation through research in the housing sector is essential to address questions of suitability, affordability, durability, flexibility, quality and access. The components that make up homes, neighbourhoods, towns and cities can easily be classified, a data source that has powerful potential. The problem is that we have yet to create the feedback loops, platforms of equivalent, comparable data and benchmarks that will enable an effective body of knowledge. So now that we have appointed Flora Samuel as vice president for research I look forward to beginning the task.

RIBA research commissioned by past president Stephen Hodder concludes that clients want the architect to take a leadership role. We must grasp that opportunity as only then will we lead a paradigm shift in the perceived value of the architect and our role within society. Please do contact me or Flora with any ideas for how best to proceed.

president@riba.org
@ben_derbyshire

NO DEAL IS A BAD DEAL

RIBA’s research into the impact of Brexit on architecture, Global Talent, Global Reach, shows how the UK’s position as an international architectural exporter and architecture’s £4.8 billion contribution to the economy are at risk from a no-deal Brexit. Read the report at architecture.com/Brexit
Triestram Carfrae is an engineer who understands architecture. Part of the team completing Gaudi’s Sagrada Familia, his modus operandi is classic Arup: and now he is head of a multi-discipline design elite

Words: Hugh Pearman  Portrait: Ivan Jones
a new road bridge alone – but keep the existing bridge and road infrastructure for future needs, adapting it if necessary for rail. That is the solution that was adopted.

Carfrae has a slogan: ‘What does good look like?’ and an approach – in any project, pause. Step back, come out of the problem, consider alternatives. He remembers Peter Rice comparing the design process to a hound following a scent – it’s not linear. And above all, Carfrae knows that design decisions are made by the emotional side of the human brain. If you thought engineers were technocratic types, think again. Artificial intelligence is on the rise, especially the aspect of it known as ‘machine learning’ which, for instance, allows a computer to beat us at chess. He believes that in the ‘human-machine partnership’ we now operate, it is creativity, intuition and emotion that will keep us ahead of the robots. ‘You have to give machines oceans of data. They can’t make mental leaps.’

This triumvirate of virtues, he says, is what you often find in the UK, which is what brought him back here after a long spell working in Australia – though British-born and raised, he has a distinct Aussie accent. He notes that just about every Formula One motor-racing team in the world is based here and himself has a passion for Lotus cars – because he admires the dictum of Lotus’s founder, Colin Chapman: ‘Add lightness, not power’.

Beyond this, he questions our sometimes conventional view of design and thinks we should get out of our comfort zones more. ‘You can design a better conversation’ is his way of starting the thinking on this, going on to consider designing better lives, a better world. He thinks that with design experience comes fluency but also unconscious bias – there’s the danger that we’ll stop inquiring and questioning, and slide into formulaic responses. ‘Could designers start looking at problems that are not in their discipline at all?’ he challenged the assembled RDIs.

This way of thinking – the intuitive way, if you like – is the common experience of all good designers and is teachable, he reckons – secondary school level, a particular focus of the RSA, being an ideal place to nurture it. Nor is this a solitary activity, given his history of exemplary collaborations. Apart from Lloyd’s of London and his ongoing work with the team on the Sagrada Familia, the landmarks from his career that he highlights are the fabric-roofed Schlumberger Research Laboratories in Cambridge with Hopkins (1985), Sydney Football Stadium with Philip Cox (1988) – the first with an all-round roof rather than separate stands; the ‘Water Cube’ or Beijing National Aquatics centre (‘just a piece of magic’) of 2008; and the algorithmically-derived structure of 111 Eagle Street, Brisbane, another collaboration with Cox.

This is how he works – playing ping-pong, as he says Renzo Piano puts it, with architects. He’s done a couple of footbridges on his own, he says, but he prefers working with others. ‘I GET architecture,’ he says. ‘And the Sagrada Familia is the purest collaborative project I’ve ever worked on. The Spanish architects, engineers and builders, and us. We’re in a room and the only objective is to design the best possible church.’
Photons of light take about 8 minutes to travel from the Sun to light up the huge blank canvas of the north chancel wall in Mellis.

And from here its only a 4 minute walk to the studio where the stained glass project for the East Window was created by Rowland and Surinder Warboys.

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Use and ornament

Two new books together cover postmodernism comprehensively, raising questions and making the reader think again

Hugh Pearman

Brutalism has had its comeback. Now it is postmodernism’s turn, but you really need to look outside the UK to understand the movement properly. Here in the UK Nikolaus Pevsner first applied what had previously been an artistic term to the vernacular-influenced Norfolk housing of Tayler and Green as early as 1962, and applied it also to what he saw as the personality-cult 1960s brutalism of the Smithsons and Stirling and Gowan. By and large, though, we came relatively late to the party in the 1970s and our view is skewed by the brief burst of commercial PoMo that took place, broadly speaking, in the decade from 1985 to 1995, with most of it happening in the ‘Lawson boom’ of the late 1980s. There were various reasons for that, among them the powerful combination of retro-culture encouraged by both Thatcherism and Prince Charles-ism which had the effect of favouring anything that did not look ‘modern’. It got mixed up in people’s minds with traditionalism, which is very different. That’s a shame because elsewhere – in Italy especially – subtler forms of PoMo emerged over a much longer period in the post-war years, from Ernesto Rogers to Aldo Rossi, say.

Revisiting Postmodernism and Postmodern Buildings in Britain are both written by expert pairings in their respective fields. The Franklin/Harwood book – published under the auspices of the Twentieth Century Society – confines itself to the UK, with illustrated overseas outings by Stirling/Wilford only (we get only the briefest mentions of the Dutch work of John Outram, or the Japanese buildings of Branson Coates). It’s an excellent catalogue with a wide-ranging (more international) introduction but it contains almost no surprises, beyond the inclusion of Benson & Forsyth’s Museum of Scotland of 1996-8 which for some reason I had never considered as PoMo, rather modern-historicist. And then there’s Demetri Porphyrios’ contemporaneous Three Brindleyplace in Birmingham – I’d previously filed that under neoclassicism. Perhaps it is the use of exaggerated effect in both that pulls them into the net, but if so, I don’t see why SOM’s massive Chicago-inspired commercial palaces in the City of London and Canary Wharf are dismissed in a few lines, with no photos. It seems that PoMo in
And – because it is sometimes overlooked – it’s great to see Ed Jones’ 1987 Mississauga City Hall in the hero-gallery at the heart of this book.

