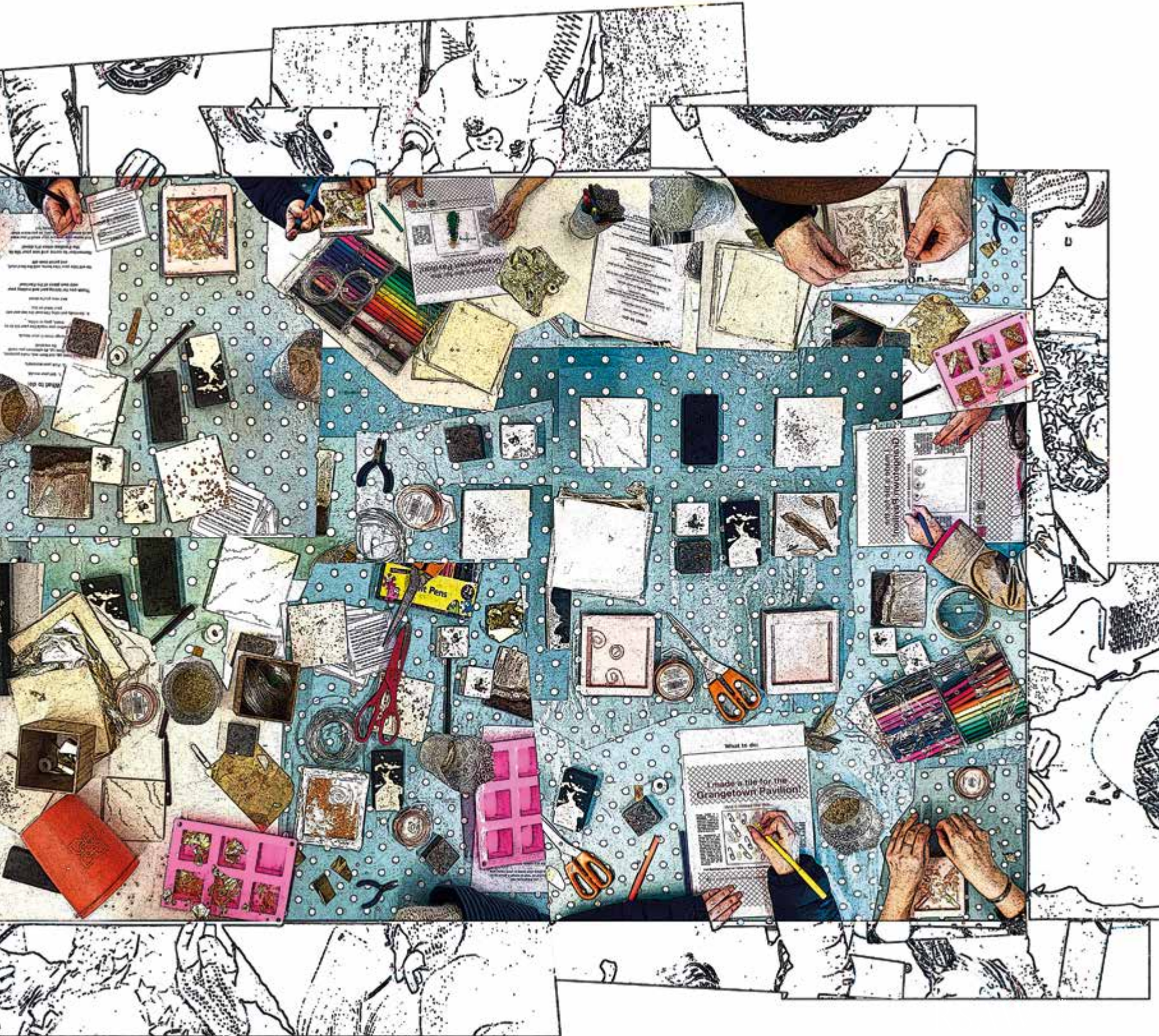


# touchstone

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Cover Image: Sophie Thomas-Lacroix, MArch2 Value Unit  
2018-19, Welsh School of Architecture. It documents a  
tile-making workshop that generated conversations around  
the table about residents' ambitions for the Grange Pavilion  
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# Between the devil and the three small Cs

Over the last decade there have been many clarion calls for project procurement to bring 'social value' to the top of the agenda. It has had many advocates. At last, the euphemistic term 'value engineering' (cost cutting by its real name) was being recognised as myopic, short-sighted and counterproductive.



Grange Pavilion launch day. Mhairi McVicar

The UK Tory government's *Localism Act 2011* signalled this step-change. The RIBA, responsibly looking after its members' interests, rushed out its response later that year in *Guide to Localism: Opportunities for architects*. The government followed that with the *Public Services (Social Value) Act 2012*, putting a legal requirement on procurement to deliver assessable social value to any community. Ten years later, in England, in January 2021 there's now a mandatory minimum weighting of 10% for social value in procurement assessments – hardly a revolution, but it's there, requiring convincing evidence, not 'community-wash'.

Wales has been on this social-value journey itself since devolution ensuring it moved up alongside the four other value assessments in the *Well-being of Future Generations (Wales) Act 2015*. A recent publication, *The Caring City: Ethics of Urban Design*, by the new head of the Welsh School of Architecture (WSA), Juliet Davis, powerfully confirms that all too necessary focus (pp.58–59).

Although Cardiff University's vice chancellor, Colin Riordan, had committed the university back in 2014 to a mission of social responsibility to its local, national and global communities through its *Transforming Communities* programme, this was to chime powerfully, and be further reinforced, by former Welsh Government minister Kirsty Williams's 25 October 2017 speech demanding further commitments of 'civic missions' from the Welsh higher-education sector.

In parallel during this decade there had been years of intense investigative research-backed lobbying of the RIBA, government departments, and public procurement bodies by Professor Flora Samuel and many others that ended up in May 2020 with the publication of the RIBA's *Social Value Toolkit*.

Intellectually, in architectural circles, previous decades of focus on adjusting architectural procurement processes to the realities of community empowerment and takeover resulted in what for many activists in this field is a sort of bible, the 2011 publication of *Spatial Agency* by Nishat Awan, Tatjana Schneider and Jeremy Till, advocating imaginative engagement processes long before, during, and after the architectural design of buildings. It was all seemingly coming together as though by osmosis – a mood of the time.

### Inbuilt tensions

But, in this realm of fighting for social value, serious tensions have always been inbuilt and visible. The coalition government brought forward in July 2010 David Cameron's launch of the 'big society',

but from the chancellor George Osborne's world viewpoint this was essentially saying the public purse has run out of money, we need an austerity budget on all public services, we've huge debt from bailing out the banks after the 2008 crash, we are selling off public assets, so get on with it and organise yourselves to run things as best as you can. To Nick Clegg, the Liberal Democratic partner in the coalition, in contrast, this 'big society' and localism no-doubt appeared like the sunny uplands of community takeover, bottom-up activism, no more incompetence and dead-hand of the local state, and letting a thousand progressive ideas bloom born of local knowledge.

The remarkable Grange Pavilion project in Cardiff (see pp.26–28), this year's winner of the RSAW's Client of the Year Award, was supportively brought into being through Cardiff University's Community Gateway programme of intense academic and student involvement. This provided also long-term guardianship and funding for asset purchasing. It is a vivid creature of this period of rethinking acts of social value; but equally we should not forget that the context was also a creature of Cardiff Council's *Stepping Up* policy in 2014, divesting itself through asset transfers of 30 community buildings to 'rationalise the estate, to significantly reduce operational costs and the maintenance backlog'. Osborne's mission was working. More of that later.

The educational value of such positive community engagement for academics, students, and practising architects, the learning of the skills of 'appreciative inquiry' and not coming into projects seeking problems with solutions, but exploring possibilities *with* and not *for* people, the building of community identity and confidence through patient shared story-telling and research, all of this has been invaluable and inspirational. We can all learn from it.

The rigour and challenges of the ten-year process, which can be seen in the 161 pages of remarkable Community Gateway documentation put together by Mhairi McVicar's team, has finally resulted in the public launch of the pavilion in July this year (see left). Through five years of conversations and events reaching over 3,000 individual residents and over 80 community, public-, private- and third-sector organisations, a cohesive community brief eventually emerged that three years later became this evolving community pavilion and its gardens.

We should not, of course, imply that Cardiff University was alone among the UK higher-education institutions pursuing this sort of agenda, but the Grange Pavilion project was the

first of what has blossomed into a remarkable 83 partnership projects in the Grangetown community involving over 20 academic and professional services departments. The university committed to a core team of four staff and project funding over the last decade, and this commitment continues. This is serious, enlightened undertaking and it is that architect academic, Professor Mhairi McVicar, who has been – and still is – the 'academic lead' on the Community Gateway Partnership's programme.

### A parallel system

However, let's be clear. It's not an implausible scenario that in the face of rapidly tipping climate change and the other social, political and economic perils facing us, that sliding levels of system collapse will be the order of the day for the foreseeable future and, therefore, the principal task for the majority of us, architects included, then becomes the working with the most vulnerable to rebalance the utterly unsustainable inequalities of the current moment.

Building up resilience, such as that going on for over a decade at Grangetown, could or should become the necessary focus for a large amount of architectural skill and energy (not that architects, rather than social artists, storytellers, theatre performers and many other creatives, don't all have a contribution to make), but is this system that underpins the Grange Pavilion-type procurement model, one that is essentially running in parallel to free market capitalism? Does it have the capacity to meet the inevitably rising tide of demand that will confront us? Equally, does an architectural system largely ruled by a free-market economy have the capacity and time to do what it takes?

In an honest telling-of-truth-to-power article by Mhairi McVicar and Neil Turnbull in 2018 entitled *The live project in the participatory design of a common ethos*, they concluded that 'while we have been able to dedicate substantial time and resources through annual cycles of live teaching to support the evolution of a project as an emergent community sought to define itself before defining a physical construct, the commitment involved in "designing with" rather than "for" communities as the RIBA recommends, poses significant challenges for commercial practice of how this work might be financially sustained and appropriately valued'.

One might also ask if there is sufficient capacity in Wales's public cultural institutions (and the charity funding sector) to repeat ...continued on p.89

It is rare to find the design of national infrastructure done with such an impressive eye to creating visual drama distinct to its setting. We can often be distracted by other value judgements. **Martin Stockley** spells out those potential distractions and in his assessment of the dualling of the Gilwern to Brynmawr section of the A465 through the Clydach Gorge celebrates instead these remarkable architectures in the landscape. Main photos: Huw Fairclough

# Works for the greater good

It is always problematic to raise questions around national projects of this scale without first establishing the context for those questions. All such projects are intended as investments and are made with the expectation of long-term returns. Alongside that sits an acknowledgement of the possibility of some short- and medium-term loss and some local damage; there could be impacts on the physical environment and to local communities in the form of social and economic disruption both during and after construction. Balancing that national long-term gain with the

local disruption is a key element of any successful new infrastructure project.

The environment of the Clydach Gorge is one of great beauty as the river wends its way down and along the spectacularly wooded valley. These latest works on the A465 trunk road to form a two-lane dual carriageway are a response to the shortcomings of the 1960s single-carriageway, three-lane road. The latter was imposed on this stunning natural setting, severed connections between communities on both sides of the valley, and also resulted in safety concerns over the high

level of collisions on this particular stretch of road.

The greater-good aim here was to improve the lives of those living, working and visiting Wales in general, and of the south Wales valleys in particular. At a more local scale, it was to provide improved connectivity for people on foot, on cycles and in motor vehicles. The intention was to do that in a way that would support and sustain local, everyday life and allow the community and culture (and thereby the economy) of the wider area to flourish. (To assess fully and accurately how well the process of consulting and engaging



‘There is much to be admired here in the quality of the completed design and constructed works and, in general, this is a project for which a good deal of both local and national pride is justified.’

with local people was carried out, and whether the design was effectively adjusted to respond to informed local knowledge is a task far beyond the scope of this article.)

**Misplaced focus on time and money**

It is reasonable as part of this appraisal to look contextually at the duration of the construction and the financial cost of the investment. These are areas of great interest to the news media and without context can be the root of unjustified criticism. For major infrastructure, the time to completion is not the critical factor, given that we are aiming for almost indefinite useful life.

The Clydach Gorge works have been long in the making, but in the useful life of the project the construction period is unlikely to be significant. We still benefit from roads laid 2,000 years ago. The public discussion of financial costs is generally held in the social and news media in terms of lavish expense, quoting only total costs and in expansive language. In reality, the cost per head to a population of 3.1 million over 100

years of a project of £330 million is under £1.10 per person per year. Even including maintenance costs that is not a high target in order to deliver positive return value.

As for the finished article, at Clydach Gorge there is much to be enjoyed and admired. This is a complex civil engineering project and arrives in the context of the all-too-many dull, mediocre, poorly designed examples elsewhere across the UK. The south Wales valleys are extraordinary in their form, their physical beauty, and in the human resilience of their present and historic communities. The place and its people warrant a high-quality response and on the whole this project delivers.

**Rising from the landscape**

The strategic approach to working with the existing landscape references typical mountain valley routes with the road hugging the valley side, subordinate to and acknowledging the local topography. The series of new footbridges that connect the former severed communities in the

Hafod Footbridge

Gateway Arch

Pont Harri Isaac Footbridge

Blackrock Footbridge

Clydach Footbridge

Pant Glas Footbridge

Saleyrd River Crossing

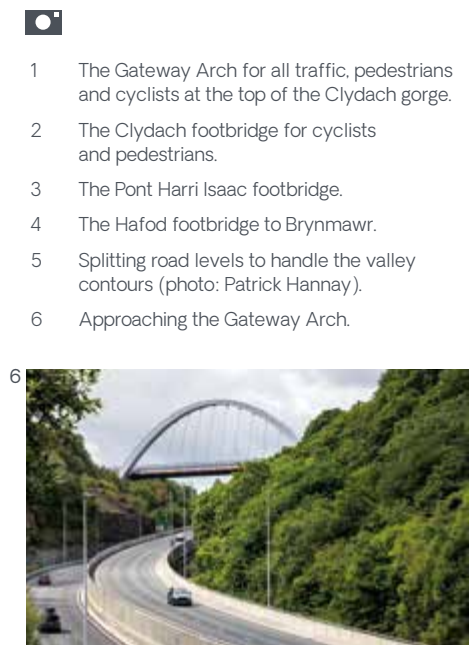


gorge are a welcome addition and more than just a token method of crossing a major road: their curved architectural forms respond directly to the landscape of their particular locations.

This is a landscape of a steep-sided valley with a backdrop of softly stratified rolling hills, with protruding rock escarpments angled up across the contours. The design references this in the generously sweeping curved form of several of the footbridges and the visually startling barrier walls that at times have to separate the carriageways at different levels. Crossing these sweeping footbridges allows new valley-wide views from locations other than inside a vehicle and in ways that allow time to take-in the lush natural environment.

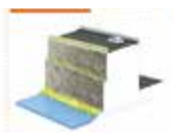
The purposely asymmetrical section design of the footbridges provides a sculpted, weathered-steel upstream edge to each, giving a reassuring solidity for those of a vertiginous tendency. The sweeping geometry is powerfully reinforced for those faster moving vehicles coming down the gorge. By contrast, the practically transparent, open, downstream balustrade celebrates the joy of the wider valley views and the Monmouthshire hills from each bridge. Such open exposed drama on pedestrian infrastructure crossing a trunk road is wonderful to see. So often they are visually closed off. The sweeping curves of the Blackrock, Clydach and Pant Glas footbridges are a particular joy in this setting.

There is a sense of a deliberate choreography to the collection of bridge structures. The more direct and less dramatic Hafod and Pont Harri Isaac bridges sit more quietly in their particular settings. The Gateway Arch bridge at the top of the gorge has to provide a key local connection by foot,



- 1 The Gateway Arch for all traffic, pedestrians and cyclists at the top of the Clydach gorge.
- 2 The Clydach footbridge for cyclists and pedestrians.
- 3 The Pont Harri Isaac footbridge.
- 4 The Hafod footbridge to Brynmawr.
- 5 Splitting road levels to handle the valley contours (photo: Patrick Hannay).
- 6 Approaching the Gateway Arch.

Back to back retaining wall - Hafod Arch side



Split Level Retaining Wall



Natural Cut Rock



Cut Rock Below Nailed Soil



Hand Placed Masonry Faced Wall



Masonry Wall Below Planted Slope



Masonry Clad Existing Retaining Wall



Planted Slope A



Gilwern Canal Retaining Wall



Planted Slope B





cycle and road from Brynmawr to Maesygartha and Gilwern down Old Abergavenny Road. There is another route over the Llangatwg escarpment. With its parabolic structural arch, the form feels a little too powerful for its function as a minor road crossing and visually in its landscape setting, particularly close-up. It could be seen as a gateway for those on the A465 descending into the gorge, and equally a termination and gateway out of the gorge for those ascending. But, in its high visibility, it is also something of a symbol, acknowledging the historical significance of a much older local road in among these most recent national infrastructure improvements.

### Much to be admired in detail

Elsewhere, there are careful and cost-effective nods to local history. The elegant simplicity of the engineered connection of handrail to balustrade, a bent and twisted flat steel section, references the Grade II\*-listed Smart's Bridge at Clydach Ironworks. Pennant stone cladding is used for some of the engineering elements, a detail that won't be loved by all including this author. Facing major structural elements with thin facade treatments somehow undermines the power of the engineering. But this is a stone gorge and it's arguable that nothing is lost in referencing that context.

Where there are significant areas of exposed concrete the surface has been given a stratified pattern suggesting the soft roll of the wider landscape and those rising rock escarpments. In other areas stone clad walls appear as a reflection of the local geology.

The concrete arch, grass and earth-topped bridge linking Station Road to Gilwern at the bottom of the gorge, which was by a different design team, is elegant and takes a different approach in its response to its context. It is recessive in the landscape rather than attempting to integrate positively.

Least successful are some of the standard, roadside, grass-planted retaining walls, which are arguably contextual to nowhere. That said, little about the physical forms speak of anything but focused human involvement, a care for craft, and of an accomplished design and construction team collaborating well.

There is much to be admired here in the quality of the completed design and constructed works and, in general, this is a project for which a good deal of both local and national pride is justified. It is a well-considered and soundly executed piece of work with enough robustness in its design and construction to serve deep into the next century. As an exercise in generating greater vehicle capacity, journey-time reliability and, importantly, the delight that is essential to good design, it is a great success. It is a credit



- 1 Geometry of new bridges responding to sweeping, rising landscape forms.
- 2 Asymmetrical balustrading: the open side offers the view.
- 3 The Pant Glas footbridge.
- 4 Railing detail, a reference to a nearby historic bridge.
- 5 The Station Road to Gilwern arch by a different design team; more recessive in the landscape.

- 6 Stratified patterning of the concrete abutment elements.
- 7 Grand steelwork on the Saleyard river crossing.
- 8 Pennant stone cladding: contextual or over fussy.
- 9 Sweeping corten steel and faceted removeable timber panels.

### Credits:

Client: Welsh Government

Main contractor: Costain

Consulting engineer:

Atkins Jacobs JV

Specialist architect:

Knight Architects

Landscape architect:

RPS Group

to its design team, the site construction team, and the Design Commission for Wales, jointly demonstrating the value of commitment and collaboration in delivering work of this quality.

### Assessment for the long term

The success of an individual piece of major infrastructure can't fairly be judged fully in the immediacy of its completion. The necessarily long process from inception, through commissioning and approval to construction, is only the start of discovering the long-term value of the physical thing we are introducing into our environment; something we are making primarily for its long-term value, and a long-term value that can't be assessed fully without the passage of time and use.


Assessing a single project through arguments about using the funds for some other piece of infrastructure are largely irrelevant. Basic needs are not about 'either or', they are about 'and, and'. We can, within our budgetary constraints, have adequate roads, railways, homes, schools and health-care provision appropriate to our societal desires. Is the amount of investment in this work appropriate? Was the decision to instigate this project appropriate in the context of climate change and future transport needs? These are national democratic questions that would have been debated long before this project arrived at construction stage and would have taken into

account the long timescales involved in bringing these sorts of projects to fruition.\*

If neglected areas like south Wales are to flourish again they still need significant levels of investment – and investment in the broadest sense of the word. The historic exploitation of the area's resources and its people generated major value that went outside Wales and now that debt is overdue for repayment. National infrastructure is not about giving a person a fish, nor about teaching people to fish, but it should provide a basis from which any manner of positive community development might grow and flourish. Functionally, this latest work in the Clydach Gorge provides greater road transport capacity, reliability and safety – and if we are to bring more investment into the area these strategic connections are arguably justifiable.