Postmodern Buildings in Britain by Geraint Franklin and Elain Harwood (Batsford, £25)

Revisiting Postmodernism by Sir Terry Farrell and Adam Nathaniel Furman (RIBA Publishing, £35)

its decadent gigantist commercial phase is regarded as beyond the pale: ‘Their work lacked the cutting wit and irony of the early, smaller trailblazers of the style,’ sniff the authors. Which is true, but they shouldn’t be ignored.

It’s a matter of personal choice: I, for instance, would have definitely included Rogers’ Lloyd’s of London with its collage elements and straight reference to Paxton’s Crystal Palace, not to mention the exuberantly Baroque Channel 4 HQ and – of course! – Piano and Rogers’ 1970s Pompidou Centre, that paradigmatic colourful reaction against clinical modernism as much as it is against conventional cultural tropes and construction methods. For me these are just different architectural expressions of the alt.mod mindset of their time.

In contrast to the Franklin/Harwood book, Farrell and Furman’s offering does consider the high-tech crowd. Farrell (first half of the book), places them in the fourth of his five PoMo categories as ‘the unknowingly but reformed modernists that adjusted everything they did because they could no longer remain aloof from, or impenetrable to, the influence of postmodernism’. Well, I’d say that Rogers in particular led rather than followed, and has always acknowledged the influence of his uncle Ernesto among many others such as Rudolph, Wright and Kahn, but this is a matter of debate: he identifies as a modernist of course. Others that Farrell includes here for various reasons are Chipperfield, Calatrava, Hopkins, and his former partner Grimshaw, Piano – but more for their ‘contextual and placemaking’ abilities than their stylings. So Farrell thinks Rogers has BECOME a bit PoMo. I’d say he always was. By the way, if you’ve seen Foster’s Bloomberg HQ you do tend to find PoMo touches in it, and I never thought I’d find myself saying that of him.

Revisiting Postmodernism throws its net globally in fewer pages than Post-Modern Buildings in Britain, making it a very rich, condensed primer. It is also highly unusual: rather than being authored by academics it is the joint work of a seasoned leading practitioner and a young enthusiast, himself a designer who works in architecture – and also a Rome Scholar, so no slouch academically. Farrell of course helped to define and build the era: Furman is one of those who – though he rejects the postmodern tag for his own joyful, allusive, highly coloured work – has an encyclopaedic knowledge of the subject. Between them – one reliving the time, the other discovering it two generations on – they bring their own large personalities to the subject.

Here there are more surprises. Peter Barber? The charming wavy-roofed, be-portholed project shown is convincing. Eric Parry? Increasingly so, especially his building in Piccadilly. Ditto Caruso St John for its Tate Britain interventions. And – because it is sometimes overlooked – it’s great to see Ed Jones’ 1987 Mississauga City Hall in the hero-gallery at the heart of this book. Good also to see a discussion of the ‘stratospherically stretched Gothic ogee-arches and ribs’ of Minoru Yamasaki’s 1971 World Trade Center in New York City, especially as it was the demolition of the same architect’s Pruitt-Igoe housing project in St Louis that Charles Jencks famously described as the moment modernism died. Best of all, there are examples here from around the world, especially Bolivia, which I’d never seen before.

Farrell sees postmodernism as an expression of societal change, more bottom-up than the patrician top-down prescriptions of much post-war planning and building. Furman states that: ‘Postmodernism is at its heart an architecture that embraces the chaos and mediated, saturated, complex and global nature of the contemporary world.’ And of course it did not go away. Both books show today’s examples by emerging architects and established names alike. You need both books, but if I could choose only one, for its vigour and breadth of subject matter it would be Revisiting Postmodernism.
Memorials are paradoxical structures. Often they are outstanding examples of creativity, but they owe their existence to tragedy. In recent times a memorial industry has emerged. Lutyens’ Cenotaph in London has at least nine monuments within walking distance, constructed in the last two decades. And in the last two months, Daniel Libeskind’s National Holocaust Memorial opened in Ottawa, David Adjaye and Ron Arad won the competition for its London equivalent, and Frank Gehry’s controversial memorial for President Dwight D Eisenhower broke ground in Washington DC.

Such high profile projects raise questions about the design values, integrity and even necessity of memorials – especially those which seek to cement the originator’s legacy. What makes the Cenotaph, or Carmody Groarke’s 7/7 memorial, an architectural success, but others nearby a failure? It is at least partly context, sympathy with the landscape, well designed lettering, sensitive use of materials. And given their unique function, memorials also require a nuanced understanding of emotional subtleties and complexities.

Must architects distance themselves from the tragic histories of such projects in order to achieve clarity of vision? Studio Libeskind led on both the Canadian monument and Ground Zero, and its CEO Carla Swickers’s answer is a definite No. ‘Memorial
architecture should not be led by an abstract or neutral hand but with the heart,’ she says, pointing out that Libeskind’s own experience, as the child of Holocaust survivors, is fundamental to his work.

The Ottawa monument is an experiential space. It is an abstract Star of David made up of triangular concrete volumes representing the badges Nazis used to identify and shame their victims. On the walls are large scale monochrome photographs of Holocaust sites taken by Canadian artist Edward Burtynsky. Two ground planes establish a circular direction of travel – one travelling down to contemplative spaces and another leading up, to the future. Above a central interpretation space is the ‘Sky Void’ with the eternally burning Flame of Remembrance. The Stair of Hope leads to a plaza overlooking the Parliament buildings and Ottawa’s Peace Tower. Evergreen trees represent the descendants of survivors and their growing contribution to Canada.

While this deliberately constructed, overtly named symbolism is not to all tastes, Swickerath explains that these meaningful elements evolved organically in the design process, which all parties approached with ‘sincerity not cynicism’. The aim is to elicit both ‘intellectual responses and feelings… evoking memories through physicality’.

In contrast, but equally powerful, is Rachel Whiteread’s Nameless Library at Judenplatz, Vienna. This concrete cast of a hermetically sealed room, whose doors have no handles and whose books remain forever closed, is a stark, austere monument but its human scale – that of typical neighbouring buildings – invites engagement. The work must speak for itself, and visitors are prompted to react emotionally rather than analytically. Whiteread favours minimal explanation. In an interview with the British Council she stated: ‘I think its references will be apparent. I’ve spent a year and a half thinking it through. You don’t engage in a project like this lightly.’

Lettering artist Mark Frith, who has worked on some of the UK’s most remarkable monuments, says: ‘We all have a common understanding of love and loss. Emotions that are evident form part of the brief, part of the source’. The key is to identify and harness those which are fruitful in conveying an ‘onward message of hope’. The same philosophies for designing a private memorial also apply to public works. Those who have buried their own dead will understand: in the time between commissioning, design, and eventually setting a headstone (around a year before the ground is ready) the memorial’s function subtly shifts. It initially identifies the deceased individual, then becomes a memento of the bereaved relative’s emotional journey too, and eventually offers comfort in achievement. A memorial is never about one person but about a network of relationships. ‘With any loss there are conflicting feelings such as anger. A memorial should go beyond that. We are designing for the living,’ says Frith.

RIBA J Rising Star and director of Sphereon Architects, Tszwai So designed the Belarusian Memorial Chapel in Woodside Park, dedicated to the victims of Chernobyl. He speaks eloquently of the role of the designer: ‘It’s a very personal, emotional journey… we were designing not just a functional building, but trying to collect people’s testimonies and re-embody their – and my – memories.’

Before the Chernobyl explosion – which killed 31 people immediately but exposed countless others to radiation, displaced thousands and left whole settlements abandoned – Belarusians experienced many tragedies, including during the Nazi occupation when worshippers were locked in wooden churches and burnt down. Keen not to focus on such atrocities but driven to subtly pay homage within his designs, So made use of interior lighting. At night, the simple modern wooden chapel glows like a lantern. It is a beacon of hope rather than tragedy. So hopes the children of the community will – in the future – identify the church not with the tragedies of their parents’ generation, but rather with new memories of friends congregating in a building filled with light and the smell of timber.

Right The Belarusian Memorial Chapel designed by Sphereon Architects in Woodside Park is dedicated to the victims of Chernobyl.
So also notes that his Belarusian clients tend to view their past as a history of emotions, rather than as a series of events. Emotional intelligence is perhaps too often disregarded in architectural training in favour of abstract intellectual reasoning. ‘A design that would win architects over does not necessarily move peoples’ hearts,’ he suggests.

Memorial designs which pay insufficient heed to potential responses can certainly have unfavourable consequences. Earlier this year architect Peter Eisenman’s 2005 Berlin Memorial to the Murdered Jews of Europe garnered negative attention when Israeli artist Shahak Shapira used tourist selfies taken there in thoughtless poses and superimposed them on grim archival photographs of prisoners and corpses. These he posted without permission on a satirical website ‘Yolocaust’ – referring to the glib phrase much used on social media, You Only Live Once, or YOLO. While Shapira was praised in the media for calling out these instances of disrespect (which included yoga and juggling among the stelae) the architect had in fact previously advocated alternative uses for his memorial, including for picnics and photoshoots. He told Der Spiegel: ‘What can I say? It’s not a sacred space.’

It would be inconceivable to imagine such irreverent visitor responses to a spontaneous memorial, in the immediate aftermath of a terror event for instance. Such popular expressions of grief are the result of an outpouring of emotion where there has been no time for the ground to settle, and their temporary nature renders them all the more poignant. So for memorial architecture to help communities achieve closure, it should probably rethink the idea of permanence too.

Consider two contrasting projects in Utøya, Norway. In June, the Norwegian government controversially cancelled artist Jonas Dahlberg’s competition winning entry for a memorial to the victims of Anders Behring Breivik’s 2011 massacre, after disapproval from local residents and victims’ families. His ‘memory wound’ proposal was a landscape intervention cutting an irreversible 3.5m slice through the Sørbråten peninsula. A perpetual reminder of the trauma and an all too literal embodiment of the scars and social divisions exacted by Breivik’s crimes.

Clearing Memorial by 3RW, near the site itself, is the ideological opposite. Here, a ring is suspended from pine trees. The victims’ names are cut out of steel, through which sunlight and plants cast dappled shadows. A visitor can see the forest, sea, and the coast at Sørbråten from the circle.

According to the 3RW: ‘The high level of social trust and sense of community was challenged and even met with criticism [after the attack]. In light of this, we propose a landscape-friendly memorial, built through volunteer work and community – the true spirit of the Norwegian society.’ This community work, known as ‘Dugnad’, is intrinsic to the memorial, as it often takes place with the changing of the seasons. According to 3RW ‘the memorial at Utøya should show the nature that slowly changes time and memories’.

Libeskind’s Swickerath raises the importance of collaboration, calling it ‘fundamental to celebrate life’. The Ground Zero project was, she said ‘the most personal and humbling’ project of her career, and one of the reasons it succeeded was that ‘everyone around the table cared deeply. If there had been only one vision it would have been a failure.’

So memorials which do not appropriately navigate the emotional environment are set to fail. Too theoretical and the monument is cold, unforgiving or confrontational. Driven by popular sentiment and the result is mawkish or kitsch. And imperialistic, grandiose memorials (which still crop up in Royal Parks) generate resentment. Successful memorials do not need to make a loud statement, but they do need to demonstrate a lack of ego and an awareness that while honouring the dead, the structure must be emotionally honest with the living. •
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Gilbert Herbert
1924 – 2017

Noted academic and writer, professor emeritus at Israel’s Technion, whose travels, wide experience and varied interests kept him busy to the end of his life.

Gilbert Herbert, who has died aged 93 in Haifa, Israel, was a distinguished educator and author of 10 books in the field of architectural history.

Herbert was born in Johannesburg in 1924. He studied architecture at the University of the Witwatersrand from 1942-46, and was a frequent prize-winner. On graduation he was offered a teaching post at the university, which was converted later that year to a full-time permanent lectureship. At the end of 1949 he received a special South African government scholarship to study systems of architectural education and spent 1950 at the Bartlett School, the Architectural Association, the University of Liverpool; Columbia University, Harvard, and MIT. He was later awarded an MArch degree for the dissertation ‘Academic Education in Architecture’. In 1951 he completed his studies for the post-graduate Diploma in Town Planning.

In 1953 Herbert married Valerie Ryan, and they had two children. In Johannesburg he continued his academic career while maintaining a modest architectural practice. Most of his work was residential, but two major buildings were the Cinerama Theatre, and – as part of a team – the John Moffat Building for the School of Architecture and Fine Arts at the University of the Witwatersrand.