*Martin Stockley is vice chair of the Highways England Design Review Panel, a panel member on the HS2 Design Panel, and a design review panellist for Places Matter!*

\* Following the recent Welsh Government decision to stop all major Welsh road schemes on climate-change grounds, the current dualling of the final section of the A465 from Dowlais Top to Hirwaun was too far down the line contractually to be halted. *Editor*



# Will ye, won't ye, will you join the dance?

Do we know where we are going on energy-generating infrastructure in Wales? Who's in the driving seat?  
**Fiona Bateman reports.**

With depressing regularity, the UK government's stop-start opportunistic and irresponsible approach to energy generation policy (or any policy on carbon-demand reduction) has become all too familiar. Instead of investing 30 years' ago in a sound strategy focused on renewables, building on the exemplary work by the late-1970s CAT innovations at Machynlleth, it has taken Putin in 2022 to provoke the latest knee-jerk, back-of-a-fag-packet calculus, the *British Energy Security Strategy* (HM Government, April 2022). With a sub-Brexit mantra of doing it all ourselves (don't say anything about importing French nuclear generated electricity, or Middle Eastern or Norwegian gas), there is loose talk of reopening coal mines, fracking for gas, and new oil extraction licences, but only to ensure the transition you understand. It seems in the panic nothing is off the table. Carbon capture at source and storage (still an unproven technology at a scale to be meaningful), just like carbon

**'Wales has always been blessed with natural material source opportunities and with 2,704 km of coastline and huge tidal ranges coupled to the spectacular asset of the natural water harbour of Milford Haven, then Pembrokeshire is yet again massively under the energy-generating spotlight.'**

off-setting, the get-out-jail-free cards for our addiction to fossil fuels, they are all trumpeted with a fanfare to the haze of the sunny, uncertain and incontestable target dates for the net-zero-carbon uplands.

Infuriatingly for the Welsh Government all decisions in this realm come under a UK-wide infrastructure remit. There is a massive inter-governmental current tussle over the Aberpergwm coal mine. Swansea's now infamous and ground-breaking proposal for a 320 MW tidal lagoon of 2015 was refused by Westminster even when the Senedd wanted to assist with its own money (more of that later).

### Going nuclear again

Now it looks like nuclear in north Wales is back in the frame. Wylfa nuclear power station on Ynys Môn is the primary target; although it's actually in its ninth year of decommissioning, with Horizon Nuclear Power officially withdrawing its planning application for a £20 billion power station at Wylfa in January 2021 after 'funding challenges'. Now it's suddenly on again, with Westinghouse and Bechtel in the frame, but by when, and how? It's all massively vague.

Trawsfynydd's nuclear site in Snowdonia, which began decommissioning in 1991 and might be site safe by 2083, is also suddenly a potential site for new, small modular reactors (SMRs) executed by Cwmni Eginio, wholly-owned by the Welsh Government. This is surely another of these wish-and-a-prayer technologies with not a cat in hell's chance of being up and running by the 2030s when it might be most needed.

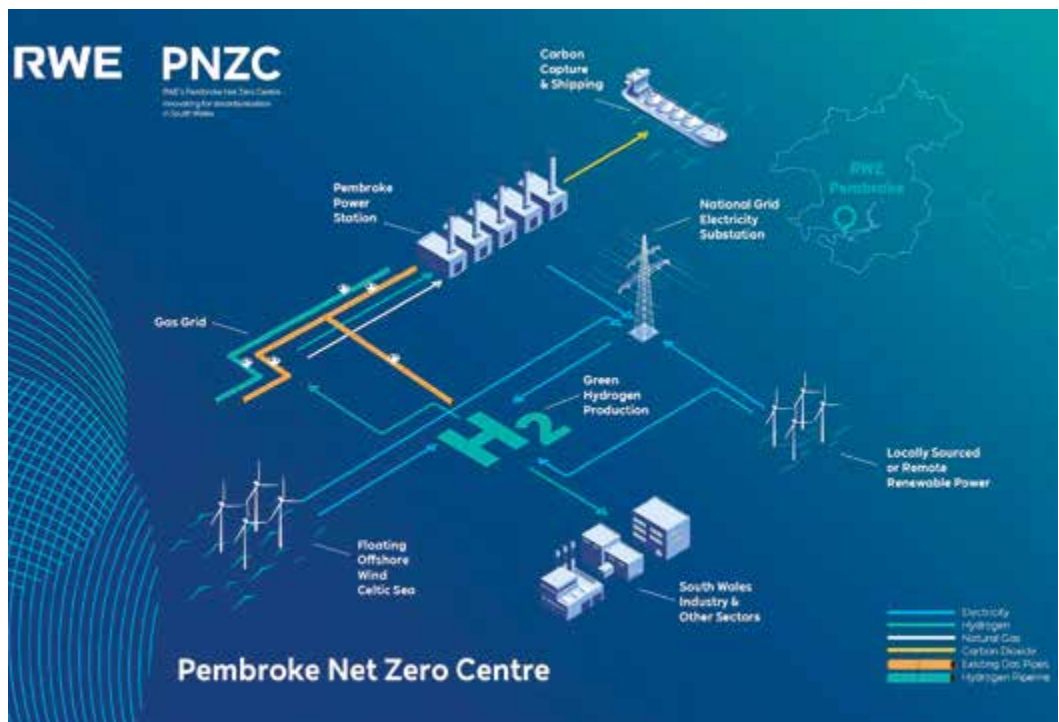
### Dock of the bay

Of course, Wales has always been blessed with extractive power and natural material source opportunities (coal, copper, slate, water, on-shore wind) and with 2,704 km of coastline exposed to south-west winds, and huge tidal ranges coupled to the spectacular asset of the natural water harbour of Milford Haven, then Pembrokeshire is yet again massively under the energy-generating spotlight.

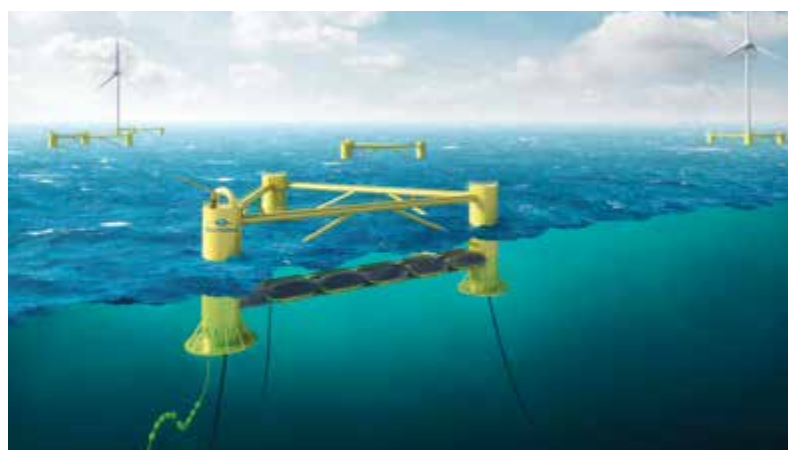
Under the driving force of the German city Essen-based RWE, responsible for all of north Wales's off-shore fixed wind-farm installations and three on-shore wind turbine installations, RWE plans to open a Pembroke Net Zero Centre next to its 2,181 MW gas turbine plant built in 2012.

Like Shell and BP, and it seems all former major global fossil-fuel-driven electricity generator players, RWE's focus is now on off-shore floating wind turbines, supposedly so far off-shore so as not to be visible from the national park. These will power green hydrogen generation. RWE has a 100-250 MW 'pathfinder' feasibility study for an electrolyser project generating

**‘Small modular nuclear reactors are surely another of these wish-and-a-prayer technologies with not a cat in hell’s chance of being up and running by the 2030s when it might be most needed.’**



- 1 Germany's Essen-based RWE's plans to develop a Pembroke Net Zero Centre scheme to harness energy generated in coastal waters for 'green' hydrogen. The on-land base will be sited next to its current 2,181 MW gas turbine plant. (2)
- 3 Houston-based TechnipFMC is planning to trial the £20 million, 1.5MW Pembrokeshire Bombora Wave project linked to floating off-shore wind turbine arrays.





‘Maybe it takes a generation of young visionaries, not yet in practice, to illustrate a different way forward.’

green hydrogen powered by those offshore floating wind farms. The press release breezily, and maybe irresponsibly, talks of ‘hydrogen for home heating’, the tempting bait for the owners of all the gas pipe network across the UK who are praying they will not be left with stranded assets with the target in Wales for domestic gas boilers to be abandoned by 2030. Most serious energy engineers think this is a false dawn. Hydrogen will be needed for transport and major power-hungry industries like steel making.

Other big energy beasts, intent on capturing the market in renewable energy generation, that are prowling around Pembroke are Houston-based but Newcastle-on-Tyne-registered, engineering procurement and construction contractor TechnipFMC, which was ranked number 1 in the top 10 list of petroleum international contractors in 2018. (What a difference a few years makes!) Now they are getting alongside the trialling of the £20 million, 1.5 MW Pembrokeshire Bombora Wave project, which will be the world’s most powerful wave energy converter. The 900 tonne, 75 m long by 15 m wide and 6 m high pilot 1.5 MW module will be secured to the sea bed. With early funding from the European Regional Development Fund via Welsh Government the

final assembly process on Pembroke Dock’s quayside this year will then lead to its launch out to its operational site in East Pickard Bay to validate its use in the open sea. The bigger prize, however, comes when the vast wave power installation is linked to the InSPIRE project with TechnipFMC to create hybrid floating wind turbine and wave arrays.

### The tide is turning

Like the naysayers on wind and solar there will be talk of days of becalmed seas, so the one utterly undeniable and reliable renewable resource is tidal. Wales is blessed with huge tidal ranges. The first tidal lagoon proposed at Swansea in 2015 never came to fruition. Westminster would never back it. The Welsh Government is not giving up. In 2021 it launched the Welsh Tidal Lagoon Challenge to the market.

Marine Energy Wales (MEW) the private sector cheerleader for tidal and wave power in Wales, based in Pembroke Dock, welcomed the vote of confidence. MEW’s advisory board has all the main players on it. The managing director of the 5.62 MW Morlais floating tidal turbine project off the west coast of Ynys Môn is there, a project developed by Spain’s Magallanes Renovables. The chair of the Tidal Range Alliance, Ioan Jenkins, is

- 1 The Blue Eden project, Swansea’s new 9.5 km long tidal lagoon scheme, this time with floating solar, floating homes, a data centre and a gigaplant.
- 2 The visitor centre at Aberthaw by Loyn & Co, as yet not under the demolition hammer.



**‘They breezily, and maybe irresponsibly, talk of ‘hydrogen for home heating’, the tempting bait for the owners of all the gas pipe networks who are praying they will not be left with stranded assets with the target in Wales for domestic gas boilers to be abandoned by 2030.’**



- 3 In process of being decommissioned. Trawsfynydd nuclear power station, north Wales. A site for new small modular nuclear reactors?
- 4 Wylfa nuclear Power station, Ynys Mon: an uncertain future?
- 5 Aberthaw coal and bio-mass power station, Vale of Glamorgan coast. To be demolished and replaced by a site for renewable and green-energy projects.
- 6 Vision for the Aberthaw site.

a member. (The Alliance’s former chair, Henry Dixon, a bridge builder and former high sherriff of Clwyd floated the notion of a £7 billion tidal lagoon between Llandudno and Prestatyn in 2014). Bombora Wave Power’s project manager Madeline Cowley is an advisory board member along with RWE’s Celtic Sea development lead, Philippa Powell.

One possibly significant player not present is Bridgend’s DST Innovations, which makes industrial batteries in the USA. Chief executive Tony Miles is co-founder of the Blue Eden project working alongside Associated British Ports and Swansea Council. Dr Rutger de Graaf, co-founder and managing director of the Dutch company Blue21, is design and technology partner for all the floating elements in this project. This is the new kid on the block for Swansea’s tidal lagoon future. But this time it’s a private market development not dependent on public money hand-outs. It’s not just a 9.5 km long lagoon with tidal turbines; there could be three phases each dependent on a sequence of energy generating installations. The project would have tidal driven turbines but it would also have a 72,000 sqm floating solar array, 150 floating homes, residential waterfront homes for a further 5,000 people, a 94,000 sqm data centre and, of course, the go-to development of the moment, a 60,000 sqm gigaplant (making batteries for electric vehicles, using, but not burning anthracite coal instead of lithium – a technology still to be tested and proved).

**Power down: embodied energy up?**

And so, we come full circle to the visually striking, but soon to be demolished, Aberthaw coal-fired power station on the Vale of Glamorgan coast, which was owned latterly by RWE. In the last years up to 2019, biomass supplemented the coal burning, and gas turbines were also installed on the site. The 2008 Aberthaw visitor centre by Loyn & Co has avoided the demolition hammer

so far. In March 2022, £8 million of Cardiff Capital Region’s £1.2 billion City Deal funding was used to purchase the whole 200 ha site from RWE. This was to stop ‘a speculative approach’ that ‘might asset strip the site’. It has committed a further £28.4 million to demolish the power plant and fund remediation and development work.

Somewhat vaguely it will be replaced by initiatives that ‘will support the production of renewable and green-energy projects’. There will be battery storage, a zero-carbon manufacturing cluster to include green hydrogen production, a green-energy innovation centre, a biodiverse ecology park with amenities for the local community, and of course a future gigaplant. It is encouraging to know that the former climate-change-denying Tory MP, David T C Davies, who is now the parliamentary under-secretary of state for Wales tells us that ‘this is a terrific project and an important one as we transition to a greener, cleaner environment and a net zero economy’.

Like Pembrokeshire, Cardiff Capital Region (CCR) joined the band of ever hopefuls bidding to be the one site the UK government’s £222 million design concept development for a prototype nuclear fusion reactor. It was not to be. Nottinghamshire’s Ratcliffe-on-Soar power station site seems the likely winner. Plans there have suggested there will be a ‘blow-down’ event at this former coal fired power station before 2030. It will close in September 2024.

The one energy issue nobody in the development world wants to really discuss is embodied energy, because it challenges so fundamentally the knock-it-down-build-it-new tendency that keeps the growth cycle buzzing and the carbon guzzling unquestioned. Did anyone stop for a moment before the ‘blow-down’ instinct kicked in at Aberthaw and Ratcliffe-on-Soar? Maybe it takes a generation of young visionaries, not yet in practice, to illustrate a different way forward (*see pp. 12–15*).

# Retrofitting energy generators

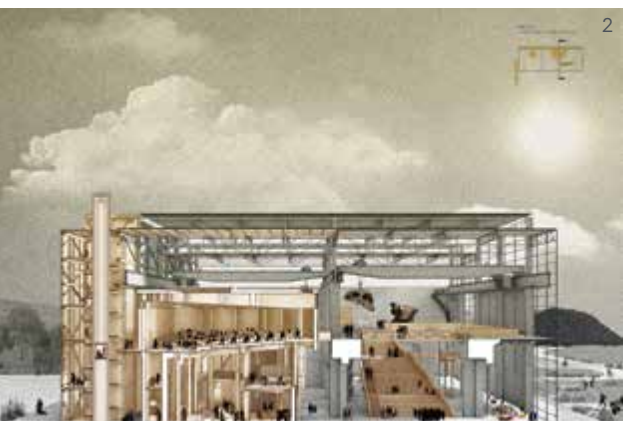
It seems to be almost impossible for those responsible for redundant energy infrastructure to recognise the opportunity for reuse, thus saving tonnes of embodied carbon. It seems we may have to rely on the younger generation to imagine two better, smarter futures.



- 1 A new 'Fun Palace': one element inside the existing but re-purposed turbine hall.
- 2 One turbine and its plinth removed and replaced by a 350-seat citizen's assembly hall for the East Midlands.
- 3 People power replaces coal-fired power.



**CASE 1:**  
**Power *with* the people: re-imagining Ratcliffe-on-Soar power station post 2025**  
William Harvey,  
Centre for Alternative Technology, MArch



During an online talk for the Architecture Foundation's 100 Day Studio in 2020, Sadie Morgan of AHMM (and recently appointed chair of the National Infrastructure Commission's design group) said 'infrastructure is often done to rather than for people'.

This rang true of Ratcliffe-on-Soar power station's past and is continuing into the present and possibly its future. Due to be decommissioned in 2024, the site is planned to become an incinerator and some form of 'green' technology park. There is government talk of small modular reactors possibly coming to the site or even a nuclear fusion pilot project, but this will no doubt exacerbate the erasure of the eight monumentally iconic cooling towers, the 200 m flue and all the other pieces that make up the current site, including the turbine hall. Decades of memory would be lost in seconds.

Power *with* the people is a project that envisions an alternative strategy, one that sees both an opportunity for society to memorialise the loss of its vast industrial heritage –

preserving it in some parts. Meanwhile, coming to terms with the fact that this is also climate-change heritage, we need to view the buildings and structures as an urban mine. In other parts materials would be carefully demolished, reused and/or recycled.

The result of this dual strategy displays the tension between preservation and reuse. Intentional ruins and the reworking of the objects and spaces would form a new layer of civic infrastructure. Drawing on Cedric Price's 1961 vision, the Fun Palace, which sadly remained on paper, the turbine hall at this power station aims to become that infrastructure, creating a people's palace, including the elements of 'fun' that Price had in his programme, a place for children and adults to play together, while also reflecting the severity of our time. Power would be refocused and redistributed where it needs to be, with the people. For example, one turbine and its plinth would be removed and replaced with a 350-seat assembly hall, enough capacity for 50 representatives of each county in the East Midlands to come together in a citizens' assembly. The former coal-fired power station, used to turn steam turbines generating electricity, would make way for people power, generating decisions for the region's future.

These infrastructures are complicit in contributing to global climate change and ecological breakdown. This moment presents an opportunity for this industry and its owners to change tack, to relinquish these giant husks, taking a step back from the typical profit-led decommission/redevelopment cycles, and replacing coal-fired energy generation with meaningful participation at its core. Paving the way for society's evolution from a democracy dictated by rampant capitalism, to one that fiercely facilitates community, care and communication.





**Key to site axonometric**  
**Green Infrastructure:**

- 1 Local wildlife area expanded onto the site.
- 2 Formal leisure gardens created to the south of the Turbine Hall.
- 3 Community fruit and vegetable growing spaces.
- 4 Willow parade on East bank of lake.

**Key to site axonometric**  
**Blue Infrastructure:**

- 5 Existing water channels + culverts reused.
- 6 Proposed water channels + culverts to complete system.
- 7 Proposed lake in place of the existing pulveriser units and boiler house (provides heating for offices/workshop spaces/assembly halls/crèche).
- 8 Reuse of settling lagoon for reed bed system.
- 9 Water sourced from River Trent reusing existing pump house.

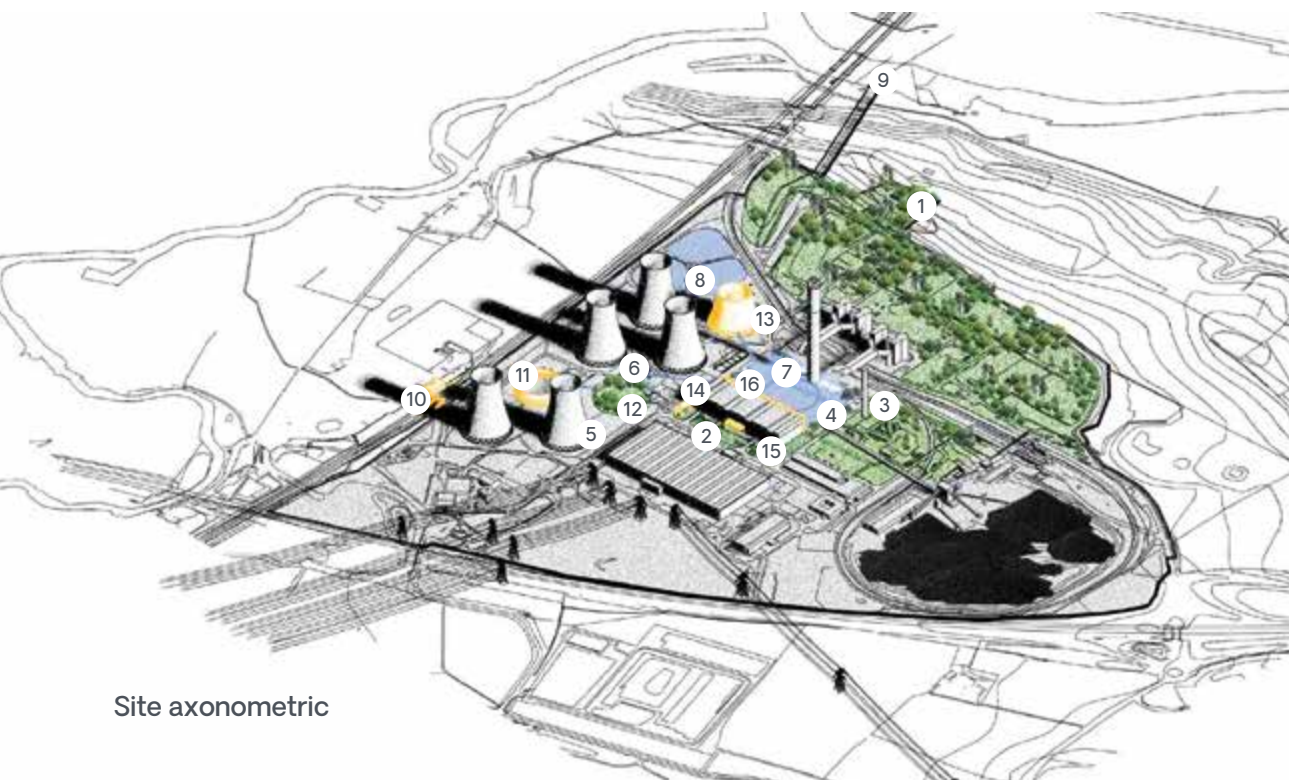
**Key to site axonometric**  
**Civic Infrastructure:**

- 10 Extension to east Midlands Parkway Railway Station providing public access to the site.
- 11 Cooling tower ruin 01 - The Henge
- 12 Cooling tower ruin 02 - Regrowth
- 13 Cooling tower ruin 03 - Waterway
- 14 West entrance portico (Cafe/Shop).
- 15 South entrance portico.
- 16 Re-constructed north facade (offices / workshops / group working / circulation & WC's)



**Key to site section (below)**

- 1 Reuse of settling lagoon for reed bed system, dealing with black and grey water.
- 2 Local wildlife site expanded onto the northern section of site.
- 3 Existing water channels and culverts reused, plus proposed water channels and culverts made to complete the system.
- 4 FGP Units reused in reverse to create artificial waterfalls, using water sourced from the
- 5 Cooling tower 01 is retrofitted with ringed gantries and a lift, used as a materials testing laboratory for green building materials, to be used locally, regionally and nationally.
- 6 Cooling tower 02 will have a structure built within it like coolingtower-05. The levels on this one will store 'waste' materials, which have been urban mined, to be reused for building projects in the East Midlands.
- 7 Cooling tower 03 carefully deconstructed down to the base ring and left as a ruin / 'henge', thus inviting more sunlight into the base for flora and fauna; another green space on the main promenade.
- 8 Cooling tower 04 removed and remediated tracing the footprint of the former cooling tower: Future development could be a geodesic biosphere, providing conditions for an indoor tropical garden.
- 9 Cooling tower 05 an observatory and multi-level art gallery housed by an elaborate structural frame built within. The frame will be designed to house offices/accommodation/or live-work spaces once the cooling tower is demolished.
- 10 Cooling tower 07 transformed into a public lido and climbing wall. Reusing the pools formed at the base of the cooling tower.
- 11 The man-made lake creating new opportunities for wildlife to thrive.
- 12 A public square / piazza acts as a social collector, at the doors of the turbine hall - the heart of the scheme
- 13 The site to south of A453 previously used for dumping waste fly ash, is proposed as an experimental Agri-voltaics scheme. Agriculture is carried out at ground level with solar PV's above on a framed system, that also supplies water



Site axonometric



Site Section



**CASE 2:**  
**Remodelling Crumlin colliery**  
Rowan Luckman,  
Welsh School of Architecture, MArch

The sinking of the Navigation Colliery in Crumlin commenced in 1907. It was finally closed in 1967. The site contains eleven buildings listed grade II and grade II\* to the north of the town.