Herbert was awarded the prestigious South African Baker Scholarship in 1957, which required him to divide the year between Italy and England. He spent four months in Rome, and two exploring the architecture of Europe, from Sicily to the Channel coast. In England, Herbert worked in the RIBA library, producing the report, ‘The Real and the Ideal in Italian Architecture,’ which later appeared as separate articles in the SA Architectural Record and the RIBA Journal.

The South Africa to which the Herbets returned was in political turmoil, and in February 1961 the family flew to South Australia for Gilbert to take up the position of reader in architecture and town planning at the University of Adelaide. The seven years in Adelaide were remarkably fruitful academically, and Herbert’s reputation grew both in Australia and abroad. With this came another significant development. The Herbets were scions of families with a healthy sense of their Jewish identity and Zionist loyalties. Visiting Israel on his 1966 sabbatical, Herbert met leading figures of the Technion, the Israel Institute of Technology, and the question of joining the staff arose. By the time he returned to Adelaide it was a goal.

The Herbets emigrated to Haifa in 1968, just after the Six-Day War, and Herbert took up his post as associate professor. By 1973, he was dean of the faculty. During the Yom Kippur War scores of the faculty’s students were mobilized, several were killed and injured, and all classes were postponed, but Herbert led the faculty with consummate skill. As life returned to normal Herbert was awarded the Mary Hill Swope chair in architecture, founded and directed the Architectural Heritage Research Centre, and received awards including an honorary doctorate in architecture from the University of the Witwatersrand. Visiting appointments brought him to universities in Brazil, South Africa, Australia and the US. When in 1997 the Technion celebrated his 50th year as a teacher and researcher, it produced his collected writings – The Search for Synthesis was his seventh book. During the many years after his retirement in 1993 that creative output never ceased. In his 89th year, his tenth book on architectural history was published.

Herbert’s intellectual brilliance was conjoined with an warm, engaging, and affable personality, remarkable administrative and leadership skills, an indefatigable work ethic, and wisdom that enabled him to advise students and others about career undertakings and personal concerns. His talents included painting, drawing, and poetry; his passions and activities in such areas as Zionism, politics, music, travel, art, theatre and Judaism enlivened his discussions. Herbert enjoyed the respect, admiration and love of children, grandchildren and friends. With splendid hospitality Herbert and Valerie welcomed and embraced all. Herbert’s many beneficiaries will treasure and miss their interactions with such a genial and gracious person, his inspired pedagogy, outstanding scholarship, and personal example.  

To inform the RIBA of the death of a member, please email membership.services@riba.org with details of next of kin.
Recollections from our youth, decade by decade

Hugh Pearman

2018 is the 125th year of the RIBA Journal. November 9 will be our actual birthday; that was when RIBA president John MacVicar Anderson announced ‘The New Journal’, created by a merger of two earlier RIBA publications, ‘Transactions’ and ‘Proceedings’. Every month this year we shall select a fascinating out-take from our archives, roughly decade by decade. And in November we will do something special.

So come to January 1900, when the RIBA invited architects to present a key building to its senior members, who then discussed it. At the dawn of a new century, what less progressive building to choose than Basil Champneys’ John Rylands Library in Manchester, an example of full-on decorated Gothic?

The format was your classic show-and-tell, with lots of drawings and the odd photo, all reproduced in the RIBAJ. Champneys was just a little defensive about his chosen style: ‘Not that I consider that any special reason, still less apology, is needed for the adoption of Gothic which, in spite of some present unpopularity, I believe merely temporary, can, I think, never fade completely into disuse or fail to influence the architecture of the future’.

This was and is a beautifully crafted building of Penrith ‘Shawk’ stone and oak with lashings of statuary, stained glass and exhortatory Latin texts. Mrs Rylands, who commissioned the library as a memorial to her cotton-merchant husband, had done some of her own research, said Champneys, especially visiting his Mansfield College Library in Oxford. It was a college-style library she desired – and one with a very imposing entrance lobby and staircase, she insisted.

Of course modern materials played a part. Mrs Rylands having laid out a quarter of a million pounds for the Althorp Collection of rare books, the building had to be fireproof. ‘The stone vaulting is covered with concrete brought to a level and covered with asphalté,’ Champneys revealed. Moreover, with lengthy negotiations needed with the neighbours over rights of light but construction needing to start quickly, where to put the foundations? ‘I advised covering the entire site with a layer of cement concrete some four feet six inches deep, so that the main features of the building need be neither finally settled nor disclosed until this portion of the work was completed.’ That’s quite some raft.

The job took up half his time for nine years. In the discussion Beresford Pite, a progressive free classicist who had visited the building, declared himself ‘dumb-struck with the scale and the wonderful construction of the vaulting’ but was a bit sharp on the style. ‘Mr Champneys has moved backwards, and his building could not be described as in any way such a modern building as the Houses of Parliament,’ said Pite. Ouch. Barry and Pugin’s Houses of Parliament were already 40 years old. Oh, and he didn’t like the ‘sombre’ colour of the stone much either. Pite was the most outspoken, but you get the impression his whole audience saw Champneys as an interesting throwback. Nonetheless he was to receive the Royal Gold Medal in 1912.

The John Rylands Library happily survives, restored and extended in 2007 by Austin-Smith:Lord. Like his medieval forbears, Champneys (1842-1935) built to last.
Liveable cities
A place for all

What is a liveable city and what makes one? Four debates held across 2017 explored the issues for green infrastructure, social infrastructure, housing and commercial development while a concluding workshop drew up an action plan for the professions and a definition that we should all be working towards:

‘Liveable communities are ones in which young and old want to stay or return, places where people can have fun and enjoy diversity, connected to the place’s natural and human cultural history. It’s a city where people have a wide range of choices and good health, opportunities and a sense of wellbeing, ownership and inclusion’

This is the city we all want to live and work in. These are the kind of qualities you’d expect to find in visions of China’s Tianjin Eco-City or Saudi Arabia’s planned Neom, with its driverless cars and vertical farms. They are the qualities many UK cities have traditionally been fairly rich in, thanks largely to a combination of enterprise and philanthropy that has provided a legacy of parks and heritage, transport infrastructure, civic buildings and distinctive characteristics.

Such resources are extremely precious. Yet, in order for cities to continue to grow, build sustainability and resilience, adapt to our post-fossil fuel, post-industrial age, and survive austere times, things have to change. This was the context for a series of four debates on the challenges and future for liveable cities, which took place in 2017. The debates, sponsored by RIBAJ in partnership with AluK, brought together expert panels with representatives of the industry to discuss four key areas of city making: green infrastructure, social infrastructure, housing and commercial development. The series culminated in a day-long workshop, which identified potential ways forward and a series of simple action plans.

The definition of the liveable city cited above – which refers to the whole of a city’s metropolitan area – was much discussed and honed at the workshop. It drew on global best practice, notably the United Nations Sustainable Development Goals.

Inevitably there were common themes in the debates. The need to design in flexibility applies to both commercial development and public buildings, while ‘sweating the assets’ became something of a leitmotif to the day’s conversations. Such approaches are becoming integral to helping buildings, and the businesses and services they house, to remain sustainable and commercially viable through a city’s vicissitudes.

Money, and the shortage of it in the public sector, exercised minds, with our professionals suggesting one potential source for both housing and social infrastructure: tax. Policy change was advocated to filter tax revenues back to local communities, not only providing a direct funding stream, but also offering the potential to give local people greater involvement in their area’s destiny.

Throughout all the debates, the role of designers in making our cities liveable was much discussed, and the final workshop resulted in two overarching recommendations for the professions. First, there was a call for urban and development economics to be brought into architectural training, to give designers greater understanding of the development process...
and chief executive of the Ecological Sequestration Trust, could promote a performance-based approach to procurement, and so ultimately raise standards, quality and understanding in placemaking.

Failure to cherish our cities could have the most serious consequences, and inevitably the conversation swayed often to London. ‘Affordability is straining liveability in communities. It pulls apart the liveability of the city that caused it to grow,’ said Colin Ross of social investment business Cornerstone. That prompted Neil Howsam, of Piercy & Company, to ask: ‘Is London becoming an unliveable city because people are increasingly struggling to live there?’

Arup’s Joe Wheelwright said London had a clear purpose: ‘People will use London as a functional tool to further careers, but that doesn’t mean they feel a connection to it.’

Alex Jan, also of Arup, concluded that people are drawn to cities by opportunity. ‘People are still coming here. We make sacrifices to live in cities.’ How great those sacrifices are will depend upon the extent to which we can make our cities liveable.

**ACTION PLAN**

1. Urban and development economics taught during architectural training
2. RIBA, RTPI and Landscape Institute to evolve a new discipline called ‘total design’ focused on placemaking.
**Liveable cities**

**Green infrastructure**

**Finding the right path to sustainable cities . . .**

Green infrastructure is essential to a healthy future. Aware of the obstacles, industry speakers felt new ways of thinking could offer some solutions.

**Nature is good** for us. It can make our crowded, stressful cities more amenable and pleasant, help us to manage environmental risks ranging from flooding to overheating, and improve our health and sense of wellbeing. That’s why some authorities have been rethinking cities in more sustainable forms, like China’s planned sponge cities, which will capture and reuse stormwater, or today’s transformed and greener Malmö.

There are examples of green good practice closer to home though, such as east London’s Queen Elizabeth Olympic Park or the therapeutic landscape created at Stoke-on-Trent’s Royal Stoke Hospital. Yet the UK’s landscape appears to be under threat. Straitened local authority budgets are prompting cuts in maintenance and skills, and some are even cutting down trees and selling off parks. On the publication of the House of Commons select committee report on public parks, committee chair Clive Betts warned: ‘If we are to prevent a period of decline with potentially severe consequences then action must be taken.’

The dilemma

Green infrastructure was therefore a fitting theme for the first in a series of debates about solutions to city challenges. The first, which took place in March, opened with a presentation from Peter Head, founder and chief executive of the Ecological Sequestration Trust, where he summed up the dilemma: ‘Short term political and finance cycles are driving decisions, which mean that everything is siloed, and critical public realm design is often missing.’ The debate was chaired by Tom Armour of Arup with a panel consisting of Julia Thrift of the Town and Country Planning Association, Pat Hayes of Ealing Council and Cannon Ivers of LDA Design.

Hayes called for a new, modern narrative on green infrastructure. ‘This is not about the Victorian narrative of land designations and big parks,’ he said. ‘We’ve got to look at the liveability of places and that means looking more holistically at how a place works. Green infrastructure is more fine grained, about stringing individual schemes together.’

Thrift felt that policymakers and clients should raise their sights: ‘We have a wealth of design talent in the UK but there is a lack of ambition among commissioners.’ The government’s housing white paper, published in February 2017, had very little to say about creating great places, while in areas of the UK where land values are low, it can be difficult for local authorities to press for green infrastructure in development. ‘A park is seen as a nice place to go, but we need to be thinking more about how it can mitigate urban cooling and deal with floods,’ she added.

That could change as we develop our understanding. The Natural Capital Committee, which provides independent advice to government, is gathering research quantifying the value and benefits of natural assets. ‘Treating someone’s high blood pressure with drugs can now be measured against sending them to the park, which works out at something like 10 times cheaper,’ said Thrift.

Such evidence could help to resolve some of the concerns around funding green infrastructure, particularly the thorny issue of who pays for ongoing maintenance. ‘New models are being explored for maintenance,’ said Thrift. ‘Money is often there but it is in different budgets, like health or utilities. We need to unpick this.’

**Design for low maintenance**

Skills are a pressing concern; local authorities have cut expertise and the horticultural industry struggles to recruit young workers. The solution, said Ivers, could be good design. ‘Parks shouldn’t be just grass and trees. We need to think differently about how we maintain spaces, using features like wildflower meadows, which only need to be cut once a year.’

Ivers also made a plea for early involvement of landscape architects: ‘Often by the time we arrive on a project things are already fixed,’ he said. ‘There’s a 40-storey building and the only place where we can make a space for people to sit is in a wind tunnel that has no sunlight.’

Such comments speak volumes about the gap between the visionary green infrastructure thinking of some global cities and approaches prevalent in the UK. Many interrelated factors, including education, evidence and early design input, have a part to play in closing that gap, but Thrift summed up the solution in eight words: ‘We need to mainstream the idea of greening.’

I see a big difference between rural and urban living. There’s a need for education to help urban dwellers embrace the natural environment.

Richard Powell, C H Lindsey & Son
Green infrastructure is a relatively new term, for a discipline still in its infancy. While Natural England’s definition runs to more than 150 words, Joe Wheelwright of Arup managed it in fewer than 20, saying, ‘It’s more than a feature that brings joy to people, it’s functional. It’s a high performance piece of infrastructure.’