Crumlin Power, Luckman's proposal for the site, would store energy through a variety of storage methods that use the already existing structure of the colliery, such as the long mineshafts, flooded underground caverns, and large industrial-scale buildings. No 'traditional' electrical batteries would be used, because these decay over time, are polluting, and unethical to source. Instead, power would be stored through kinetic and potential means: lifting a weight, a raised hydroelectric reservoir, and compressed air storage being just three of these methods.

The scheme would pioneer often new technologies on a small scale, allowing research, monitoring and exposure that could see them applied elsewhere throughout the country.

Energy storage was determined as the new purpose of the colliery, a newly necessary, though under-represented repercussion of our country's increasing reliance on renewable sources of power.

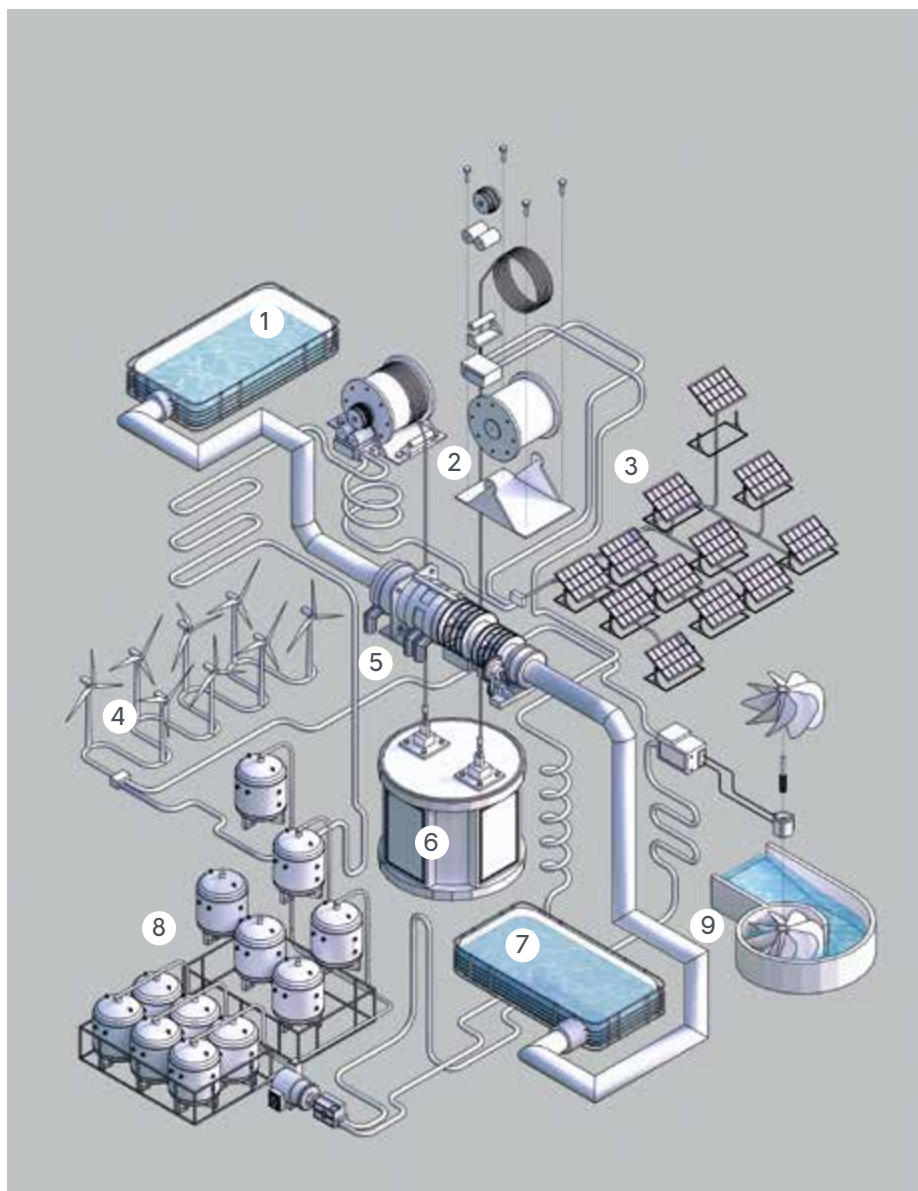


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Key to renewable energy generation system for Crumlin

- 1 Upper reservoir
- 2 Gravity battery winches/turbines
- 3 Solar array
- 4 Wind turbines
- 5 Hydroelectric pump/turbine
- 6 Gravity battery weight
- 7 Lower reservoir
- 8 Compressed air energy storage
- 9 River-based hydroelectric turbine

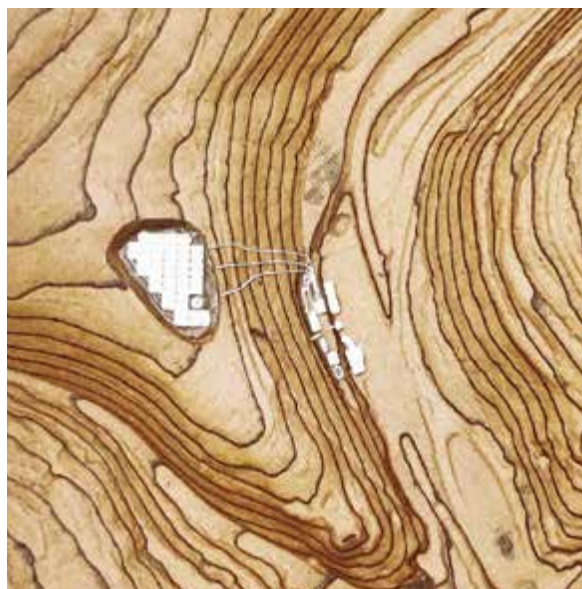
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It's impossible to ignore the similarities to the Navigation's previous life, where energy was stored in the coal of the mine. It became important, however, to redefine its storage ability accounting for our current knowledge about fossil fuels, pollution and carbon dioxide, an unfortunate by-product of what made the colliery what it was.

The aesthetic value of the site would be a large asset in its new mission. The bold, conspicuous nature of the proposal would draw attention to the necessity for energy storage in a climate where renewables are often hidden away or treated as eyesores.

Transparency would be key to fostering understanding about the function of the different storage methods, allowing the public to grasp the scale of the energy we use and experience the 'sublime' through its very visible storage and production on site. Every technological element could be observed, experienced and comprehended along the pedestrian journey through the site. The augmented reality technology would allow another level of understanding and involvement.

5



- 1 Navigation Colliery, Crumlin, 1907: in its current derelict but preserved state.
- 2, 3 Daytime and night-time view of the remodelled colliery site for a renewable energy future.
- 4 Renewable energy systems for 'Crumlin Power'.
- 5 Site model showing upper reservoir.
- 6 New pylon and transformers connecting 'Crumlin Power' to the national grid.
- 7 New adopted language for the site, steel structures and the tensile fabric roofs embracing the existing masonry structures.

Chasing their tails, looking for the wow factor, do those directing the future cities of Cardiff and Swansea know where they are going on behalf of the well-being of their future generations? Gareth Jones goes in search of coherence.

‘Ask a councillor how he or she defines the essence of their city and they all sound the same, up and down the land, many of them parroting the latest buzzwords ... they should also by now have developed a much deeper sense of themselves’.

# Cities of tomorrow

Fourteen years ago, the eminent town planner Professor Sir Peter Hall told an audience at Cardiff University that he was pessimistic about the future of smaller conurbations outside of the south-east of England. The big ‘core’ cities would prosper, but at the expense of smaller, neighbouring ones. I asked what his prediction for Welsh cities was. Cardiff, he said, might just hang on to the coat-tails of the English core cities, but Swansea and Newport faced only managed decline.

Much has happened since, including a global financial crisis, growing awareness of climate-change imperatives, a gathering IT revolution, and of course, a pandemic. All of these forces have been reshaping urban areas, although the exact implications of some of them for the future of city centres are still unclear.

What is apparent, however, is that leaderships in both Cardiff and Swansea still believe in the city as a unit that must be ‘competitive’, and that the key to success is eye-catching ‘development dynamism’ that attracts further inward investment. After decades of ‘megaprojects’, Cardiff is engaged on another major bout of redevelopment, with three schemes that aim to build out the city centre southward on old industrial sites from the central railway station down to Cardiff Bay. With the arrival of City Deal funding, Swansea is embarking on a suite of projects to revive its ailing urban core. But what exactly is the long-term strategy of these two cities, is it sustainable and what are the implications for the people who actually live in them?



### Back to normal but what is normal?

Of the three big projects in the capital, ‘Central Quay’ got planning permission in June. The two others, the ‘Embankment’ site (see p.82) and ‘Atlantic Wharf’, are in the pipeline. They all feature various combinations of offices, residential blocks, retail, entertainment and leisure, and new public realm including much-needed ‘active travel’ river bridges to connect the centre with neighbourhoods like Grangetown.

Cardiff Council’s director of planning, transport and environment, Andrew Gregory, says footfall in the centre is back to normal after the pandemic, but the hybrid working it accelerated has caused some investors to reconsider the amount of office space required, with one scheme on Callaghan Square on hold. However, Gregory maintains the city centre’s expansion south is unaffected, saying demand is merely changed from quantity to quality:

‘All of those schemes have been worked up in the last few years but they are all on exactly this model, which is recognising it’s all about high-quality buildings and spaces, low-carbon, but creating not just the buildings but the space around those buildings, the master plan.’

In our interview, it was striking how often Gregory used the word ‘density’. The council appears to have got the memo, from urbanists Ed Glaeser, Richard Florida, et al, that successful cities are created when we build them high or pack a lot of diverse people into them. There is something in that, of course and, if it’s done properly, it also reduces the carbon footprint. *Future Wales*, the Welsh Government’s national plan, recommends a minimum of 50 dwellings per hectare in new urban developments and higher densities in inner cities.

Property company Rightacres is the developer of Central Quay on a site formerly occupied by Brains Brewery. It’s the other side of the railway tracks from its Central Square development, which brought the BBC and HMRC from the suburbs into the heart of the city. Central Quay is a £1 billion mixed-use project of 2.5 million sqft, on the banks of the Taff. The drawings show a new river bridge and public square that will not be adopted by the local authority.

One of its residential towers reaches 29 storeys and there are 718 apartments on two plots, making this a very dense development indeed (427 dwellings per hectare). The council says it succeeded in reducing the scale and massing

originally proposed (although there was actually an earlier much lower density scheme by the same developer in the public domain). Concerns remain, however. Take lighting. Fully 25% of the flats will have inadequate natural lighting levels, meaning a lot more artificial illumination in the winter. Andrew Gregory downplays this saying ‘some of those units may have had a degree of compromise on the light, but they’re not social housing, so people are choosing to move there and often these units are those facing towards the river or towards the square into quite vibrant spaces so it’s not like you’re looking into the back of a building or something’. That may change, of course, if other buildings grow around these plots.

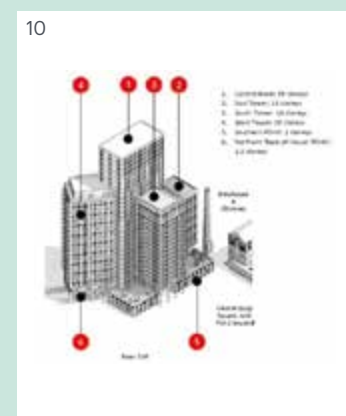
### The domino effect

At the planning committee meeting to consider the proposals, it was noticeable how many times council officers met the concerns of elected members by using the ‘wider planning balance’ argument, claiming the ‘transformational’ nature of the project overwhelmed the objections. Some councillors complained that too little (£2.2 million) had been secured from Rightacres for public benefit (the negotiation with the district valuer began at £20.0 million). That’s not enough

### Cardiff’s Central Quay: how it will be



- 1 Central Quay block site model. White elements recently given planning permission. Orange element refurbished former Brains Brewery. Yellow elements the proposed ‘Ledger’ building and multi-storey car park.
- 2 View of proposed Central Quay development from across the River Taff with later buildings added (3).
- 4 View from Crawshay Street and terrace with later buildings added (5).
- 6,7 Raised views of Central Quay.
- 8 View from south entrance of Central station to development with later buildings added (9).
- 10 One of the faceted and modelled hi-rise apartment buildings in Central Quay by Rio Architects.



‘... Cardiff’s strategy seems to be to get development first and worry about the quality-of-life issues and public realm second...’

to pay for the new bridge or for more than four or five 'affordable homes' elsewhere. Andrew Gregory says the council had a 'very long struggle, dialogue' with the developer but in the end had to accept the district valuer's view about the commercial viability of the project. 'Cardiff is a challenged development area [...] all the UK core cities are in a very challenging spot. Our land isn't very viable. So, we've got to come to a balanced position.'

This assessment gets backing from one of south Wales's most experienced commercial property specialists, who didn't want to be named:

'Commercial property in Cardiff gets rentals of about £26 a square foot, putting it right at the bottom of the UK's premier league of big cities. Swansea isn't even in division 2! Developers prefer to invest in places like Bristol, Leeds, Manchester. Cardiff's returns on investment are very marginal, which is why some developers may skimp on quality. But to be fair to them, they are taking a risk in Cardiff and the city is lucky to get what it can.' Rightacres didn't respond to *Touchstone's* invitation to comment.

Against this background, Cardiff's strategy seems to be to get development first and worry about confidently securing the quality-of-life issues and public realm second, hoping the

momentum generated by 'transformational' projects will create confidence among investors, unlock other schemes and bring subsequent public benefit. Central Quay won't pay for a new bridge but all three – Central Quay, the Embankment and Atlantic Wharf included – will, and fund much more besides. So, it's important not to challenge the commercial imperatives of property companies and investors by insisting too much on planning controls.

Perhaps that's a caricature: Andrew Gregory insists all three schemes are of very high quality. But critics argue for a more patient strategy that would put an end to the 'tall towers' the city's seen a lot of recently. They worry that allowing too much density too soon may in fact jeopardise positive aspects of subsequent schemes, especially the Embankment site being developed by international property investor Vastint. (*see p.82*) If, the council prohibited office and apartment blocks higher than six to eight storeys, critics argue, development would be better distributed, softer, greener and of a more human scale.

'I'm not sure where that works', counters Gregory. 'Whether it's eight, four or five storeys, containing it, you just don't get development. It's

just not viable.' But it does work in many European cities, I suggest. 'In European cities [...] they have been nurturing and developing their cities in a way we didn't and what it means is that European cities are often much more viable and much more amenable and liveable, unfortunately.'

The authoritative London-based Centre for Cities classifies the economy of Cardiff's urban core as 'strong'. The think tank's chief executive Andrew Carter said 'through a mix of good luck and good judgement by policy-makers [...] the future of Cardiff city centre looks positive. In the future there will be changes to how people access and use the city centre: working patterns will be more flexible, retail space will be repurposed for hospitality uses, more people will live in the city centre. But Cardiff has the fundamentals to adapt and thrive.'

Carter's much less sanguine about Wales's second city (where he's from). He provoked a furious reaction from Swansea Council when, in a TV programme I was making, he described the city as '10 to 15 years behind Cardiff', and 'confused' about the purpose of its centre.

## Cardiff

### Central Quay: *how it might have been*



### Central Quay: *buildings to come*



- 1-4 Earlier schemes of varying densities for Central Quay, Cardiff adjacent to Cardiff Central railway station by Rio Architects for developer Rightacres.
- 5 Further potential schemes to come for Rightacres by Rio Architects, adjacent to Central Quay, the 'Ledger' building and a new multi-storey car park.
- 6 The future 'Ledger' building by Rio Architects close to Cardiff Central station.

### Swansea shifting

Five years on, have things improved? Rob Stewart agreed to give me a tour to explain how the council he leads is planning to turn around the decaying urban core, mostly with the aid of £1 billion of government and private money via the City Deal. We started in The Kingsway, a central thoroughfare that became a thundering bypass before getting an ill-advised makeover to accommodate the now notorious 'bendy buses'. That revamp only led in turn to the new carriageways being labelled as even more dangerous. Critics have long argued that the highways department has had a major and often negative influence on the way Swansea's developed and the current leader says he's determined to change that. Some road space is disappearing, making life better for the non-motorist. 'It's safer for pedestrians, we've converted [The Kingsway] into a higher

quality area', he tells me, as we pass smart new areas of greenery 'and part of this is for it to be a catalyst bringing in investment, for example 71/2 Kingsway'. He's referring to a new office block, designed by Architecture 00, which will replace the old Oceana nightclub. 'It's a high-end, environmentally-friendly building [...] home to over 600 workers that will spur on the economy in this part of the city.' He's adamant that the move to more home working will not affect its viability. 'We are way below where we should be in terms of usable office space so we're confident that [...] everything we're building, we'll fill it.'

Swansea's urban core needs urgent attention. After 40 years of actively dispersing economic activity outwards, the council estimates £180 million a year is 'lost' in spending to out-of-town retail and business parks, and that this must be arrested. Covid and online shopping have only accelerated the centre's collapse, with three major chain stores disappearing in recent years. As we make our way around town, Councillor Stewart talks a lot about making Swansea a 'destination'. The number of projects is dizzying: a zip-wire on Kilvey Hill; the rescue of decaying historic architecture; Wales's first six-storey timber-framed building (possibly); a Penderyn

distillery; old department stores and shops getting repurposed or converted into housing; a 'biophilic' building pioneering new ways of living with green technologies; a revamp of the ugly, concrete Castle Square and, a new waterfront entertainment arena, already delivered as part of the £135 million Copr Bay development.

The level of activity is impressive given that nothing much has happened in Swansea since the council abandoned its long-held obsession with bringing in a developer to build a big and inappropriate shopping mall called Castle Quays 15 years ago. Does it all add up to a coherent strategy, however? It feels rather pick and mix, pressing all the buttons, building things and hoping that one thing will lead to another, rather like in Cardiff.