Discussion at the concluding workshop of the debates highlighted the fact that key messages about what green infrastructure is and what it can do for cities still need to be conveyed to policymakers, the property and construction industry, and the public. Some are already using data and digital tools to demonstrate how green infrastructure’s impact could be communicated. For example, the University of South Florida and the city of Tampa have developed the TampaTreeMap tool, which details the precise annual value of an individual tree in a given location, in terms of financial benefit, energy saved, stormwater filtered, air quality improved, and carbon dioxide removed.

Chair Peter Head said this kind of awareness raising needs to be applied to blue infrastructure just as much as green. Water management ‘is all too often done in pipes, rather than in the soil. At the moment we are doing great things in pedestrianisation, but it is not helping flooding.’

Shifting such thinking requires a more integrated approach to project design and delivery, connecting policies and breaking down the divisions that separate designers, civil engineers and other stakeholders. This is where the total design approach, outlined in the introduction, comes in, bringing the design team together early in the project to explore options and their overall value to citizens, developers, the city and broader environment.

Research and experience are already demonstrating numerous positive effects that the green and the blue can have on such diverse factors as city resilience, health and wellbeing, productivity, distinctiveness of place and even the value attached to property. Now every asset needs to be made to work hard for multiple end-users and its future – particularly future maintenance funding – fully considered.

For designers, Wheelwright said, there are opportunities to make a creative contribution at every scale from the city-wide strategic project to the smallest pocket of urban space. In fact, the delivery of hundreds of small coordinated schemes can create an effective and meaningful overall network.

**ACTION PLAN**

1. Recognise urban greening as high performance infrastructure
2. Think about how green assets can be made to work for multiple end users – and maintained
3. Make the most of every opportunity – small schemes add up.
Building social infrastructure...

How can we support and sustain the schools, surgeries, community and cultural centres that make up our social glue? The second RIBAJ/AluK debate on city life brought up plenty of ideas.

In the run-up to the general election last June all the political parties’ flyers prominently featured their commitment to health and education. Politicians and public recognise that schools, doctors’ surgeries, leisure centres, museums and community centres are key services for our health and wellbeing, and form the social glue of our communities.

How that social infrastructure is provided in the city context is, however, open to question. Funding may dominate the political agenda right now but other forces such as planning, climate change, governance, technology, big data, risk management, and security and safety also pose myriad questions for the shape and sustainability of new and existing facilities. It focused on how the public and private sector, funders, architects and the construction industry can develop strategies to support and sustain social infrastructure in cities.

Colin Ross set out the experience of Cornerstone, a company that works with the public sector to help release land and assets for schools and affordable homes. ‘In areas like London, it can be difficult to find sites in areas where the infrastructure is required,’ he said. ‘Proposals can become political and controversial.’ Cities that have suffered industrial decline pose their own challenges in encouraging people to move into renewal areas and using infrastructure to make a market. Where projects are providing both housing and education, there can also be problems in cross-funding.

Architects could help overcome the barriers, said Ross. ‘Creative input is needed from day one in establishing the problem and its solution.’ But Andrew Neill of Investec Bank cautioned that projects brought forward by public sector sponsors are governed by their own approaches, funding streams, types of asset and service. ‘It can be difficult to do something unless there’s a scoring system to show value for money.’

Peter Head noted that a key learning point from the debate was that it is very hard in the early stage to connect design and human health and wellbeing outcomes. ‘We’re missing tools and methods,’ he said. Building information modelling (BIM) is one tool that is already useful in the early stages of a project. ‘We have quick and dirty models available early to show to the community, to the teachers and pupils of a school, for example,’ explained Chloe Obi of Bouygues UK. ‘We can use BIM or virtual reality in communities to drive conversations with key stakeholders.’

Not all social infrastructure is welcomed. If you are trying to locate a bail hostel, for example, then you can come up against pressures from local communities and their politicians.

Michael Dunning, architect, EA Swainston Architects

Such research and development might help answer one of the enduring questions of regeneration and placemaking investment: is it better to invest in a statement project, or a series of smaller, lower profile interventions? From David Chipperfield’s Turner Contemporary in Margate to Eric Kuhne’s Titanic Museum in Belfast, there are examples of major projects intended as catalysts for and symbols of change. But the government’s 2016 culture white paper promoted a lower profile approach, called the Great Place Scheme, which in its pilot phase has channeled £20 million of National Lottery and Arts Council England funding into 16 locations across England. This funding is helping to deliver more locally focused cultural initiatives through placemaking.

Edible Bus Stop’s Will Sandy contrasted London’s controversial (and now defunct) Garden Bridge project with his team’s work transforming hostile patches of urban streetscape into green, active community spaces. ‘Love it or loathe it, the Garden Bridge has got us all talking about green infrastructure,’ he said. ‘But we calculated that the money that could be spent on the bridge could instead be used by the London boroughs to each create 33 new green spaces. There are 17,800 bus stops in London, and if half of those were greened it would improve people’s lives on a daily basis.’

Public funding for such projects may be in short supply, but private capital could be more readily available, although Cornerstone’s Ross sounded a note of caution. ‘Putting in infrastructure at the start of a project can take 15, 20 or more years to repay, and that

Above Will Sandy, creative director at The Edible Bus Stop, with Chloe Obi, head of BIM for Bouygues UK, at the second panel debate.

Social infrastructure panel
Chloe Obi, head of BIM, Bouygues UK
Andrew Neill, director, infrastructure finance, PPP/social infrastructure team, Investec Bank
Colin Ross, director, Cornerstone
Will Sandy, creative director, The Edible Bus Stop

SOCIAL INFRASTRUCTURE PANEL
Changing living, working and development patterns can leave schools, museums and pubs in the wrong location and out of step with a city’s growth. ‘It’s quite difficult politically and organisationally to allow social infrastructure to develop as it should – and it’s starved of resources,’ said Colin Ross of Cornerstone. ‘In an existing city there isn’t the capability to look at where people are going.’

The answer is determining and rationalising what assets are needed and where, but that requires leadership and enhanced capacity, and relies on gathering a wealth of data. ‘Some boroughs are already thinking about it but they often lack the tools to take it to implementation,’ said Ross. The way forward, the workshop concluded, lies in a high level technocratic and non-political planning overview to create a framework for infrastructure in established cities. This would align with a city’s anticipated growth path and be informed by the abundance of smart data that cities are starting to exploit.

Combine this with a place-centred approach to delivery and management of facilities, and cities could be producing far more responsive and creative social infrastructure.