Councillor Stewart takes me across a new bridge, already nicknamed 'The Crunchie Bar'. At last, after decades of having to cross Oystermouth Road, a forbidding dual carriageway, pedestrians and cyclists can now move unimpeded and safely from city centre to waterfront. From the crossing we can see the new arena and 'coastal park'. 'The Arena's worth about £17 million a year to the local economy but it's what it spurs', he tells me, 'so Skyline [the zip-wire operators] are coming on

**'this is leadership that still appears to be struggling to rediscover Swansea's personality ... Councillor Stewart described the architecture as "Instagrammable"... but parts of Copr Bay ... could cloy soon enough.'**



- 1 Proposed revamp of Castle Square, Swansea.
- 2, 3 A new bridge for Swansea pedestrians and cyclists, nicknamed the 'Crunchie Bar' providing an important crossing of the heavily trafficked Oystermouth Road; this provides a long awaited better connection of the waterfront to the city centre.

1



### Swansea New additions to the public realm

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the back of the arena; the aquarium area; so, you add those other reasons for people to be here’.

It’s to be hoped every one of the City Deal projects is a success: many are aimed at addressing clear deficiencies. But in an uncertain world, what can this approach to regeneration guarantee?

**Confidence in assets**

Perhaps more predictable, longer-lasting benefits will come from how the city is trying to exploit, sustainably, its natural assets: its river and waterfront. Councillor Stewart talks about Swansea’s version of Manhattan’s High Line. Swansea’s elevated green corridor is rather shorter, a westwards extension of the new coastal park next to the arena, which will ‘punch a hole’ through the existing civic centre, connecting to a new aquarium on the other side. Regeneration specialist Urban Splash has been appointed as the council’s partner in a £750 million contract to repurpose the civic centre and the unloved St David’s retail mall, as well as provide new housing and riverfront improvements in inner-city St Thomas. If all of this creates more mixed housing stock, a more diverse population and new, sustainable ‘green and blue infrastructure’

that knits the city together and connects people quickly to nature, it will not just make Swansea’s core a destination for visitors but, more importantly, have *long-lasting* and *local* benefits. And well-made, well-used physical connections and infrastructure don’t date as much as some other investments, making them more economically and environmentally sustainable.

Even today the locals will tell you ‘the Luftwaffe badly damaged Swansea in 1941, but it’s the council that finished the place off’. Swansea’s local authority seems determined to learn from past mistakes and Andrew Carter of the Centre for Cities says it does now appear to recognise the need to create a city centre that is attractive to highly skilled knowledge workers and firms.

But this is leadership that still appears to be struggling to rediscover Swansea’s personality. Its recognition of its enviable location and natural capital is encouraging, but to walk around phase 1 of Copr Bay is slightly dispiriting. Its cartoonish footbridge, its shiny, brightly coloured apartment block and LED-lit arena give out a disjointed, slightly theme-park-without-a-theme vibe. This is the city as spectacle. Councillor Stewart described the architecture as ‘Instagrammable’ at the arena’s opening event, but parts of Copr Bay’s built

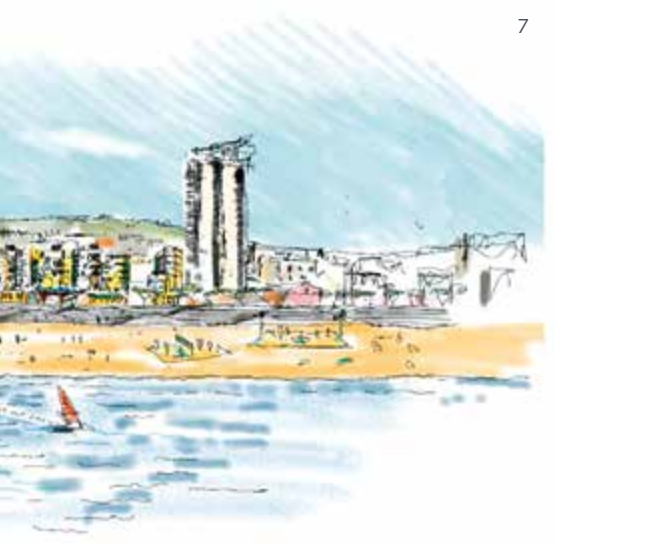
environment could cloy soon enough. Instead, why didn’t someone invite Wilkinson Eyre to design the footbridge? The architects of Gateshead’s Millennium Bridge could have delivered a crossing that would have gestured towards their industrial and maritime museum a stone’s throw away on Swansea’s waterfront. It could have been a modern take on Swansea’s metallic history and been a better way to establish a more coherent and recognisable identity: Swansea as city connecting its people with ease to the nature and amenities around them and honouring its past with clever contemporary architecture that points towards new industrial futures.



**Swansea**  
**New schemes and installed developments**



‘Swansea's local authority seems determined to learn from past mistakes... but still appears to be struggling to rediscover Swansea's personality.’



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### The beauty contest

Despite obvious progress, both Swansea and Cardiff seem wedded still to a reactive and opportunistic approach to development. To be fair, they are up against major commercial forces: landowners, developers, major institutional investors, all looking for a decent return. Their ‘development dynamism’ approach will create development, but will it create sustainable, liveable cities that work for everyone? Cities whose buildings and infrastructure won’t have to be torn down again later on, with all the implications for carbon footprints? Cities that build on and develop the indigenous assets and talents of nature and people, instead of importing big-ticket items to create the wow factor?

When cities fight for ‘development’ in so many sectors – office, retail, leisure, entertainment, the knowledge economy and so on – they improve their chances of getting in some investment but at the expense, surely, of creating or maintaining a coherent identity. Ask a councillor how he or she defines the essence of their city and they all sound the same, up and down the land, many of them parroting the latest buzzwords.

Swansea’s shown before that it can make a bold move in line with its innate, distinctive qualities when it pioneered Wales’s first marina in the 1980s. And Cardiff is making a far-sighted commitment to a metro that will generally improve quality of life and sustainability. Both cities participate in a beauty contest for outside investment, necessarily to an extent, but they should also by now have developed a much deeper sense of themselves and what they want to be in the future. If they then built on a greater (perceived) authenticity, they might be surprised to find that investors and locals alike would respond to it, like they do in many parts of Europe.

*Gareth Jones is a freelance journalist. He has worked for several organisations including the BBC and various UN agencies.*

‘Both cities participate in a beauty contest for outside investment, necessarily ... but they should also by now have developed a much deeper sense of themselves.’



- 1 Kingsway One by Architecture 00 in Swansea, hoping to spur on the city economy.
- 2, 3 The £135 million Copr Bay development with park and entertainment arena.
- 4 Coming to the city soon hopefully a Penderyn distillery.
- 5 Already installed the Waterfront entertainment arena ‘worth about £17 million a year to the local economy’, says Councillor Stewart.
- 6 Swansea’s Civic Centre due to be repurposed by Urban Splash and connected to the westward extension of the new coastal park.
- 7 Above, visionary sketch by Urban Splash working with Chris Loyn, of new green elevated shorefront corridor using disused former railway infrastructure.
- 8 Above right, street art by Jeremy Deller with a heartfelt message for the city.



Above, Clients and design teams: BBC Cymru Wales HQ. Centre, give-and-take space between public and private: Andrea Palladio's Palazzo Chiericati, Vicenza, 1550.

Right, RSAW Client of the Year Award day at Grange Pavilion, Grangetown, Cardiff.

Facing page, BBC Cymru Wales HQ, Central Square, Cardiff: entrance elevation, photo Nigel Young.

# Centre and locale: institution and world

Seeking to establish a relationship with the world beyond their doors in very contrasting ways, two Cardiff institutions have realised two new buildings, only a short walk from each other in the city. **Andrew Carr** visits the new home of BBC Cymru Wales in Cardiff's Central Square and then crosses the River Taff to the Grange Pavilion and park, a new social heart for a deprived community.

Standing in the shade of a crisp aluminium canopy, on the fourth-floor terrace of the new BBC Cymru Wales building, your gaze is drawn across Central Square to Cardiff Central railway station and beyond, to the edges of the River Taff and Grangetown, where another new, more modest, community building, supported by Cardiff University, has been built. While perhaps an unlikely pairing, both buildings demonstrate important lessons about the presence of an institution in the wider world, the roles of the centre and locale, design processes and attitudes to a shifting present.

Both the BBC and Cardiff University are long established in the city. The BBC opened its first studio in Wales above a music shop on Castle Street in the centre of Cardiff in 1923.<sup>1</sup> In the intervening hundred years it gradually drifted further from the centre, occupying several existing buildings before commissioning purpose-designed studios in Llandaf, which opened in 1966. The new building opened in Central Square in 2019 returning them back to the centre of Cardiff. The BBC's wider portfolio of buildings has seen a contrasting movement as operations have moved out of London.

Since its establishment in 1883, Cardiff University has continued to occupy sites in and around the centre of the city. In 2012 it established 'Community Gateway', an initiative to establish 'a long term commitment to a geographically defined community', realised as a set of open-ended student and research projects working with the communities of Grangetown.<sup>2</sup> Over several academic years these activities coalesced into the re-inhabitation and eventual redevelopment of a bowls pavilion in Grange Gardens in 2019, opening as the Grange Pavilion in 2020 and officially launched at a gala open day in June 2022.

Contrasting trajectories are traced by each institution: the BBC drifted from the city to the suburban locale of Llandaf, before being drawn back to Central Square. The university, evolving from the centre, has sought to reach beyond it by establishing a productive presence in Grangetown. A different presence and relation to the wider city is established by each, mediating between institution and world. A similar dialogue is discussed by architectural thinker David Leatherbarrow in his essay 'The Sacrifice of Space' to describe the give and take between public and private, inside and out of Andrea Palladio's Palazzo Chiericati, built in 1550 in Vicenza.<sup>3</sup> The loggia of the palazzo was extended outside the plot owned by Chiericati, gaining him living space above but simultaneously creating a colonnaded space below 'through which the citizens might, under cover, go and do their business, without being molested by the sun, by the rains and snow'.<sup>4</sup> This 'double cut' between public and private interests helps form one edge of Piazza Matteotti, contributing to the life of the city through the design of one side of one building.

The two buildings in Cardiff exchange 'double-cuts' in different ways. The BBC assumes a symbolic presence in its return to the centre, occupying a prominent position in Central Square. The hope is that this spatial proximity and physical presence will help 'engage with audiences', making the institution visible, open and accountable. Security concerns have counteracted this movement since the building's design inception, making it hard now for the building to interact with its immediate environment and become a permeable, accessible part of the city's fabric. It's hoped-for openness has turned inwards – the double cut denied. The Grange Pavilion, by contrast, is very much ... *continued on p.29 >*



## Centre: BBC Cymru Wales HQ

**‘...its thread-like colonnade and glazing, signals an openness to engage with the square, its realisation does something very different ... The handling of these edges is a real missed opportunity for the building...’**

Opposite Cardiff Central railway station, across Central Square, is the BBC Cymru Wales building. Designed by Foster and Partners, this five-storey building includes new studios, offices and production facilities. It achieved planning permission in 2015, allowing a shift from BBC Cymru Wales’s previous home at Broadcasting House, in the outer locale of Llandaf, where it had been since 1966. Beginning its move in 2019, when the new building was ready, it was disrupted by the pandemic and is only now more fully occupied.

In moving from Llandaf the BBC sought a more visible, urban location that would allow it to work in more ‘flexible’, ‘agile’ ways, ‘retain talent’ and ‘connect’ with audiences, who also fund the BBC via the licence fee and to whom it is ultimately accountable.<sup>6</sup> Building on his experience at BBC Salford, Alan Bainbridge, director of workplace and corporate real estate at the BBC, commissioned Sheppard Robson’s interiors group ID:SR to work with BBC Cymru Wales in 2010 to explore potential sites, including the reuse of the Llandaf campus, and develop

a brief. After settling on the Central Square site, a decision much approved of by the staff, several developer-led teams were approached before appointing Rightacres, which partnered with Foster and Partners as architect. A central visible civic presence was pivotal in this move and considered more important than leafy Llandaf, with its compartmentalised campus, or alternatively a site near its Roath Lock Studios in Cardiff Bay.

Roughly square in plan, the building is organised with an 18 m deep L-shaped floor plate along its northern and eastern sides to Wood Street and Marland Street. Corners are held with solid looking reconstituted stone cores containing escape staircases and service risers. A thinner stone trabeation frames the curtain walling to the floors between these ‘bookends’. The ‘media hub’ sits detached from this L-shaped element, linked by bridges across the resultant atrium, which helps bring daylight into the depth of the building. It culminates in a roof garden beneath a crisp oversailing anodised-aluminium canopy, reminiscent of a similar canopy built by



the studio at Vieux Port in Marseille. Thin steel columns drop from this roof creating skeletal colonnades to the south and south-western facades along Central Street and Central Square, facing the railway station.

The area around the square is undergoing extensive redevelopment, including the creation of a new bus station with which Foster and Partners was involved originally, but which is now being executed by local firm Holder Mathias architects. The five storeys of the BBC building and its immediate neighbour, the Cardiff University School of Journalism, is well judged, setting an appropriate scale for the square and avoiding the clashing juxtapositions that litter the periphery of the city centre. While diagrammatically the more solid L-shape helps establish an urban grain for this evolving part of the city and the lighter handling of the hub, with its thread-like colonnade and glazing, signals an openness to engage with the square, its realisation does something very different.

Frustratingly, the notion of a publicly accessible route through the building, though

little signalled on the station facade, has been disabled by security concerns following the Charlie Hebdo attack in 2015 (the year the building gained planning permission) and for now, at least, is not possible. Early visualisations show the station-facing facade with transparent low-iron glass, with the public in the square inhabiting the ground floor of the building, extending the civic realm into, under, and through the building. The potential of retail spaces lining the Marland Street side of the building to open on to this interior public cross-route have been replaced with a bomb-proof wall. A south-facing fully-glazed facade was always going to struggle to deal with the sun, requiring shading or, as is the case here, blue reflective glass, which, more engagingly, reverses at night to reveal the activity inside. This thin skin also has to perform acoustically, to avoid the noise of trains, traffic, and rugby fans disrupting broadcasts, so has become sealed.

Similar rebuttals happen along the ground floor – a single-storey set back creates another colonnade-like layer, lined with more reflective glass punctuated with the signage (and red bins)

of a Pret A Manger, though it's hard to tell if anyone is in there. A couple of slab-like benches and some tables scattered in front of Pret apologetically invite inhabitation. A radio theatre green room is lost behind curtains on the curving glazed corner. The solid bookends offer little to the other corners, nudging the shops that will face the bus station into a recess and terminating a cryptic invitation to pedestrians to walk in the colonnade as it returns along Central Street – a narrow cut-through lined with blank louvres along the depth of the building opposite which hides a shared basement vehicle ramp.

The handling of these edges is a real missed opportunity for the building and BBC Cymru Wales to engage with the daily life of the city 'connect with audiences' and establish a symbolic open presence between the BBC, Wales and the world. Engaging contemporary examples of similar edge situations are not difficult to find, though admittedly might not pose the same security risks – compare Central Square with the recent Town House designed for Kingston University by Grafton Architects. This more substantial



- 1.2 The busy connected interior that is also calm and quiet, is set around an 'L' shaped top day-lit void that separates the "hot and heavy" hub spaces from the "Velcro and wheels" open working areas.
- 3 Ground floor facade set-backs and glazing suggest a curiously off-putting entrance approach given the public welcome implicit in the initial brief.
- 4 Kingston University Town House by Grafton Architects: a model of a more generous and substantial re-working of the loggia and colonnade.
- 5 Shops facing the bus station nudged into a recessive space, terminated by solid corner elements.
- 6 Master plan of the whole Central Square area suggesting an openness to public moving through and between built elements. The built reality is more closed off owing to security issues.



reworking of the loggia and colonnade invites occupation and includes balconies and terraces at upper levels. These ingredients are all there in Cardiff but, lacking the sophistication of Foster's earlier colonnade at the Carré d'Art in Nîmes, which established a visual dialogue with the Maison Carrée, and weighed down by security concerns, the colonnade dissolves into a retinal after-image – rigid cords to hold down the roof in climate-modified gales – not the 'double cut' of Palazzo Chiericati.

Once inside, and past security, the world of the BBC begins to open up and the ambient noise hushes. It is impressive just how calm and quiet this busy, interconnected interior is; acoustic absorbers are discretely integrated throughout. Bainbridge was keen to promote a 'neuro-diverse' workspace and has created a range of environments to suit different modes of activity and individual preference. This is articulated with a combination of highly serviced and often technical, enclosed spaces, alongside partial screening, different sorts of furniture, and more open-plan areas. This succeeds in creating diverse opportunities for different types of work and interaction though somehow homogenises the interior too. Each colour-coded floor is uniquely arranged but uses the same

family of fittings with the same carpet running throughout, softening any differentiation between hub, bridge and support spaces. Within the building everything is open and revealed – from studios, editing galleries and server rooms to live-on-air radio rooms and workspaces. This carries through the ethos of being 'visible' and 'accountable', 'opening up the inner workings of broadcast'. Post-covid, the BBC hopes to start tours of the spaces to allow the public inside, in a controlled way, so that they can see what it does.

The floor-to-floor heights of the building are set at 4.9 m, pushing them higher than a typical speculative office, creating some flexibility and better daylight levels. The 'hot and heavy' hub has a deeper floor structure allowing it to take the heavier loads of TV equipment, compared to the 'Velcro and wheels' slabs of the surrounding L-shaped areas. This diverse and open set of spaces establishes and prompts possibilities for use. It is just beginning to become more active post-lockdown. In line with shifts in BBC culture it is now possible to broadcast throughout the building – a 'broadcast anywhere environment' – in the ground floor 'street', on the roof terrace, on curved seating areas, on balconies that can quickly be closed off with curtains from the rest of the building. Staff scribble notes on wipeable partition screens 'Crimewatch happening here at 11.10 am'.

It will be fascinating to see how the use of these spaces evolves. On election night five simultaneous broadcasts took place on the different balconies and spaces in the building.

Bainbridge, a skilful client and positive bridge between the wider corporation and his collaborative design teams, has an eye on the future too, not wanting a building that is too specific but one that can change and adapt as technology and broadcasting culture evolve.

**Credits:** BBC Cymru

#### Building

Client: BBC Workplace

Occupier: BBC Cymru Wales

Developer: Rightacres Property

Architect: Foster + Partners

Cost consultant: Gleeds

Structural and services engineer: Arup

Acoustic consultant: Arup

Façade engineer: Arup

Principal contractor: ISG

#### Fit-out

Client: BBC Workplace

Interior architect: ID:SR Sheppard Robson

BBC's due diligence and broadcast architect: ID:SR Sheppard Robson

Cost consultant: Currie & Brown

Structural engineer: AECOM

MEP engineer: AECOM

Project manager: J4 Projects

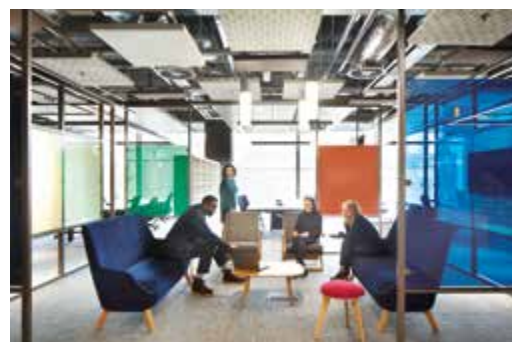
Fit-out design-build contractor: Overbury



First floor plan



Ground floor plan



The interior offers a panoply of colourful diverse opportunities for different types and scales of interactive working environments that offset the more homogenous general open working areas (photos: Jack Hobhouse)

## Locale: Grange Pavilion

**‘While McVicar is clearly a key player ... its authorship is ultimately collective and the ‘double cut’ of benefits mutual.’**

A few minutes’ walk west, away from Central Square you enter Grangetown – Cardiff’s largest electoral ward and Wales’s most ethnically diverse one. The cacophony of construction work in the city centre, visible from the edges of the River Taff, is replaced with insistent rows of terraced houses built in the late nineteenth century and relieved by Grange Gardens, a modest Victorian park where a new community centre has been built. The Grange Pavilion is the result of an ongoing process that began in 2012, a process that is perhaps more important than the building itself as a model of long-term collaboration and co-design.

Originating in ‘a chat at a bus stop’, which led to the establishment of a residents’ group, the Grange Pavilion Project was later joined by Community Gateway, an academic initiative of Cardiff University to develop links and partnerships beyond their walls, through ‘academic lead’, Mhairi McVicar. Over the next few years, a series of ‘vertical studios’ took place where students from the Welsh School of Architecture (WSA) engaged in open-ended events and initiatives ‘gathering stories to help

gather community’.<sup>8</sup> There was no formally defined client, an agreed site or defined programme – no building, as such, to design. Instead, a longer, more patient, open-process of ‘co-production’ and ‘appreciative inquiry’ evolved. ‘Love Grangetown’ workshops and ‘Ideas’ Picnics’, with free tea and cake, captured thoughts, dreams and fears; follow-up interviews by student ‘community researchers’ explored these in more depth. By 2016, Cardiff University as ‘asset guardian’ negotiated a one-year lease for a former bowls pavilion in Grange Gardens, launching it as a potential community venue, spending £30,000 on refurbishment to bring it into use. In parallel, plans for a more ambitious new-build project were being developed, assisted by Big Lottery Funding and other major social grant funding charities and institutions. In 2017, a second successful Lottery bid helped secure enough money to fund the new building and, two further years later, a Community Asset Transfer took place as the university took on a 99-year lease for the pavilion, allowing construction work to begin.



This lengthy process created more than just the beginnings of a new building. It had established community relationships, initiatives and momentum. Everyone involved had invested hours of their time alongside full-time jobs and commitments to their families. As a result, a professional team of Dan Benham Architects with IBI Group was appointed to work with the community to develop the proposals. They were interviewed, with two other practices, through a short teaching project with the WSA and community members to ensure they were a good fit.

The resultant building occupies the south-west corner of the Grange Gardens, defining a space around the former bowling green, effectively the two walls of a walled garden. A crisply detailed roof zig-zags above a red brickwork base separating it from the rest of the gardens and nearby Victorian bandstand. A rusty metal screen slides back to reveal a gap between these brickwork walls and forms the entrance to the pavilion, past an out-of-hours window serving takeaway drinks and snacks. Entering



Axonometric view from south west



Floor plan



Key to floor plan

- 1 Flexible multi-use space
- 2 Kitchen
- 3 Office
- 4 Café
- 5 Kitchen with outdoor counter
- 6 Store
- 7 Classroom
- 8 Garden store
- 9 Outdoor covered flexible space



the building at this corner of the L-shape, brings you into a large lobby space that doubles as a cafe and seating area with diagonal views to the square garden beyond. To the left is a large activity space, two others being accessible from a glazed corridor which overlooks the garden. These three spaces, together with the lobby and garden host a busy weekly programme of activities encompassing adult learning, dance, yoga, singing, youth groups, sewing clubs, lessons, playgroups, karate, netball and a local market. It provides a single location for the multiple, often compartmentalised communities of Grangetown to co-exist.

The internal spaces gather around the retained sunken bowling green lawn, which is lined with raised planters and fruit tree pots (avoiding contaminated ground conditions) together with SuDS beds (which also appear in surrounding streets as part of a council initiative, Greener Grangetown). More rusty metal screens, this time decorated with laser-cut swirling patterns slide back to open up one corner of the building to provide a covered, unheated shelter for tools and storage.

The walled garden form of the building is somewhat defensive in nature, creating a secure physical barrier from the gardens beyond. This allows it to be more open on the bowling green side, where large sliding glazed openings ensure a close connection between outside and

inside, assisted by a deep, near industrial, storey-high steel truss that avoids the need for any intermediate columns on the glazed facade line. The steelwork reappears in most of the spaces, which extend to the zig-zag roof lined with acoustically absorbent finishes punctuated with rooflights, and are intertwined with galvanised cable trays – all wrestling with the spatial layout. Accordingly, the spaces lack some resolution, creating unresolved junctions and juxtapositions, though this is perhaps no bad thing, permitting users to take control of the building for themselves, unafraid to pin something up or make changes that would be intimidating in a more orderly environment.

The project builds on what is already there: Grange Gardens was established, a bowling green and pavilion created and now the Grange Pavilion. This continuity refreshes and evolves the locale, enabled by a long-term commitment from the centre – Cardiff University. While McVicar is clearly a key player in this latest phase, its authorship is ultimately collective and the ‘double cut’ of benefits mutual: the community can tap into the resources, expertise and long-term stability of the university as a partner; the university can engage with the local community and fulfil directions from the Welsh Government; while students, educators and researchers are embedded in very real and worthwhile pedagogical and research experiences.

**Credits: Grange Pavilion**

- Architects: Benham Architects and IBI Group
- Cost consultant: Mott MacDonald
- Structural engineer: Mann Williams
- Services engineer: Holloway Partnership
- Landscape architect: The Urbanists
- Town planning consultant: CDF Planning
- Project management: Mott MacDonald
- Student involvement: Cardiff University – Welsh School of Architecture, Cardiff Business School
- Community consultation: Cardiff University Community Gateway
- Contractor: BECT Building Contractors
- Business development: Development Trust Wales

**Funders and supporters:**

- Big Lottery Fund, Welsh Government, Garfield Weston Foundation, Enabling Natural Resources and Well-being, The Moondance Foundation, The Clothworkers' Foundation, Higher Education Funding Council Wales, Cardiff University, Cardiff Bay Rotary, Wales & West Housing Association, Lloyds Bank Foundation, Asda, IKEA, GoCompare, Colin Laver Heating, RSPB Cymru, Taff Housing Association, Cardiff and Vale College, and individual donations and volunteers



- 1 The L-shaped pavilion makes effectively two walls of a walled garden creating a protected and overseen space.
- 2 Crisply detailed zig zag roofs float above a largely transparent ground floor defining the space round the sunken former bowling green.
- 3 Corten sliding metal screens enclose a covered unheated shelter for tools and storage.
- 4 Former bowls pavilion converted in first phase but eventually replaced by new Grange Pavilion.
- 5 The public park-side approach.

Photos: Kyle Pearce Photography

**‘Amidst a shifting present both projects trace different trajectories in their negotiation of the centre and locale, institution and world. Both projects approach the future and exchange ‘double-cuts’ in different ways.’**

... continued from p.22

inhabited by local people; a result not so much of the specifics of the building, though this plays its part, but by the prolonged investment of time and energy of the university in working amid the communities of the locale. The building simply gives form to these discussions and activities, resulting from a temporal double cut – a sustained dialogue and presence to enable positive change. At the outset there was no tangible outcome to the project so it represented, for the institution, a risk and act of faith in those involved.

Pivotal in the success of this investment was Mhairi McVicar of the Welsh School of Architecture, the academic lead at Cardiff University, who has provided a consistent guardianship to the ongoing, open processes of ‘co-production’ – treading, I suspect, a tricky balancing act between the research outcomes demanded by university metrics, generations of fee-paying students immersed in studios with uncertain outcomes, and a community that may well initially have been suspicious, cynical or uninterested. Happily, patient engagement and a committed presence has blossomed, finding a physical symbol in the new building.

Alan Bainbridge performed a similar role in the BBC. Drawing on his experience of developing other BBC sites, such as at Salford, he orchestrated a design team to work, develop the brief, explore potential sites and finally design the building. Introducing the design team to his BBC production colleagues with the opening gambit ‘tonight, I thought we could take over the production of the Blue Peter show’, to which they would invariably bristle and recoil – his approach is both combative and disarming. The roles and expertise of those in the room being immediately clarified, conversation could turn to the design of the building in an atmosphere of respectful collaboration.

Nearly five hundred years have passed since Chiericati commissioned his palazzo from Palladio. Unlike that building neither McVicar’s nor Bainbridge’s names adorn their buildings, but instead dissolve into them, together with the wider network of collaborators, co-producers and consultants that made each possible.

Conceived pre-pandemic, those involved, and the underpinning institutions, could never have predicted the shifts that have taken place since – the opening and anticipated occupation of both buildings hampered by restrictions. They are both now being used more fully as we begin to reclaim our civic life and gather again in collective spaces. It remains to be seen what the long-lasting effects of the last few years will be, but remote and flexible working practices have now been demonstrated as a possibility, encouraging a more local life as people spend more time in their immediate neighbourhoods.

The Grange Pavilion seems well placed to serve these shifts, acknowledging another form of centre, one more locally focused and encompassing of the diverse communities and individuals in its midst. It may not be the future the founders of the Grange Gardens Bowls Club envisaged, but it is one that has grown out of a long-term engagement with a place and its people. This process is ongoing, with student research and post-occupancy evaluations underway and further studios planned. Cardiff University is due to hand over its role as ‘asset guardian’ to the Grange Pavilion CIO by 2024. The Community Gateway is developing a business case for the future and sees the pavilion as a ‘partnership base for ongoing collaborations in enterprise, careers and role model, after-school, lifelong learning, and research and live-teaching collaborations.’<sup>5</sup> The presence of the BBC seems more uncertain, despite occupying a bigger, more civically prominent building. The BBC’s experience of its bespoke campus in Llandaf seems to have left a scar, not just in terms of a carbon debt and loss of significant twentieth-century heritage. Bainbridge was keen that the new building be not too tailored to the BBC – hence the decision to inhabit a flexed’ speculative office building – and suggesting a nomadic attitude to its future. Perhaps technology will change, the internal layout will adjust, or perhaps the BBC will leave Central Square for someone else to use and seek another home. The restless impact of the competitive market and technological development takes its human toll.

The centre may become void.

Amid a shifting present both projects trace different trajectories in their negotiation of the centre and locale, institution and world. Both projects approach the future and exchange ‘double-cuts’ in different ways: the BBC assuming a nimble symbolic poise at Central Square; Cardiff University, with a campus already long established in and around the civic centre, nurturing a long-term commitment outside this centre – a temporal double cut – a dialogue to enable positive change. A locale that will hold.

*Andrew Carr is an architect based in London who has written on the uses of time in architecture and the work of architects including Dow Jones (see Touchstone 2019, pp. 24–29) and Níall McLaughlin. He was educated at the Welsh School of Architecture before joining Brady Mallalieu Architects in London. He has taught at various schools of architecture, including the WSA for ten years, and is presently a visiting critic at the University of Westminster.*

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# Land shifts

At the very foundation of every environmental challenge are land issues. Being in the early stages of what may yet be the most seismic changes to the landscape of Wales, we may need some perspectives and some signs of hope.



Land shifts 1

## Land means votes: the Chartist Land Company 1846–1851

Talk to any member of The Landworkers' Alliance (LWA) Cymru and they will tell you. Access to land for small farmer-growers is their biggest headache. Even though horticultural production statistics can demonstrate all over the world (see *Via Campesina*) that it is the small farmers with small plots who can grow most intensively, the access-to-land struggle for small growers persists with a vengeance.

In Monmouthshire and the Brecon Beacons National Park in May 2022 a community benefit society, Our Food 1200, was launched. Monmouthshire, along with Pembrokeshire and the north-east of Wales, has some of the best quality growing land in the country. Our Food 1200's primary aim is devastatingly simple, to link new young growers with those farmers and land managers willing to release small plots in Monmouthshire and the Brecon Beacons National Park. The secondary agenda is to transform a landscape in Monmouthshire largely dominated by livestock, and the land required to feed them, into one that includes 1,200 acres of horticulture that can offer every member of the population locally procured sufficient vegetables for their 'five-a-day'.

Of course, housing is the society's other headache, homes next to where you grow. Planning policy for decades has aimed to achieve the opposite – to keep us all in existing towns and villages and leave any new living in the countryside to those who can afford the sky-high

sale prices for a room-with-a-view sold to them in a converted barn. The still uphill struggle to gain permission for One Planet Developments, despite the planning policy for them being in existence for over a decade, simply tells you who has the power when it comes to land access.

The Chartist agitator Feargus O'Connor would have empathised with the LWA. In the 1830s and 40s the Chartist movement throughout the UK was pushing furiously for voting rights for the working man. Revolution was in the air. After three failed attempts defeated largely by the House of Lords, Parliament passed the Great Reform Act in 1832, part of which allowed small land holders to get the vote.

O'Connor seized the opportunity setting up the Chartist Land Company running a lottery offering 3d and 6d shares to industrial city workers across the UK, to initially raise money to buy land, which then through a lottery the lucky ones would get an initial two-acre plot and a house (2, 3). O'Connor was a furiously energetic renegade in the eyes of most Chartists. They argued that O'Connor's land-to-votes project was a chimera and distraction from the central cause of expanding massively the suffrage to all men (and it was only men then).

In the end it was not just the Chartists who rejected him, but O'Connor became a serious threat to the whole UK establishment (not unlike OPD dwellers). The thought of the countryside being invaded by the working class, particularly led by the wild and utterly unbusinesslike O'Connor, was not what the landowner-to-votes reformers had expected. (The whole remarkable story can be read in *The Chartist Land Company* by Alice Mary Hadfield, David & Charles, 1970.)

From setting it up in 1846, O'Connor with astonishing energy in five short years had started seven settlements across southern England and the midlands with distinctive quality houses and two- to four-acre plots of growing land. The first was at Heronsgate sometimes called O'Connorville on the edge of what was then the village of Chorleywood outside London (4).

The area is now one of the most sought after and expensive residential areas for London commuters. O'Connor would have turned in his grave. The large plots now make for fabulous

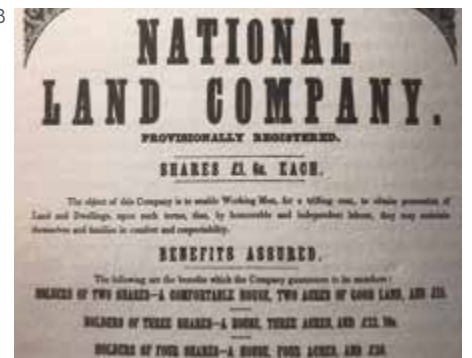
tennis courts and swimming pools, and allow for the complete demolition of the modest houses and their replacement by palatial uber-rich homes (5). The Chelsea tractors can hardly squeeze down the tiny hedge-lined lanes.

O'Connor's whole enterprise was legally closed down in 1851. His devil-may-care bravura along with his somewhat self-centred disorganisation and over-weening radicalism caught up with him. The Land of Liberty Peace and Plenty pub he also built at Heronsgate is still there with that name today (1). The seed was sown.

2



3



4



5







### Land shifts 2 The Welsh Land Settlement Society 1936–61

Dramatic agitation was in the air again 80 years after the Chartist uprisings. Ten years on from the Great Strike of 1926, deep economic depression was still wrecking industrial workers' lives. A government-led attempt at whole-time settlement of the land for farming and growing on a large scale was seen as a positive approach to the colossal scale of unemployment. The Land Settlement Association, with the support from the Carnegie Trust, the Society of Friends and the National Council of Social Services, was set up in 1934 linked in parallel to the *Special Areas (Development and Improvement) Act*.

Following land settlements of 240 unemployed industrial workers and their families from Durham, Tyneside and west Cumberland on small holdings in the midlands and south of England in 1934, the Welsh Land Settlement Society was set up by the Ministry of Agriculture and Fisheries in 1936, led by Captain Geoffrey Cartland Huw Crawshay, a keen horticulturalist born in Abergavenny. 'Unlike his infamous ironmaster ancestors', as one writer put it, 'Geoffrey Crawshay was a Liberal and known for his commitment to the well-being of his fellow countrymen.' He was an outstanding organiser.

Five cooperatives were set up and one site for small holdings. Two cooperatives were in Glamorgan (762 acres and 212 acres respectively), and one in each of Pembrokeshire (355 acres), Flintshire (851 acres) and Monmouthshire at Llanfair Discoed (348 acres). The 329 acres for 40 small-holdings, also in Monmouthshire, was at Leechpool, Portskewett (*see 1 above*).

Unemployed miners' families from the valleys moved to the south Wales settlement sites (2). Good quality houses were built (3) and reasonably rented to fit with their likely income from growing. The society, with government money, organised the mentoring and training, providing tools, machinery and all the glasshouses and other outbuildings.

In the cooperatives the society took on all the local distribution, packaging and marketing of the produce. The families just concentrated on growing on the land and in large glasshouses and in some cases tending chickens and pigs. Their most productive period was in the second world war when other financial support and

subsidies came their way. Post-war, alternative better-paid employment (indoors) began to lure some workers and their families away to new local industries. Challenging weather conditions exacerbated these pressures. Foreign trade deals, increasing cheaper large-scale imports, the rising force of larger retailers, all took their toll.

The 20 semi-detached houses in the tiny garden village of Trewen (4) off the A48, attached to Court House Farm at Llanfair Discoed, are still very visible today (5). As the cooperatives struggled in the late 1950s the ministry sold the freeholds of houses to the local authority. The same eventually happened to the farmland becoming in some cases county farms. Elderly tenants had their rents protected, but then came Thatcher and the 'right-to-buy'. Enough said. Now most houses have been considerably extended (6). No current resident is working the land. The last of the Welsh Land Settlements sites at Boverton near Llantwit Major was sold by public auction in 1961. Captain Crawshay, after his remarkable efforts, might be justifiably turning in his grave.

Historic photos courtesy of website  
<http://www.wlssealand.wordpress.com>



## Land shifts 3

## A place beyond borders: Felin Uchaf on the Llŷn 2004-present

With the Welsh Government's launch in July 2022 of its *Sustainable Farming Scheme: outline proposals for 2025*, the stage is set for the most radical transformation of the Welsh agricultural landscape facing up to the end of the European Union CAP subsidies.

If you have been a listener to Radio 4's 5:30 am 'Farming Today' programme, you know that progressive changes have been on the way for quite some time. Many stories on the programme have been coming from all over Wales as well as the rest of the UK. Agro-ecology, agroforestry, regenerative farming, no-dig, no fertilisers dependent on fossil fuel production, rebuilding rotational systems, rewilding, nature-friendly farming networks, the roller coaster of ideas was set in train 13 years ago at the first Oxford Real Farming Conference. The fourth annual Wales Real Food & Farming Conference will be this year at Lampeter, Ceredigion.

Of course, for at least a decade or more nearly all farmers have had to diversify income. Post-war agriculture as it became obsessed with food production, propped up by subsidies based

on acreage owned, was always a tough call for the smaller farms of Wales. Driven by economics towards monocultures, the numbers employed have been falling year on year; succession planning is stymied by the young moving away and the old stubbornly remaining, hanging on fiercely to their culture and language, constantly eroded by tourists, incomers, holiday lets and second-home owners. Before the hedge fund investors gobble up swathes of the Welsh landscape to trade in carbon offsetting to ease the conscience of those unwilling to halt their fossil fuel addiction, more fundamental questions need answering. Who gets access, how many, and what is the land for? This all requires a step change in thinking. A visit to Felin Uchaf on the Llŷn peninsula offers some thought-provoking answers and possibly yet further questions.

This 23-acre former derelict farm site was driven by farming economics in the 70s to create one big hedge-less, tree-less open pasture on the windswept Llŷn. After 20 years of radical transformation there is now a community woodland of 18,000 young trees, 2 km of new hedge banks, an orchard of 300 fruit trees, and a community supported organic farm and forest garden (*see below*). There is a veg box scheme for the local community, for when the veg is not feeding the local, European and international volunteers on site (who are there through EU and charity-funded

internships, exchanges, volunteering schemes, apprenticeships, all learning ancient craft-building skills and contemporary horticulture skills) in the summer months.

An early challenge was to assemble a vast thatched, oak-cruck-structured barn (4, 12), initially where local traditions of timber boat-building were handed down from ageing mentors to young local enthusiasts. Local authorities stepped forward commissioning from the barn workshop, rights-of-way signs, gates and stiles, often wonderfully sculpted with carved lettering in the locally sourced oak (9, 14). Private commissions for oak-structured house extensions and other carpentry commissions as far away as Gloucester still generate income. 39% of current income is derived from the holiday letting of the thatched roundhouses that volunteers have built over time plus a solitary timber cabin. This letting occurs when the volunteers do not require them (5, 8). More are planned.

The skills of cobb building, thatching, dry-stone walling have all been passed on to future generations. Some have learnt to create incredibly complex carpentry joints when assembling Welsh oak structures, allowing the inevitable deformities in the wood to dictate a wild but admirable aesthetic. All these assemblies demand a huge and enjoyable collective energy.

Most projects involve local schools, volunteers of all ages, youth groups and sometimes hard-to-





reach children, and other times those on probation, each finding their place among a team. The Felin Uchaf charity works with five other local charities.

Archaeology academics have brought teams of students from Bangor, Cardiff and Vienna universities. Over years they have explored the 2,500-year-old iron age round house settlements of Meillionydd less than a mile away.

Since 2005 at Felin Uchaf, those students have experienced the haunting and inspirational interior of the Big Roundhouse, Tŷ Crwn Mawr (2, 3, 10, 11), sharing their experiences with storytellers, musicians, theatre performers, dancers and poets, all drawn to and inspired by this magical creation, assembled from locally harvested water reed, pine poles, coppiced hazel, stones and clay dug from site, all thatch-roofed with local reeds.

Over years those at Felin Uchaf have also slowly assembled a centre for archaeology mythology and storytelling learning a distinct local stone walling skill of combining giant boulder stones at intervals with smaller infill (6). A cobb-walled café and cultural study centre has been assembled, and most intricate of all, a twelve-sided observatory building where Maia Eastwood, a 17-year-old volunteer from Borthy-gest near Porthmadog, led a group of volunteers to exquisitely carve astrological imagery into the hammer-beam structure (7).

Like the disappearing CAP funding of agriculture, the generous EU-funded rural development programme, the Erasmus Leonardo da Vinci programmes and many others, will all seep away after 2025. Will that money formerly from Brussels, simply now come direct from Westminster, pound for pound, as the Brexiters so often bragged and promised? There is no sign of it yet. Before we left the EU, the money came direct to Wales. Now we have to wait for largesse from Westminster. Currently, there is no guarantee that the UK government will live up to those promises. This remarkable vision of another landscape at Felin Uchaf and most certainly the Welsh Government's sustainable farming scheme will rely on those promises being kept.