As with other parts of city infrastructure, the panel thought sweating assets to optimise benefits, both social and financial, is essential to ensure amenities stay sustainable, accessible and relevant. Evolution needs to be designed into new and existing buildings, from the local health facility to the flagship cultural project. That may mean rethinking the way a service is provided, such as siting a library in a shopping centre.

This calls for expertise beyond design, and the final workshop ended with a call for a greater grasp of urban and development economics to be given to tomorrow’s architects and planners, so they can play a greater role in shaping projects that can serve their communities. ‘Architects need to be able to work with clients to develop an idea,’ said workshop chair Peter Head. An understanding of urban economics could provide a clearer view of how individual projects can link to opportunities to support city growth. Knowledge of development economics could give architects and planners greater insight into the factors that are key to making projects happen. Such expertise could give architects greater influence.

**Four ways to sustainable social infrastructure**
- Better planning from government in matching need for services to projects
- More integrated approaches to funding to break down funding stream separation
- Mechanisms to connect capital to projects
- More tools, methods, data and evidence, specifically about the performance of facilities that would enable the business case for investment to be made.

**Where we go from here**

**Changing living**

And long-term patient capital is harder to find.’ Head said the UK is failing to seize opportunities, notably in tapping into the financial community’s recognition of the United Nations’ 17 sustainable development goals, in areas from poverty to education.

‘Why is the government not establishing the mechanisms to allow capital to flow through to provide the facilities that Britain needs?’ he asked. ‘We’ve got to engage government and allow private sector funding to flow.’

‘If cities are to function as centres of high productivity, social infrastructure is essential, whether that’s in our jobs, our leisure, or getting the kids to school,’ said Ross.

**ACTION PLAN**

1. Sweat the assets to optimise social and financial results
2. Weave adaptation and evolution into the solution
3. Develop understanding of urban economics and development economics for architects.
There is a fear that something might be rotten in the state of UK housing. We know we are falling short of delivering on housing targets, and that affordability and availability have become key concerns, particularly in major cities. We also know that the homes we build and refurbish can go very, very wrong, with the catastrophic consequences seen at Grenfell Tower.

A string of government reviews and think tank reports have identified the factors that brought us to this point, and more will follow in the light of Grenfell. Failings have been identified in such diverse areas as the land market, planning policy, the structure and culture of the UK housebuilding industry, housebuilding methods and regulations, and government policies that promote house buying and the sell-off of council housing, while largely ignoring the provision of social rented homes.

While the broad theme of the event was housing, the discussion homed in on the design of today’s homes and the architectural profession’s role. Peter Head, who chaired the debate, has an unequivocal view of UK housing: ‘It is a completely failed system.’ June Barnes, of master developer Urban&Civic, drew attention to the development of ever taller and more complex residential schemes in the capital, with their equally complex strands of ownership: ‘We are taking real risks in the homes we are building, but architects are at the end of all this and have no control.’

In 2016 a record 26 towers of at least 20 storeys were completed in London, 24 of them for residential use. Tall buildings now account for about a third of all new homes being constructed in the capital.

Living densities in the city have grown dramatically, explained Julia Park of Levitt Bernstein. A decade ago her practice, with HTA, Pollard Thomas Edwards and PRP, carried out a study into intense urban living, called Recommendations for Living at Superdensity. ‘Then we thought a density of 150 dwellings per hectare seemed brave,’ Park said. ‘By 2015, our revisit of the study found 150 dwellings per hectare was the starting point and so we came up with the term...’
Numerous policymakers, pundits and industry leaders have presented their ideas for untangling the Gordian knot that is the UK’s housing crisis. In some respects, therefore, the final workshop was treading familiar territory, with a debate that covered land supply, the private housebuilder model and other delivery routes.

“We need local authorities to be given authority to build. We won’t get a shift in output until we do,” said Alex Jan of Arup. This proposition has long been voiced by many in the industry and won limited support from government in the autumn budget delivered in November.

Another big policy intervention could come in tax reform. The government is moving towards allowing local authorities to retain 100% of business rates with the aim of making local government self-sufficient, and London is set to trial the approach in 2018. Papellists thought that stamp duty and other property taxes could also be channelled for reinvestment locally in housebuilding, in order to provide, as Jan put it, ‘more of a nest, and less of a nest egg’.

With chancellor Philip Hammond setting a target of 300,000 new homes a year to be delivered in England by the mid-2020s, concerns continue about how the UK housebuilding industry can deliver, reliant as it is on traditional building methods and a European labour pool. The budget included investment for innovation and skills in construction, and so could help drive offsite manufacture of homes. Levitt Bernstein’s Julia Park outlined how it could be applied in dense city development: ‘In London there are very common homes – the 50m² one bed apartment, and the 65-70m² two bed apartment. They are fairly standard – there are limits to the design variety you can have. So why not manufacture the best options?’

Technology can help deliver low energy homes that are cheaper to run and factory built for quality – factors that the panel considers to be critical in providing homes fit for the future. But in the for-sale market, there is also a need to educate consumers about the benefits of such homes. ‘We do have a problem with a cultural misunderstanding of what design is,’ said Park. ‘We buy a house based on a five-minute walk round. People don’t know how to buy.’ Quality, standards and consumer awareness could all be raised through the total design process, with its approach benefiting not only homes, but also wider neighbourhoods. ‘We’re not looking at liveability in the round,’ said Park. ‘Cities offer more facilities so we can be forgiving of city housing itself. But suburban communities are falling far short of what makes a rounded community.’ That might be a good place to start innovating.

ACTION PLAN
1 Reform property taxes to deliver local homes
2 Apply technology to improve better quality, more affordable low energy homes
3 Adopt the total design approach to raise public expectations and awareness.
The office is one of the fastest-changing types of building. The fourth debate considered how different work practices are affecting design, and how the industry can make appropriate structures. ‘It seems that we may have been building the wrong thing for the past 30 years.’ Now there’s a statement. Have we really got it so wrong with an entire generation of office buildings across the UK? The point, made by debate chair Peter Head, is that office buildings are being refurbished and redeveloped long before their design life warrants it. ‘If you look at the life of a commercial building, the desire for it doesn’t last long,’ he said. ‘There is a mismatch between the specification and the need to change the building. That leads to the conclusion that offices should either be designed for a short life to match their use life, or for a very long life to provide a skeleton for adaptive reuse.’