For further info on Felin Uchaf go to [www.felinwales.org](http://www.felinwales.org)





#### Land shifts 4

#### Forest live-work cluster: Pantmaenog in Pembrokeshire

Post-pandemic, we are all working hybridly aren't we? Well, no, not really. That's a very middle-class assumption for those whose tool is principally digital and their space requirements are a kitchen table top. But, many other workers have collective shared production spaces full of complex machinery they must attend. They frequently have long journeys to work. For the niche market of hardwood craft workers, cabinet makers, turners, carvers, musical instrument makers, their machinery is not sizeable to a single kitchen worktop. Their prime source of material is a forest, not a cul-de-sac in suburbia. Just as small-scale growers need a place to live on the land near the soil that produces the veg, wouldn't it be intelligent if a community of hardwood craft workers lived near their forest source, sharing some of their skill and knowledge and even some of their machinery?

This is the courageous intention behind a scheme for six timber houses and their workshop spaces being nurtured into existence by the ever-progressive Phil Roberts on behalf of the forest manager Coed Preseli, which is engaged on the Pantmaenog forest improvement project at Rosebush in north Pembrokeshire.

Joining the project as site freeholder and developer-builder is the equally progressive and visually memorable Down 2 Earth not-for-profit organisation based at Bryngwyn Bach, Llanrhidian on the Gower peninsula, whose colourful and in their words 'spectacular' building

creations sit comfortably in the first area of outstanding natural beauty in the UK. It provides life-changing experiences to south Wales's most vulnerable groups through innovative health care and education delivery. It will be training local groups to Pantmaenog in building skills to deliver the houses and workshops. Quite a team, with quite an ambition.

While Woodknowledge Wales has been furiously lobbying the Welsh Government to get serious about bringing into being a timber-house-building industry for Wales with a massive upscaling required in tree planting and financial incentives (see *Touchstone 2021*, pp. 12-15), Welsh Government also updated in April 2021 its *Woodland for Wales: strategy* for how we will develop and preserve our woodlands over the next 50 years. The days of clear felling, it signalled, are clearly intended to be the past – although not quite yet, as travelling through any part of Wales currently testifies.

The 600-hectare Pantmaenog forest shares that Welsh Government vision. It's moving from 'clear fell' to 'continuous cover' forest management to encourage wildlife and fauna biodiversity, while allowing and encouraging amenity and recreational public access. With

carefully managed selective felling being the mantra, this then allows the natural regeneration of native trees to occur.

This future mix of diverse trees will keep a steady supply of hardwood for these six high-added-value micro-businesses, which will be the lucky residents of homes and workshops that are – as set out in the planning application – intended to be 'highly insulated, low impact, timber-framed structures with timber cladding using centralised renewable energy systems, from PVs, with either ground source heating, or a wood waste fuelled, centralised biomass boiler system to provide central heating to all buildings and timber drying areas [...] They will be designed to insulation standards well in excess of current building regulations using natural, safe, environmentally friendly, breathable materials'.

That's what we would expect. What we might not expect is the statement that the buildings will be 'using locally sourced construction materials [...] wherever they are available'. They are timber houses next door to a forest! It would seem obvious, but you have to read the Woodknowledge Wales's critique to understand the full journey we still have to make as a country before that becomes obvious.



# touchstones



## PORTS OF CALLINGS

Some ports of Wales are critical pieces of national infrastructure, their function acting beyond borders. Many major ports have a long history of uneasy tension with their adjacent communities. The ports have powerful control over their land perimeters. Deindustrialisation and shifts in shipping technology have often left them as powerful property magnates able to draw on substantial financial resources through their land assets. (Remember the powerful influence on the location battle for our Senedd; Associated British Ports (ABP) chaired by former secretary of state for Wales, Nicholas Edwards (later Lord Crickhowell) were big players.)

There are three types of ports in Wales: privatised, municipal and trust ports. The privatised ports are Barry, Cardiff, Port Talbot and Swansea. The *Wales Act 2017* sought some Welsh Government oversight or shared strategic policy-making with these facilities' owner, ABP. To what degree the running of the ports is solely a market-led operation is still being negotiated five years on.

The trust ports, each with an independent board and ruled by UK guidelines, are Neath, Newport, Caernarfon, Saundersfoot and the biggest daddy of them all the deep-water estuary port of Milford Haven, for decades one of the major fossil-fuel import gateways to the UK (*see also pp.8-11*).

The settlement of Milford Haven had religious beginnings. Peace-loving Quakers fleeing the bloody American war of independence resettled in the UK in 1792 with Sir William Hamilton, being a major landowner, building a new life for his fellow Quakers through

**‘To what degree the running of the ports is solely a market-led operation is still being negotiated five years on.’**

establishing Milford Haven and a local economy based around whaling. The social bedrock of their settlement was founded on the Quaker testimonies of simplicity, peace, integrity, equality and stewardship. Once again, they could feel they were a ‘society of friends’.

That no longer survives. Global capitalism has put paid to it. Any local principles of communal sharing of decision making in the settlement of Milford Haven, Quaker or otherwise, are rendered redundant as the economic development now is actually devised and mobilised by decision makers in Westminster. The Milford Haven Port Authority, being a ‘major’ trust port, generates a media about itself seemingly similar to an ordinary trust port. However, whereas ordinary trust ports are classified as ‘independent entities’ (and could be well integrating and collaborating servants with their local community), the UK government considers major trust ports such as Milford Haven to understandably have ‘economic and maritime significance wider than at local or regional level’. The UK government is a stakeholder appointing a chair and non-executive directors based in Westminster to the board. Major trust ports are classified by the Office of National Statistics as ‘public corporations’ and ‘effectively under government control’, their independence and responsibility to their local communities are effectively lost.

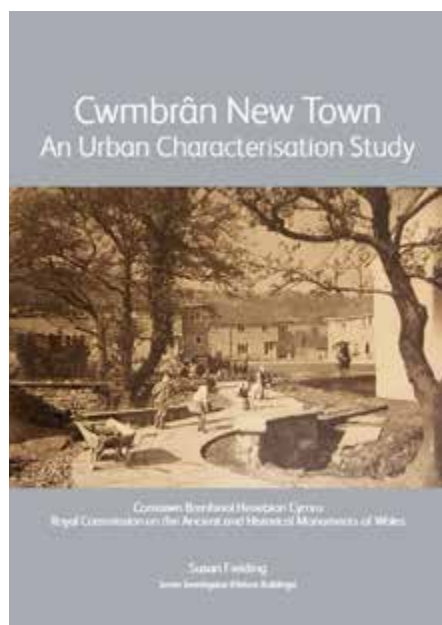
Income from international trade deals for oil and gas appear in the statistics for the regional economy. Local economic life is thus radically misrepresented. However, the volume of oil imports is declining. The liquid natural gas installations are being automated. Local employment is being buffeted by the global economic storms.

The port authority is reserving Pembroke Dock further down the haven for development in offshore renewables and hydrogen, while the harbour at Milford Haven it sees as a ‘tourism destination’. And yet, as Milford Haven's historic high street is dying a painful death, the port authority is actively undermining any hope of its revival, recently adding to its burgeoning property portfolio a retail park and new supermarkets with which local traders cannot compete, while the profits leak out of the region via dividends paid to shareholders. Those Quaker testimonies of ‘equality’ and ‘stewardship’ need resurrecting at Milford Haven.

*Touchstone acknowledges the research work done by CAT MArch students Stephen Davies, Karina Kolensnikaitė, Waldo Olwage, Jemma Jamin and Rachael Allen.*

# touchstones

## CWMBRÂN SEEKING RESPECT AND RECOGNITION



**Cwmbrân is Wales's sole 'mark 1' new town,** representing an important phase in UK post-war town planning and a significant part of our nation's built heritage. Largely overlooked by the heritage sector, a new characterisation report by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) aims to bring attention to this unique settlement.

Cwmbrân, on a site in the Afon Llwyd valley described as 'a good deal more attractive than imagined', was designated on 4 November 1949 with the Cwmbran Development Corporation (CDC) established the same month. Unlike other new towns, the purpose was to provide a new community for those employed in existing industries of south-east Wales, reducing commuting and improving family life. The master plan, by planning consultants Minoprio & Spencely & P W Macfarlane, was published in March 1951.

Over the next 35 years the CDC implemented and developed this plan to create a community balancing social and private housing, neighbourhood amenities with a thriving regional commercial and civic centre, and industrial innovation and investment with an impressive programme of public art and recreational facilities. The unique powers of the CDC, as a publicly owned but independently operating developer able to provide a continuity of concept and philosophy, were fundamental. The combination of long-term strategy with the individual vision of chief architects such as J C P West, Gordon Redfern and J L Russell, led not only to a coherently planned network of green spaces, neighbourhoods, industrial zones and town centre, but also to innovation in building form, materiality and construction techniques that resulted in a series of exciting and important buildings and landscapes. These include an early example of a pedestrianised town centre with Monmouth House and its towering William Mitchell sculpture overlooking

the exuberant water gardens, to the remarkable Fairwater Square local centre surrounded by the innovative housing of Fairwater, Greenmeadow, St Dials and Coedeva.

While Cwmbrân's character has generally been well preserved, it is increasingly under threat as green spaces are infilled, neighbourhood centres demolished, and buildings such as David Evans (now House of Fraser) 'modernised'. The water gardens are now awaiting demolition having been refused for listing by Cadw. A *sign* to the Court Road Industrial Estate is the single listing, and there are no conservation areas. It is increasingly important to recognise and protect the distinctive characteristics of this Welsh town, while understanding the lessons that can be learnt from it in forging new sustainable communities for the future.

The new publication is designed to inform a plan for future development by Torfaen County Borough Council that respects the qualities of Cwmbrân, its historical background and heritage, and its physical environment and context. It is also hoped that it will form a starting point for future investigation of, and discussion around, the place of Cwmbrân in the built heritage of Wales.

The publication forms part of the RCAHMW's thematic work on recording and researching the built heritage of the twentieth century, aiming to increase understanding, appreciation and protection of this under-represented and undervalued area of our heritage. *Susan Fielding*

*Cwmbrân New Town: An Urban Characterisation Study* is available as a free ebook at:

<https://shop.rcahmw.gov.uk/collections/downloads/products/cwmbran-new-town-an-urban-characterisation-study>

A limited number of free physical copies are also available (postage and packing costs apply).

## MISSING FROM THE RECORD

Although, strictly, last year's *Touchstone* was our 25th anniversary issue, a quarter of a century since 1996, there will be those of you with long and pinpoint-accurate memories who will know there have been some gaps. For a couple of years, a few issues didn't appear.

Because of those gaps, some significant projects never saw the light of day as part of Wales's printed public record of architecture. Of course, budgets affecting pagination limits will have always played a part in what gets missed out, but maybe we need to straighten out the

record and then, as the RIBA awards system now encourages us to do, we should go and pay a post-occupancy revisit?

Ones that should possibly be on that list (not in any order of significance) are: Clyne Castle residences, Swansea by Stephen Hill of Holder Mathias architects (*right*); the Wales Millennium Centre by Jonathan Adams of Percy Thomas Partnership (which although appearing in the pages was never appraised as a fully working building); The College Merthyr by RMJM; Ysgol Craig y Deryn, Llanegryn by Geraint Roberts of Darnton B3 (*below right*); Ysgol Pen Rhos, Llanelli by HLM Architects; Cardiff Pointe by Neil McOmish of Scott Brownrigg; Ysbyty Ystrad Fawr, Ystrad Mynach by Colin Hockley and Kieren Morgan of Nightingale Associates; Entrance building Ysbyty Morristons by IBI. That's just a start. Do alert us if you think there are others.



## A BRIDGE TO CAT'S FUTURE



**In any architectural learning environment having the chance to design and build for real**, as a collective team effort, is frequently exhilarating, the high point of any student's year. For years the MArch course at the Centre for Alternative Technology (CAT) has offered a 'build week' in July where three or four students' designs (to different briefs) are selected by the student body and then built. Many of the assembled (mostly timber, but also rammed earth, hemp-lime, etc.) structures have been offered to CAT's site itself, and communities throughout Wales. Many have balanced practical functional needs, budgets and time available, with a touch of the elegant folly. One of the most memorable early 'builds' was the 'bird hide' at the nearby Coed Gwern by Bryn Hallet, et al (*left*).

More recently the build week just before lockdown resulted in the exquisitely crafted, large-scale furniture elements designed by student Freya Bruce that finally did justice to the spiritual spatial qualities of Borer and Lea's AtEIC building, the former CAT bookshop.

So much of CAT's early environment was assembled through the sweat and graft of committed volunteers and site residents at the quarry. It was frequently experimental, always pushing boundaries.

Architects building have always been somewhere in the mix. In the founding period, building the community, architect Roderick James was a driving force.

In the late 80s 'gearchange' it was architect Roger Kelly as director who led the opening up to the world of the quarry community through the installation of the top and bottom station to the cliff water-balanced railway, and later the AtEIC

building and the straw-bale theatre. Pat Borer architect was the continuous thread through all of this from the very beginning, linking in this particular development phase with architect David Lea and the building skills of Cindy Harris.

The next leap came with the post-millennium drive to develop post-graduate education on site. Borer and Lea designed through a 'planning-for-real' process with the site community, the substantial WISE building, its scale inevitably breaking the long tradition of community self-build.

CAT is on the edge of diving into yet another upscaling of ambition. The 'architectural practice of the year' Haworth Tomkins is on board. Consultants Turley and Faithful+Gould are taking CAT on to a global stage of procurement ambition. Borer has handed over his digital historical archive of every construction on the site. It's a symbolic gestural moment. A fast-paced consultation is working toward critical regional and national funding bids.

In this current heady envisioning process, it is good to know that this year's MArch-post-lockdown build is still firmly self-build, grounded and yet connected. A critical piece of CAT's site infrastructure, an old and collapsed timber bridge, needed a remake. To the design of student Nina Xenitidou with the engineering oversight of Richard Heath of Momentum (also working with Haworth Tomkins) and assisted by the on-site carpenter mentoring of Dieter Brandstatter, a new team-built bridge has appeared, awaiting its finishing roofing element (*left*). It's good to see the productions of the graduate school still centre stage. Long may it last. The bridge may be a critical contribution to the next leap forward for CAT.



Main photos by Nick Caville

# Calm, caring and considerate

What would the great theorist on altering architecture, Fred Scott, have made of the major anniversary remodelling of the Bute Building for a re-energised Welsh School of Architecture?



Nobody should set about transforming an existing building without understanding the thinking and writings of Fred Scott. He published, lectured, curated and taught internationally. He was visiting professor at Rhode Island School of Design, and taught at the Architectural Association in London, but most significantly, he was for decades the course leader for interior design at Kingston University..

Some architects might, as Frank Lloyd Wright did, scoff at the term 'interior design'. But for Scott such an attitude was mere ignorance; his take on the discipline gave it a confident intellectual dignity. It was remodelling existing space, what has trendily come to be known now in these carbon-conscious times as 'retrofit first'.

Many leading designers and architects remodelling substantial buildings of the 1980s and 90s and ever since, were either taught or influenced by Scott, or taught with him. He railed against the creation of other new degree course titles in the interiors field that appeared in the 1990s. 'Interior architecture', he argued, by the very combination of those two words, made second-class citizens of his sophisticated endeavours: and yet curiously in the latter years of his career he published his most well-known tome, *On Altering Architecture*, into which he poured his decades of carefully formed positions.

As Peter Youthed in his thoughtful review of Scott's book argued, he changed the whole intellectual climate on how to remodel existing



building by making ‘comparisons with art conservation, through discussion of the nature of the modernity, ruin, the function of copying and reproduction and exploring the psychological and sociological aspects of transforming existing buildings [...] Scott reveals the “transgressive” nature of alteration work that breaks the taboos of restoration and conservation and discloses the presence of the surreal in even the most everyday of architectural transformations.’

### Peeling back the dross

Over time, through careless consideration of a building’s original intention, buildings just get messed about with a sort of lazy functionalism. Such acts are criminal even if practical; they are everywhere around us. Often one needs instead to rediscover that pure original intention, peel away the dross, but Scott was not a slave to purity of the original either. Yes, you had to understand that original intention, but circumstances would often arise where creative demolition and substantial seeming conflicting interventions, marked out distinct and bold transformations. These were not just spatially wilful, but in the best way expressive of the changed inhabiting culture.

So, what would Scott have made of the Welsh School of Architecture’s latest substantial remodelling of its Grade II-listed Bute Building, in Cathays Park, Cardiff? This was, it seemed, a major chance to peel back the accumulated dross.

A school of journalism, the building’s previous joint-occupier was moving out, leaving only a university-wide shared library facility on the first floor. As many sections of the architecture school family had for years camped in a suite of unsatisfactory outbuildings in the city, all could at last be brought under one roof. More studio space for all years and courses could be created. Most importantly, the architects could colonise the ground floor giving them for the first time in their history a street frontage, an internal space for public interfaces immediately adjacent to the entrance. This they call the ‘living lab’, plus a substantial public exhibition/conference facility, set as a terminating double-height volume on the entrance axis.

For years infamous constantly interrupted crits took place in corridors – a social disaster and a fire risk. The school demanded a state-of-the-art, what they termed a ‘hybrid studio’, that would allow multiple sizes of crits in parallel to occur, plus one-to-one reviews, and intimate discussion spaces all acoustically secure, but all demountable and capable of reconfiguration. This they now have at the rear of the building. A large part of this years show was held in this reconfigured space (see pp.42-43).



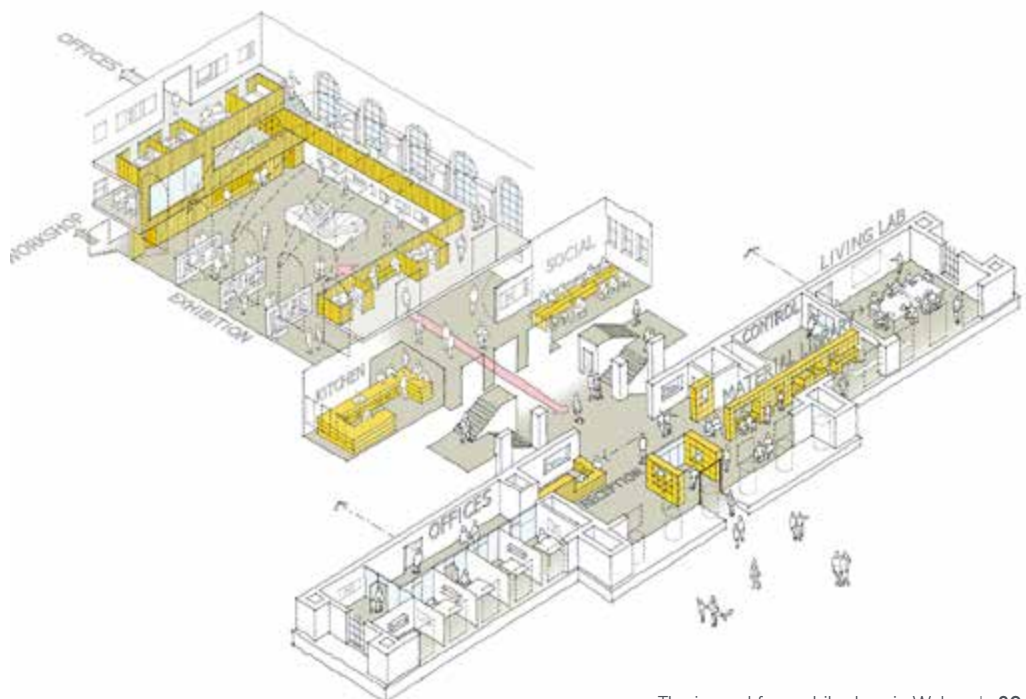
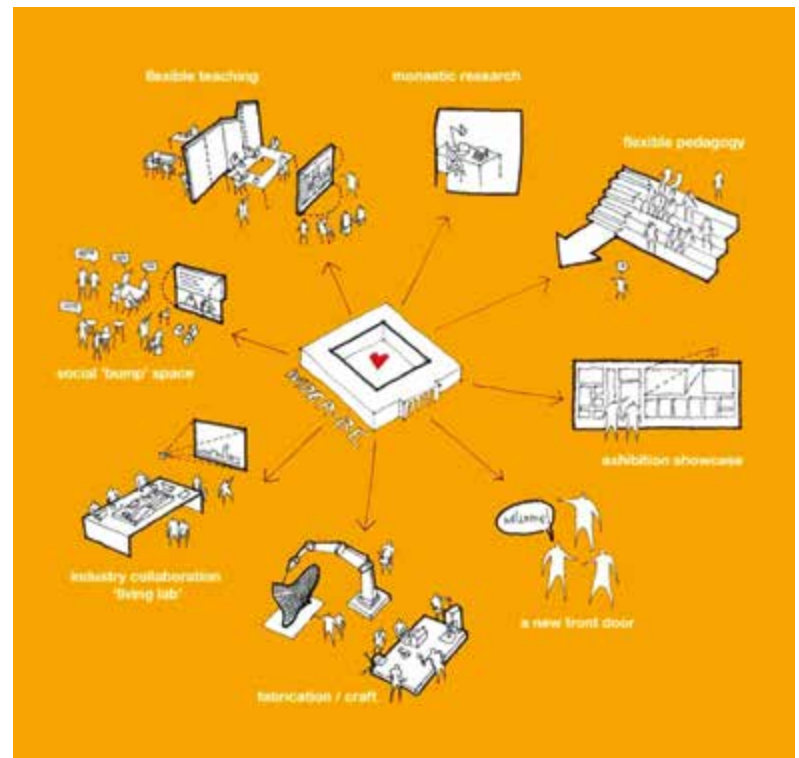
Facing page  
Top, the new centrepiece of the retrofit, the return to a naturally lit and ventilated hall at the heart of the refurbished school.

Bottom, the WSA’s Bute building.

This page  
Top right, the critical elements of the brief.

Below, the public fronting ground floor entrance space.

Bottom, axonometric of new ground floor public fronting spaces



Despite the school's long-established reputation for craft and making, their multiple and ever-expanding range of workshop types were overcrowded, always setting limits on their collaborative teaching offerings. This has been fully remedied. This year's show (see pp.42-43) is testament to how successful the remodelling is.

### Back to beginnings

The BDP Cardiff office team hired by Cardiff University did its historical homework. The 1911 competition winning drawings by Ivor Jones and Percy Thomas were found and studied. The original double-height, naturally lit and ventilated

'examination hall' had been mashed in the 1980s by installing a mechanically ventilated, raked seated Birt Acres lecture theatre. Beneath it, in a windowless subterranean space, was a popular and lively student eatery.

A perfect combination of respect for the original, a clear reading of contemporary demands, and a determination for low-carbon servicing, meant that all that went. The daylight and air are back. A first-floor walkway/balcony is hung and slung down one side, thankfully not axially. This was all fully used and tested in this year's opening night student exhibitions of both digital and physical presentations. It went swimmingly.

The 1916 ground floor had top-lit and naturally ventilated workspaces in the courtyards. These had been closed up over time and mechanically serviced. Many of these original spaces and their spirit-lifting qualities are reinstated as studios and seminar spaces.

Throughout the work the stress was on fixing the essential, keep it minimal carbon, and reinstating the best of the past. Where you add new, add respectfully, but not slavishly extending the early-twentieth-century material language. New is made quite clearly distinct from Percy Thomas's original, and don't mess with what doesn't need fixing even if you have the budget



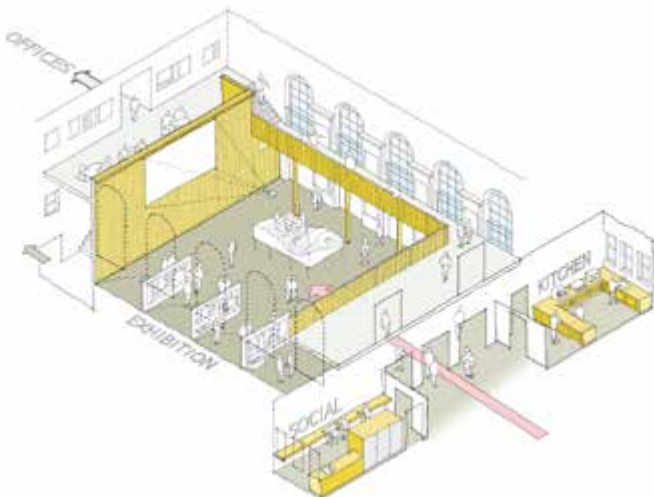
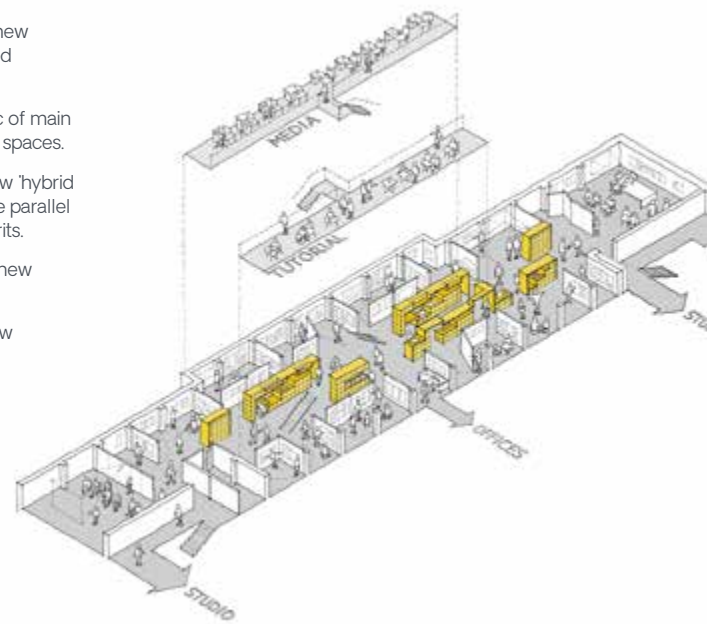
Top and centre left, the new naturally lit and ventilated exhibition hall.

Bottom left, axonometric of main hall and approach social spaces.

Right, axonometric of new 'hybrid studio' space for multiple parallel reviews, seminars and crits.

Bottom right, one of the new review spaces.

Below, more intimate new review spaces.



to. The remit was clear: make the workings of teaching, research, workshops and public interface ‘Rolls-Royce’ without the bling and any ostentation. It came in on-time and below budget. The university’s estates department and Chris Tweed, the former head of school, who so skilfully built and made the economic and social case for the transformation, must be well satisfied.

### Subverting conventionality

But what would Scott have made of it? The acerbic pen of Sir Nikolaus Pevsner wrote of the Percy Thomas building that ‘for all its size and prestigious location, it is disappointingly

conventional’. The claustrophobic heaviness of its entrance joinery has thankfully been lightened somewhat in the transformation; the pompous axiality of the staircases always felt over-egged. It still does. The first floor at the front hasn’t altered; the Bute library is still there; it still forces architecture proper up on to the second floor, even though some new studios and the expanded workshops occupy lower floors around the building’s perimeter. The student buzz of the former ground floor eatery has been erased. The estates department had a new policy of no café spaces in individual departments. Early signs on BDP drawings of ‘social’ and ‘kitchen’ spaces

open to and straddling the entrance spaces to the exhibition hall have been closed away.

What Scott would have spotted was a later post-second-world-war Percy Thomas addition of a tower of administration spaces beyond the great hall. Someone clearly wanted more bang for their bucks, more floors within an overall height limit. So, none of the floor levels were contiguous with the existing. The tower’s stairs are unpleasantly narrow; ceiling heights are tight. Leaving the tower untouched prevents the opportunity to connect front to back directly on its obvious entrance axis. It cuts off an opportunity to throw off and subvert that disappointing conventionality of neo-classical Sir Percy before he met up with Dale Owen’s modernism.

The school performs very highly on all rankings for both research and teaching. It has a long tradition of solid and well-grounded architectural education, well-respected by practising architects worldwide. It is a massively international school. It is not the school of Dewi-Prys Thomas’s search for a vernacular modernism. It is not anymore tilted to scientific rationality in spite of the loudly expressed socio-political and cultural objections from the sidelines (see *Touchstone 2021*, p. 47). It is a school eager in its energetic multiverse of talented international staff and students to break borders, takes its social responsibility and engagement with communities most in need (see pp.22–29 and the editorial), and heal a planet wounded by too much profligate neglect. The new transformation is calm, caring and considerate. Did it not need to suggest or offer something else?

‘For Scott, architectural design, at its best, is a kind of “Bacchic delirium” where opposites are reconciled and great architecture navigates a skilful trajectory between the excessive fetishisation of the “new” and the senseless preservation, or reproduction, of historical fabric for its own sake.’ Maybe more delirium was needed at the WSA somewhere? That tower for a start.

*Patrick Hannay*



Above, sizeable new workshops.

Below, axonometric of new workshops.

Right top, new studios with existing formerly closed off roof glazing, now opened up.

Right centre the post WW2 added tower.

Right below, section showing awkward tower floor levels.



#### Credits:

Client: Cardiff University

Architect: BDP

Structural engineer: AECOM

Mechanical & electrical engineer: CPWP

Quantity surveyor: Gleeds

Acoustic consultant: BDP

Project manager: Capita

Main contractor: R&M Williams

There's nothing like a major break to allow one to radically rethink things. It's been three years since the Welsh School of Architecture had a physical student show. They stepped into uncharted waters. **Patrick Hannay** reports.



# Process is the product

After three years without a physical end-of-year show, with a completely refurbished architecture school keen to show off its new and expanded spaces, and with a new first female head of school recently in post, July 2022 at the Welsh School of Architecture (WSA) was bound to be an extraordinarily ambitious affair.

There had been student-led shows before, curated collaboratively with staff; there had been online website shows to cope with Covid-19; always there had been catalogues of work from the end of years 3 and 5, either digitally, in print or both. But this year it was to be a hybrid show, all three mediums interconnected (printed catalogue, online website and physical exhibition). That might at one level seem simple, par for the course in many architecture schools. But the call came from the new head of school: all courses under the school's capacious wings, all years, all students could and should submit work for the exhibition to be made available in all three mediums, each taking on a particular role. There would be physical and digital space for all. That's potentially over 900 students to show. But this was not just an act of democratic transparency.

There was a far more complex agenda.

The first suggested title for the hybrid show was 'Open-ended'. This became 'Unfinished', in the sense that all of us in this business are on a journey. Yes, there are fixed delivery points, but we are always learning, searching. So not just year 3 and year 5 work as professional practice calling cards, but all years 1 to 5, and all other master's-level courses such as urban design and post-graduate research degree work. To show the evolving, interconnected, interrelated, unfinished journey was the ambition.

Then came another twist, another challenging layer. 'Process' behind the designed product, behind the fixed final image, both in the making of the image and the design project itself was to be made public. QR codes, VR and AI would connect the physical show to individual student's processes displayed online.

The final complexity came from Adam Hogan leading the student-led curating team. The work would not be displayed by years or distinct courses but under shared themes, common issues across the school arising from all the work: 'activism', 'circular economy', 'regeneration

**'There would be physical and digital space for all... this was not just an act of democratic transparency. There was a far more complex agenda.'**



**‘The work would not be displayed by years or distinct courses but under shared themes, common issues across the school arising from all the work.’**

and adaptability’, ‘redefining the rural’, the ‘social values of architecture’, and many more, these labels structured the locational groupings of work. Of course, being space and object makers you can’t just deliver such ambitions spatially by just pinning things to walls and board. The physical framing, supporting the work, must appear open, spatially fluid, unpolished, raw but crafted, capable of endless reuse.

The two main exhibition spaces were at the ground floor front of the school and at the second floor distant back of the building in the new hybrid studio space (*see p.40*). With judicious placing of bars on upper floors, bands playing on spacious landings and video work being projected on glass walls to corridors, the link of front to back on the opening night worked. For later in the week with the crowd gone it was more challenging.

The digital work went up in advance of the physical show. Three days of 15-minute talks on various aspects of ‘process’ built momentum leading up to showtime. On the day, the head Juliet Davis opened it all, streamed to all spaces within the school, followed by a master presenter of inspiring process. They could not have chosen better than to have Rajeev Kathpalia of the Ahmedabad-based Vastu Shilpa Consultants, the founder of which was the Pritzker prize laureate Balkrishna Doshi.

So how did it all really go? The QR code gateways via the physical exhibition to students’ processes was one step too far in the time available. In the end, just over 200 of the potential over 900 invited submitted work for the show. 140 of those were architecture years 3 and 5. With no physical show for the last three years, it was hardly surprising that only 12 from years 1 and 2 were there; how could they possibly have anticipated the spectacular forum they were being offered? Next year, one hopes, will be different. The new expanded workshop machinery spaces in the school, allied to the talented workshop staff, working with a dedicated team of students

delivered an immaculately made and assembled framing system on time. The spatial games worked. The coordination and curation teams of students and staff were remarkable.

The thematic ordering of the work by issues tackled, rather than by years completed, was a quiet coup de théâtre. As you wandered, a powerful subliminal sense came of a multi-faceted, energetic and imaginative journey being undertaken by all at the WSA, but also one that was very focused on the seriously challenging social issues of our time.

*Touchstone* over the years has sought to downplay the overbearing allure of the fixed image. In 1979 its editor, then at the *Architects’ Journal* commissioned the photographer-critic Tom Picton to write a two part, 32-page attack entitled the ‘Graven Image’. It touched some raw nerves but mostly went unnoticed. Walking around this WSA show with a head full of previous show memories, it was difficult to fight against a sneaking sense of feeling visually underwhelmed by hundreds of A2 images clipped with pegs from strings.

That same editor has 45 years’ experience of trying to journalistically investigate how various processes lead to either well-loved or despised architecture. It takes a huge investment of time to do it for which nobody will pay you. In 1993 that same architectural journalist made a video with architect Penoyre & Prasad on the design process of a doctors’ surgery for a supposedly groundbreaking RIBA exhibition in Portland Place, ‘The Art of the Process’, which sought to expose to the public various top-flight architects’ processes of design. In my view it failed miserably. It’s always such a tough call. Some architects simply don’t want to reveal their intellectual secrets. Some can’t in a way that makes sense to lay people. Exposing in a linear format what is an impossibly complex layering of specialist-learned thought processes and decisions, to an onlooking public audience, is the challenge for next year at the WSA. They will have to start earlier, but it will be worth waiting for, if they make it.

**‘...a powerful subliminal sense came of a multi-faceted, energetic and imaginative journey being undertaken by all at the WSA, but also one that was very focused on the seriously challenging social issues of our time.’**



#### WSA student team:

Chair: MacOurley James

Physical exhibition chair:  
Rose Nicholson

Curation team lead: Adam Hogan

Sponsorship team lead: Methila Ganasooriar

Events team lead: Kirsty Lerchundi  
Mboengho and Manatalla

Graphics team lead: Elias Khlif

Physical exhibition design team lead:  
Adam Hogan

Social media team lead: Alex Hargreaves

Year book team lead: Zsofi Veres

Web design team lead: Zsofi Veres

#### Steering board:

Juliet Davis, Federico Wulff, Shibu Raman, Hiral Patel, Steve Coombs, Eleni Ampatzi, Oriel Prizeman, Michael Corr, Mhairi McVicar, Samantha Johnson, Amy Stackhouse, student chairs (see above)

Overall chair: Kate Nash

#### Workshop/assembly leads:

Dan Tilbury (staff), MacOurley James,  
Rose Nicholson.

#### Sponsors:

Fosters and Partners (primary sponsor)

Formation Architects (secondary sponsor)

Terence O'Rourke, Hyde + Hyde Architects,  
Ridge and Partners, Rio Architects.

# Disembodied energy

**There is no 'net zero' without aligning rigour and consistency in measurement of embodied carbon. Yet trying to measure and report on embodied carbon can be inconsistent, inaccurate, or inefficient at best. Sonia Brookes argues there are ways we can collectively improve this process as an industry, but this requires a fundamental shift at a UK policy level.**

**W**ith the recent Intergovernmental Panel on Climate Change highlighting the magnitude of change we need within the next three years to limit our global trajectory above 1.5°C, pressure mounts on the UK construction industry to accelerate its efforts further towards net zero. As responsible practitioners in the industry, we need to acknowledge and demand a higher level of due diligence when quantifying what net zero truly means. Offsetting a business-as-usual approach to our buildings is not an option..

Despite the absence of any UK legislation for measuring embodied carbon, it is noticeable that as an industry we are taking strides towards recognising the importance of the whole-life impact of both operational- and embodied-carbon emissions. We are witnessing a growing momentum from local authorities and clients who are starting to recognise this at scale by setting aspirational targets and frameworks against which buildings can be quantified and

measured. In parallel, a plethora of guidance and assessment tools have emerged to encourage uptake across the built environment.

As practitioners doing our best to design and build buildings that meet these aspirational requirements, adopting tools to undertake these historically time-consuming assessments is our promise of viable, informative and profitable data that we can realistically offer as part of our scope of works. Dramatically improving our accessibility for carrying out these assessments in-house, these measurement tools become integral to aiding the decarbonisation of the building industry.

However, being so focused on upskilling and carrying out the assessments, there emerges a major faux pas around how we are actually quantifying embodied carbon. Very limited consideration has been given to assessing the comparability and rigour of these different and emerging assessment tools and, of course, the UK data pool and baseline targets these are consequently informing.

Driven from my own painstaking introduction to lifecycle carbon assessment, my first-hand experience of the complexities facing an industry grappling with embodied-carbon measurement included inconsistent datasets, misaligned benchmarks and skewed performance claims. Being somewhat bewildered by this inaccessible

**‘More clarity and consistency around the implementation of whole-life carbon assessment is needed to boost credibility and uptake across the built environment.’**

RICS Professional Statement, 2017

and unregulated territory, I undertook research analysing identified inconsistencies in embodied-carbon assessment tools (and processes), as well as considering tool applications in the future of embodied-carbon legislation. This was facilitated by the testing of a Passivhaus case study house using four UK embodied-carbon assessment tools.

Ten detailed test scenarios undertaken across the use of the four tools demonstrated clearly that disparities, even within the tools themselves, can be significant. This was the result of a multi-layering of factors including the scope boundaries of the tool, databases used, and assumptions adopted despite all conforming to the well-known RICS Methodology. This made the alignment of these assessment tools invariably complex. The ten test scenarios demonstrated a 53% difference overall for upfront carbon results (module A1-5/ cradle-to-practical completion) and an 86% difference for whole-life embodied carbon results (modules A1-5, B1-B5, C1-C4 excluding B6 & B7/ cradle-to-grave), thus demonstrating the wide interpretation and inconsistency, in particular of the ‘in-use stage’ and ‘end-of-life stage’ carbon emissions, which inherently are subject to greater future uncertainty.

## Summary findings

Diving into the data was key to establishing where some of these major irregularities were occurring. Summarising these broadly, the key findings are presented below and can be referenced in detail in my main research report.

- Tools can vary considerably in their suitability and applicability, and most significantly the databases that underpin them. These could range from OneClick LCA with 100,000+ datapoints in comparison to FCBS Carbon with around 90 entries. A good database should contain a range of verified generic-

**‘It is recognised [...] that for a sustainable future we need to drive towards net-zero carbon emissions across the UK built environment and that a lack of available and consistent data is one of the main barriers that remain unresolved.’**

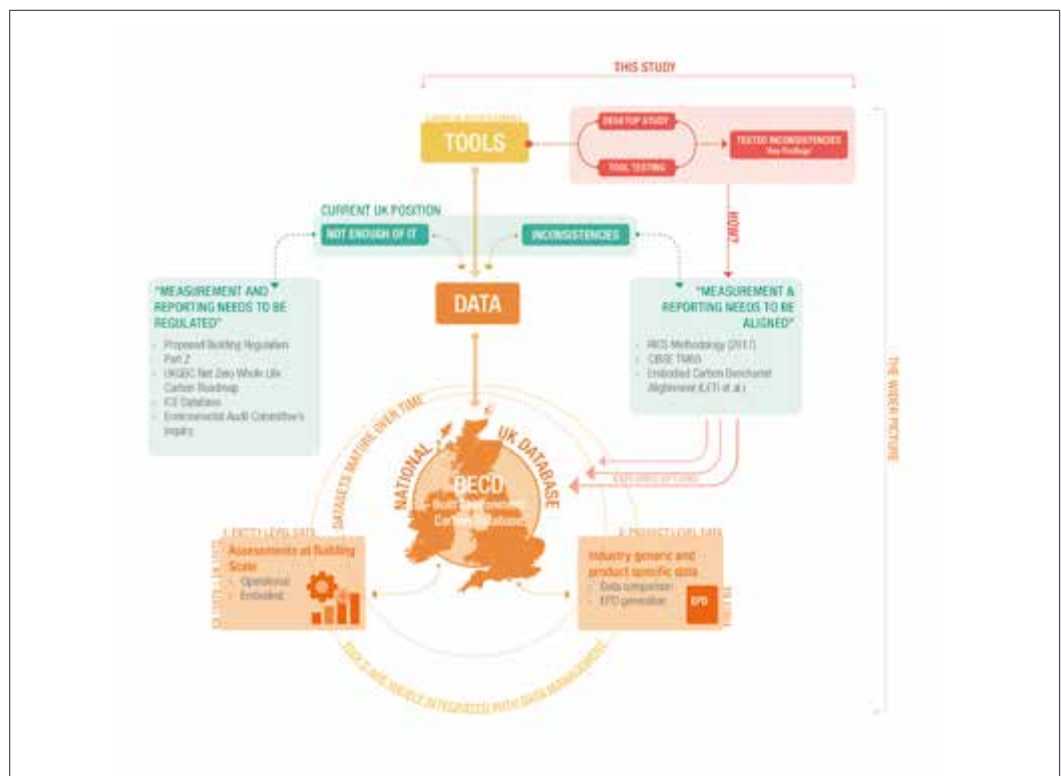
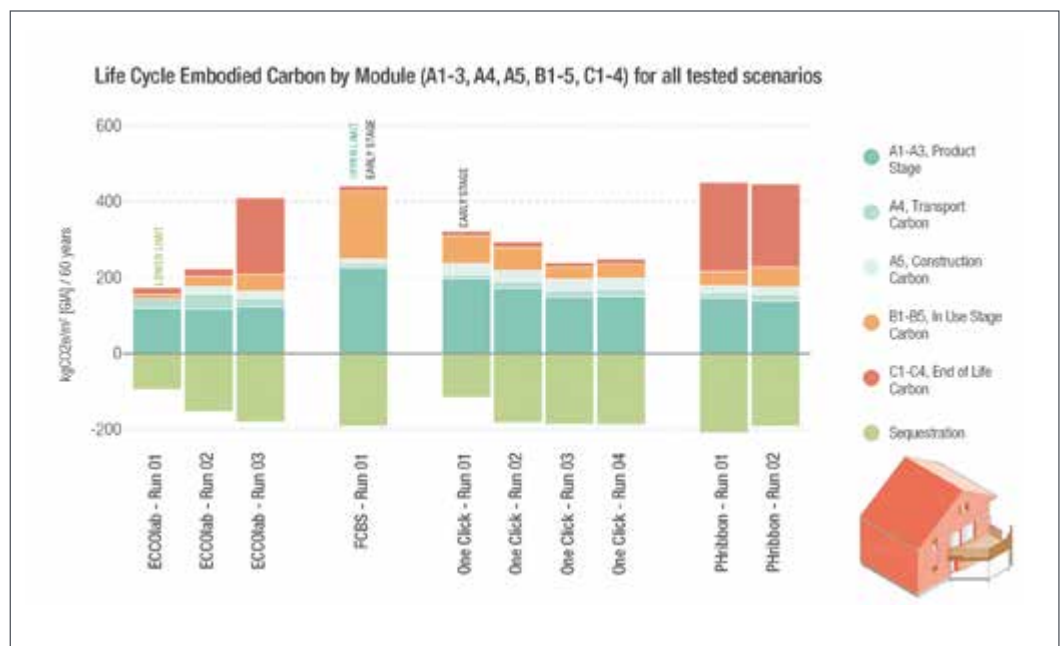
Built Environment Carbon Database, 2021

to-specific data that are regularly updated. In the absence of detailed information, verified generic data should always be available to use. One useful attribute of the ECCOLAB tool was the ability to be able to input specific and bespoke materials, subject of course to a thorough quality-assurance process.