Continual renewal of commercial buildings is one of the fundamentals of the property market and drives city growth. But the sustainability of this approach has been questioned, notably in several high profile cases involving postmodern architecture, such as the two Peter Foggo buildings in the City of London’s Broadgate, which are being replaced with a far larger tower. This quest for ever bigger, taller, newer commercial buildings was one of themes of the final debate in the 2017 series, which focused on the commercial property sector.

Alex Jan of Arup outlined how policy and the market shape commercial buildings and cities: ‘Success means cities have to be economically attractive in the opportunities they create, as well as physically attractive,’ he said. ‘The busier cities are, the more public services they need and that costs money.’ That in turn helps to drive taller buildings, he said: ‘Cities such as London are experiencing growth in population and employment, and policy is designed to encourage the concentration of development. Local government is incentivised to allow tall buildings to be built to support the provision of public services. In the UK this is the only way local authorities can fund key services.’

Commercial development contributes to the city through its buildings and places, through the infrastructure payments its developers make, such as the community infrastructure levy (CIL), and through the rates paid by business occupiers. The business rate system was recently reviewed by the government but remains controversial for the burden it imposes on companies. ‘Council tax on a flat on Hyde Park Corner will be around £1,800. Business rates for a retail unit on the ground floor, at roughly the same size, will be many times that,’ said Savills’ Oliver Pursdon.

Developers are balancing a complex
There is a sense that the pure commercial building doesn’t really exist any more, and that now development is more about placemaking.

Peter Head, chair and CEO, The Ecological Sequestration Trust

mix of business risks and rewards, as Mark Swinburne of Argent highlighted when describing his company’s approach at its King’s Cross regeneration. ‘The value generated by the offices of King’s Cross allowed the infrastructure to exist, particularly in the public realm,’ he said. ‘There is a question of how much developers are expected to pay. We paid £450 million at King’s Cross and the infrastructure doesn’t generate value, but we do it because we are there for the long term. We derive capital growth from creating a great space that people enjoy.’

That approach is far from universal, and policy and profit have given us a legacy of office buildings whose characteristics were summed up by Neil Howsam of Piercy & Company. ‘Fifty years ago they were about floorplates, toilets, and the endless drive for efficiency. But nobody ever walks into an office building and says, “Look, this is an efficient building”’.

The office building is, however, changing, as numerous influences converge, including disruptive technologies. ‘There seems to be a divergence from ownership to sharing and use,’ said Arup’s Jan.

Tech and creative businesses have also driven a new office market. Low cost ‘deburbs’ of ageing buildings in areas like London’s Old Street have provided raw, flexible, character-packed spaces where these SMEs combine work and play. Now, a broader occupier base is being attracted by products like WeWork’s global co-working developments, which offer such benefits as pet-friendly policies, and Derwent London’s White Collar Factory with its deconstructed but highly flexible space. That is feeding into more mainstream offices.

Old Street has seen demand, property prices and developer interest soar since it became a hipster hotspot. Some tenants are now moving to new places offering better deals. That’s not necessarily negative for the city, Savills’ Fursdon points out. ‘It invigorates other areas as they move to them.’

Many of today’s tenants want not only location and the right price, but the kind of features that will help them attract and retain millennial workers. ‘We don’t sell office space,’ says Argent’s Swinburne. ‘We sell amenity – first comes food, then cycle provision, and then terraces.’

That blurring radically alters the concept of office development, said Peter Head: ‘There is a sense that the pure commercial building doesn’t really exist any more, and that now development is more about placemaking.’

...Where we go from here

Over the centuries commerce and industry have taken us from the marketplace to the skyscraper. In seeking creative conversation and bustle in their offices, today’s firms seem to be trying to recreate that marketplace environment, albeit in a steel, glass and concrete shell.

The office block, traditionally designed for efficiency and standing imposingly apart, is now being reimagined as a multifaceted and flexible workplace that integrates seamlessly with a city’s leisure, arts and café culture to blur the boundaries between work and play. The shopping centre and high street are also shifting their focus from shops to cafés, bars and leisure destinations.

These changes all play to the skills of architects, the wider design community and placemaking as a whole, agreed the participants in the concluding AluK Cities workshop. ‘There are greater opportunities to create balanced and sustainable places, helping to generate the liveable city,’ said Neil Howsam of Piercy & Company.

While housing and social infrastructure have been slow to change, commercial development has very different drivers, explained Alex Jan of Arup. ‘Commercial development has to be responsive, and to compete not only nationally but internationally.’ Architects can help clients not only to attract tenants, but also to manage and maximise space and resources and ultimately produce more sustainable development, applying total design.

Today’s ultimate expression of flexible, contemporary working is the co-working space – short term, easily accessible and offering the chance to join a club with access to photocopiers and ping pong tables. Such models are influencing the design of workspace, with dense desk spaces complemented by spacious breakout areas, that could drive further change. ‘The shared economy creates opportunities for intensification and increased productivity of the asset, enhancing sustainability in the city,’ said Howsam.

As market demands for differentiation or excellence in a development continue to evolve, the panel sees architects designing two very different types of buildings: those meeting a relatively short term need, or more flexible, and ultimately sustainable, longer term solutions.

Within this debate it is easy to forget that the concept of working in an office is a relatively new one. In 1900 some 85% of the population worked in heavy industry and manufacturing; today about 80% of GDP is generated by the service sector. Look a century ahead, and it is probable that what constitutes ‘commercial development’ will have changed as much again.

ACTION PLAN
1 Tap into opportunities to intensify and increase productivity
2 Accept that change is constant
3 Design for the short term or, better still, for longer term flexibility.
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Corn Exchange
Leeds, 1863

Cuthbert Brodrick’s practice was based in Hull but in 1852 he won a competition to design Leeds Town Hall. This success led to further commissions for significant buildings in the city – the Mechanic’s Institute (1865) and the Corn Exchange (1863).

Although the Town Hall is often judged Brodrick’s finest work, the Corn Exchange is an equally remarkable achievement. The cylindrical building is faced with diamond-pointed rustication in local stone, belying the majesty of the interior trading hall. This is topped with a soaring elliptical domed roof, reminiscent of a ship’s inverted hull and a feat of Victorian engineering. The architect drew inspiration from Paris’s Halle aux blés which he had studied while on the Grand Tour in the 1840s.

The Exchange continued to trade into the 1980s but business had dwindled and the building’s future was uncertain. Eventually it was converted into a shopping centre by Alsop and Lyall and reopened in 1990. Corn traders were still allocated space to do business and continued to operate there until 1994, when trade ceased for the first time in 131 years.

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