— Robust and conservative assumptions are key in the absence of data. Early-stage calculation tools should aid and facilitate robust estimations based on more conservative scenarios as opposed to best-case assumptions. This enables primary focus on decarbonisation principles instead of simply mitigating high-carbon choices. (For example, carbon cement replacements such as GGBS in early design stages should be avoided so as not to drive decision making; instead material alternatives or optimisation should be targeted.)

— User error and interpretation was found to be a significant contributor to data inconsistencies. In one example, a 175% increase in emissions was the cumulative result of both incorrect product data input from an environmental product declaration and an underestimate of area for a wall element. This identified that an intuitive tool is useful to both provide guidance to the user but also help identify and eliminate error. OneClick was found to provide a well-established platform of guidance and information, dynamically reviewing results against internal databases to identify any atypical results.

— For consistency, accuracy and efficiency, integrated workflows between embodied-carbon measurement and building



1 Comparative results for whole-life embodied carbon by element (A1-5, B1-5, C1-4). Ten test scenarios across the use of four tools demonstrate that disparities, even within the tools themselves, can be significant. This is particularly relevant to 'B' and 'C' stage emissions.

2 The use of embodied carbon tools become integral to aiding the decarbonisation of the building industry when considering the wider picture. The inconsistencies demonstrated in the research are consequently informing the UK data pool and industry benchmarks. This will result in an embodied-carbon performance gap if these are not addressed at a policy level that adopts a freely accessible lifecycle-carbon tool and database.

**‘Being so focused on upskilling and carrying out the assessments, there emerges a major faux pas around how we are actually quantifying embodied carbon.’**

information modelling are essential. Tools should facilitate quick outputs with integrated assessment features drawing from quantities and information already used by the design team in a main coordination model. However, this does rely on the quality of the model, and separate direct input methods were found to be a useful feature for capturing bespoke instances.

- Qualitative data recorded for the tools in terms of workflows, observations and ratings from a user’s perspective were key to understanding the fundamental use and application of them. Tool scopes, features and costs were found to vary substantially. Findings concluded that tools need to be accessible both in terms of costs and complexity, as well as providing an integrated learning platform. For example, the AECB PHribbon successfully integrates information references throughout its spreadsheet tool.
- Sequestration from timber and timber-based materials always need to be fairly considered against end-of-life impacts, to avoid ‘greenwashing’. This varied significantly between the tools despite standards outlining how this should be addressed. One tool reported on the potential benefits of sequestration without fairly taking into account an end-of-life burden (in line with industry guidance), though this was caveated to use with caution. This could easily be miscommunicated and lead to false statements and greenwashing.
- The transparency of data is fundamental to improving accuracy of whole-life embodied-carbon datasets and knowledge. Many of the digital tools operated ‘under the bonnet’ churning out final totals that can be subject to a multitude of errors or inconsistencies not visible to the user when looking to attribute final numbers. Data should always be

available and accompany any calculations, and reporting should be transparent in breakdown and scope in order to usefully contribute to a wider UK database.

The magnitude of inconsistencies, even at the scale of my research, highlight the gravity of the issues we now face. If we can’t align and start to usefully quantify, compare and reduce true embodied impacts in buildings, then we can’t jump ahead making skewed performance claims of achieving net zero. With the ever-increasing interest on embodied carbon in the built environment today, the need for credible and verified whole-life carbon datasets has never been greater.

Drawing on the research and initiatives of some of the leading carbon experts, the Built Environment Carbon Database consortium reiterates this lack of available and consistent data as one of the main unresolved barriers when considering the UK’s transition to net-zero carbon emissions. It acknowledges the need to bring aligned reporting together within a centralised

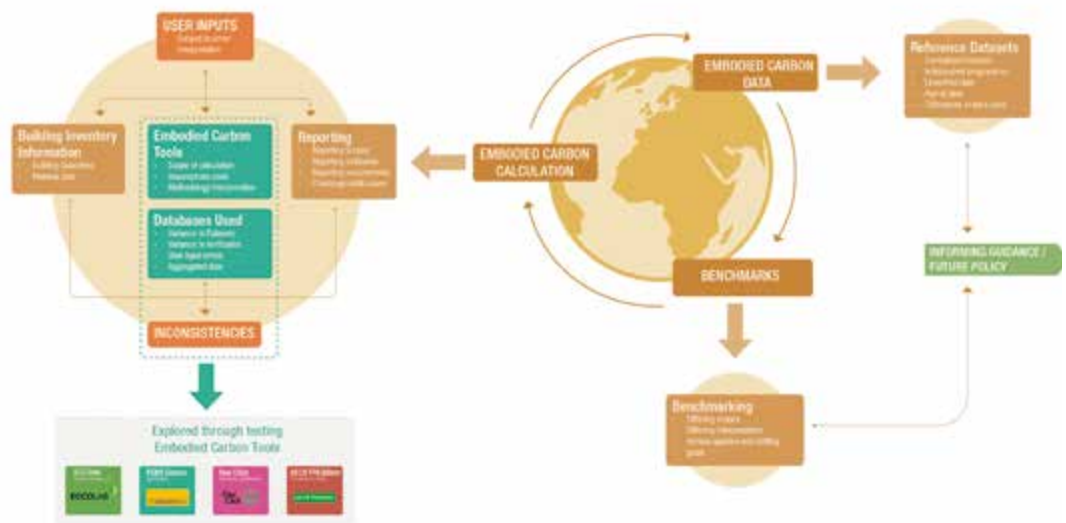
free and accessible UK-wide resource. While the initiation of such databases at industry scale have never quite taken off, it is hoped that such a database could provide the platform for these transparent and controlled data to usefully inform UK industry trajectories and benchmarking.

On this basis, my vision is for a freely accessible national but carefully considered whole lifecycle carbon assessment tool to be developed. This, in tandem with a refined and simplified methodological framework, would help the widespread adoption of embodied-carbon measurement and reduction at scale.

Amid the flurry of industry-wide activity by key stakeholders such as the UK Green Building Council, supported by organisations such as the Architects Climate Action Network, which is working hard to address both this lack of regulatory requirement for embodied carbon by advocating for policy change and alignment towards consistent measurement and reporting methods, I believe true mass adoption and uptake across the built environment can and will only happen once it is implemented at UK policy level. But even then, unless we can collectively align and rid the industry of some of the hurdles identified in my research, we’ll increasingly face disparity between striving for net zero but facing an embodied-carbon performance gap.

*You can download a copy of the original research by emailing: [sonia.brookes@architype.co.uk](mailto:sonia.brookes@architype.co.uk) who would welcome peer review and feedback on this from any interested, like-minded parties.*

Sonia Brookes



Above, an indication of the important role tools play in the growing awareness of Embodied Carbon Assessment.



# Are we getting there?

**In the 2019 report *Better Homes, Better Wales, Better World*, Chris Jofeh of Arup and his team set out to the Welsh Ministers a clear direction of travel to retrofit and decarbonise our existing homes. Is Wales still giving a good lead to the rest of the UK? Chris Jofeh offers an update.**

**W**ales is ahead of England when it comes to decarbonising socially owned homes. Wales's Optimised Retrofit Programme (ORP) is much better designed than BEIS's Social Housing Decarbonisation Fund (SHDF).

In the Welsh programme, every home is surveyed thoroughly. A device in every home automatically measures and transmits its gas and electricity consumption and internal environmental data every 30 minutes to the Active

Building Centre (ABC) at Swansea University for monitoring and analysis. Consistent data naming and data formatting are used throughout, which will make it easy to analyse and compare outcomes, a feature that the programme in England so far lacks. (SHDF barely collects any usable data about outcomes).

About 6,750 homes are involved in the first two phases of ORP. Only a small fraction are currently transmitting data back to the ABC, owing to major supply chain problems caused by the global chip set shortage and because it has taken far longer than expected to resolve GDPR issues. Resolution is imminent and that should be followed by a substantial increase in the number of homes sending data to the ABC.

Work to homes in the first two phases of ORP should be completed by March 2023. The next phase of ORP, known as ORP 3, will be launched in autumn 2023.

Sponsored by the ABC at Swansea University, the UCL Energy Institute has just completed an all-Wales building stock model, which is a digital

twin of every building in Wales. This will support every aspect of the decarbonisation of all our buildings, including finance. Finance for social landlords is a major challenge. In the Cardiff Capital Region there is a project in the early stages of trialling an end-to-end digital capability that links the stock model, and eventually an energy network model, with the financial model built by an organisation that offers off-balance sheet financing for the decarbonisation of socially owned homes.

The table below shows that about 16% of Welsh homes are socially owned, about the same proportion as England (17%) and Northern Ireland (15%) but substantially fewer than Scotland (23%).

84% of Welsh homes are privately owned, either owner-occupied or privately rented. In England the figure is 83%. Neither England nor Wales has made any real progress in decarbonising privately owned homes. This is serious because these homes are responsible for the vast majority of residential greenhouse gas emissions. They also provide the greatest opportunity for green jobs.

## UK home occupation types

Region	Owner occupied	Privately rented	Rented from housing associations	Rented from local authorities	Other	All dwellings (millions)
England	64%	19%	10%	7%	0%	24.7
Scotland	59%	14%	11%	12%	4%	2.6
Wales	70%	14%	10%	6%	0%	1.4
Northern Ireland	70%	14%	5%	10%	0%	0.8
<b>UK</b>						<b>29.5</b>

### Data sources:

England: Ministry of Housing, Communities & Local Government. *English Housing Survey Headline Report*, 2019–20, December 2020.

Scotland: Scottish Government, Housing statistics: *Stock by tenure*, 2018.

Wales: StatsWales. *Dwelling stock estimates by local authority and tenure*, September 2020.

Northern Ireland: Northern Ireland Statistics & Research Agency. *Northern Ireland Housing Statistics 2019–20*, December 2020.

**‘The design of energy-efficiency and decarbonisation policies must be based on a proper understanding of the behaviour of owner-occupiers and landlords.’**

On 29 June 2022, the Climate Change Committee (CCC) published its latest annual assessment of progress on the UK’s net-zero journey,<sup>2</sup> warning that ‘major failures in delivery programmes’ relating to home energy efficiency and agriculture are jeopardising progress. Regarding buildings and heat, the CCC has singled out the UK’s housing stock as a source of emissions that will derail net-zero progress without policy interventions soon. The CCC gave UK government 9/10 for ambition and 4/10 for delivery.

I believe there are three main factors responsible for the failure of current and previous UK energy policies to deliver affordable and sustainable residential decarbonisation at scale:

- The first is *lack of long-term policy certainty*. I count at least 15 significant changes in UK residential energy efficiency policy since the introduction of the Energy Efficiency Commitment in 2002. It is not so much



**People and organisations that directly or indirectly influence Welsh homeowners about residential decarbonisation. They all need to be at the table to agree strategy and tactics.**

Banks and building societies	Electricians	National Energy Action	Religious organisations based in Wales
Builders	Energy Saving Trust	National Federation of	Rent Smart Wales
Builders’ merchants	Energy suppliers	Women’s Institutes	Retrofit Academy CIC
Cadw	Estate agents	National Home Improvement Council	Role models
CBI Wales	Family, friends and neighbours	National House Building Council	Royal Welsh Agricultural Society
Centre for Alternative Technology	Friends of the Earth	National Residential Landlords	RSPB
Citizens’ Advice	Green Construction Board	Association	Schools
City regions	Green Finance Institute	NHS Wales	Sustainable Energy Association
Climate Change Committee	Greenpeace	Office of the Future Generations	Third Sector Support Wales
Community Energy Wales	Heating engineers	Commissioner	Transition Network
Community Housing Cymru	Higher and further education colleges	PAS 2035 duty holders	TUC Wales
Constructing Excellence Wales	Institute of Welsh Affairs	Plumbers	UK government departments,
Construction Industry Training Board	Insurance companies	Professional design institutions (e.g.	e.g. BEIS and DLUHC
Construction Leadership Council	Local authority building	Royal Institute of British Architects)	UK Investment Bank
Conveyancers	control departments	Professional trade bodies	Universities
Cynnal Cymru	Local authority planning departments	(e.g. Federation of Master Builders)	Urdd Gobaith Cymru
Designers (architects, engineers,	Local enterprise partnerships	Public Health Wales	Valuers
quantity surveyors)	Local Partnerships LLP	Public services boards	Welsh Government
Development Bank of Wales	Manufacturers and suppliers	Qualifications Wales	Welsh Local Government Association
Distribution network operators	National Eisteddfod of Wales	Registered social landlords	

the impact of any individual policy as the uncertainty and confusion caused by so many policy changes that has impaired the decarbonisation of UK homes. The National Infrastructure Commission has referred to the damage caused by ‘frequent, almost arbitrary changes in [government] policy [...] with numerous and sometimes conflicting aims’.

- The second factor is *failure to understand and change human behaviour*. The National Audit Office, the Confederation of British Industry and the Cabinet Office all agree that people need to be at the heart of the residential energy efficiency agenda. That means that the design of energy-efficiency and decarbonisation policies must be based on a proper understanding of the behaviour of owner-occupiers and landlords. To decarbonise their homes, they must have not only adequate knowledge about how to act but also the environment in which they live must facilitate action. This means both its physical attributes such as the availability of suitably skilled builders and installers and affordable finance; and whether residential decarbonisation is a socially normal thing to do, in the way that having a new kitchen or bathroom is socially normal. The actions of many people and organisations are needed to ensure social normality, and policies much reflect this.

**‘Hydrogen is claimed by some to be the way to decarbonise our homes, but it is not. Study after study has shown that there are better uses for hydrogen and better ways to heat our homes.’**

- The third factor, which overlaps with the second, is the *lack of a systems perspective of the problem*.<sup>3</sup> In the context of this article I mean that a focus solely on the actions of owner-occupiers and private and social landlords neglects the important ways in which the behaviours of these groups are influenced by the actions of many other actors in the energy system, some of whom are listed in the table on p.48. Tried and tested techniques exist<sup>4,5,6,7</sup> to help identify how different actors need to behave to create the conditions in which homeowners have the capability, opportunity and motivation to decarbonise their homes.

### A note about hydrogen

Hydrogen is claimed by some to be the way to decarbonise our homes, but it is not. Study after study has shown that there are better uses for hydrogen and better ways to heat our homes. It is important that we set the right priorities for hydrogen to enable its rapid scale-up and long-term contribution to our decarbonisation efforts.

The figure below illustrates the end uses for which electricity and green hydrogen are best suited.

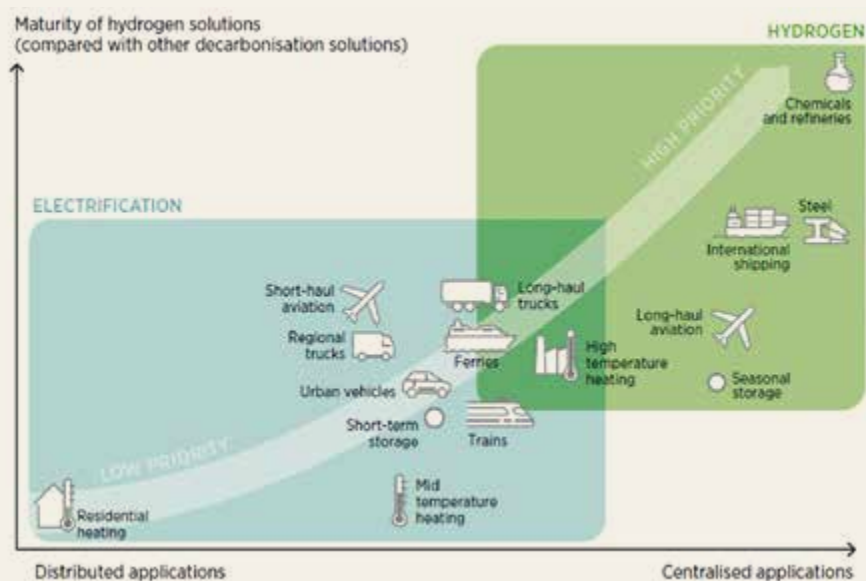
### Conclusion

To decarbonise Wales’s privately-owned homes is an immense task that will require substantial collaboration by people and organisations across the nation. It may well be made harder by continued policy changes from UK government, but we should not let this discourage us. If we work together, we will succeed.

### References:

- 1 UK government’s Department for Business, Energy & Industrial Strategy.
- 2 Climate Change Committee. Progress in reducing emissions: 2022 Report to Parliament, June 2022. [www.theccc.org.uk/publications](http://www.theccc.org.uk/publications).
- 3 C Shrubsole, et al. ‘Bridging the gap: The need for a systems thinking approach in understanding and addressing energy and environmental performance in buildings’. In: *Indoor and Built Environment*, volume 28(1), 2019, pp. 100-117
- 4 Susan Michie, Lou Atkins and Robert West. *The Behaviour Change Wheel: A Guide to Designing Interventions*. Silverback Publishing, London, [www.behaviourchangewheel.com](http://www.behaviourchangewheel.com).
- 5 Caroline Wilson and Melissa Marselle. ‘Insights from psychology about the design and implementation of energy interventions using the Behaviour Change Wheel’. In: *Energy Research & Social Science*, volume 19, September 2016, pp. 177-191.
- 6 Niamh Murtagh, Alice Owen and Kate Simpson. ‘Beyond drivers and barriers: a theoretical framework addressing the engagement of UK construction practitioners in retrofit for energy-efficiency’. In: SEEDS International Conference 2020 proceedings, Sustainable Ecological Engineering Design for Society, September 2020, online.
- 7 Robert West, et al. *Achieving behaviour change: A guide for national government*. PHE publications, November 2020.

### Clean hydrogen policy priorities



Source: IRENA. *Geopolitics of the Energy Transformation: The Hydrogen Factor*, International Renewable Energy Agency, Abu Dhabi, 2022.

# Raw *refined*

Barn conversions are ten a dozen all over the Welsh countryside but they so often suburbanise the farmyard both socially and in their visual language. One such project in the valleys, breaks that mould. It manages to belong. **Tim Graham** reports.

The architectural formulae for barn conversions in many cases have become decently well mannered: existing openings and their former internal singular volumes are respected as far as practicable; the new internal plan and sections have to work within those parameters while still coping with the bat-loft brigade and vastly varying expected levels of domesticity. The raw has to be refined. How far and in what way the raw is refined is, however, critical.

With planning policy deterring dreams for those who could afford it, of a new dwelling in open countryside, all the attention has turned inevitably to installing human animals where there were once the four-legged variety. The Country Land and Business Association Cymru's 'Rural Powerhouse' campaign, suggesting that by easing up on planning, thousands of redundant farm buildings could be a pragmatic solution to our affordable-homes crisis, is clearly laughable. The reality almost inevitably is that the gulf in income and often culture between most farm workers and new barn inhabitants is not necessarily a well-mannered or easy fit. The physical fabric may seem undisturbed, but the social fabric may be broken irreparably.

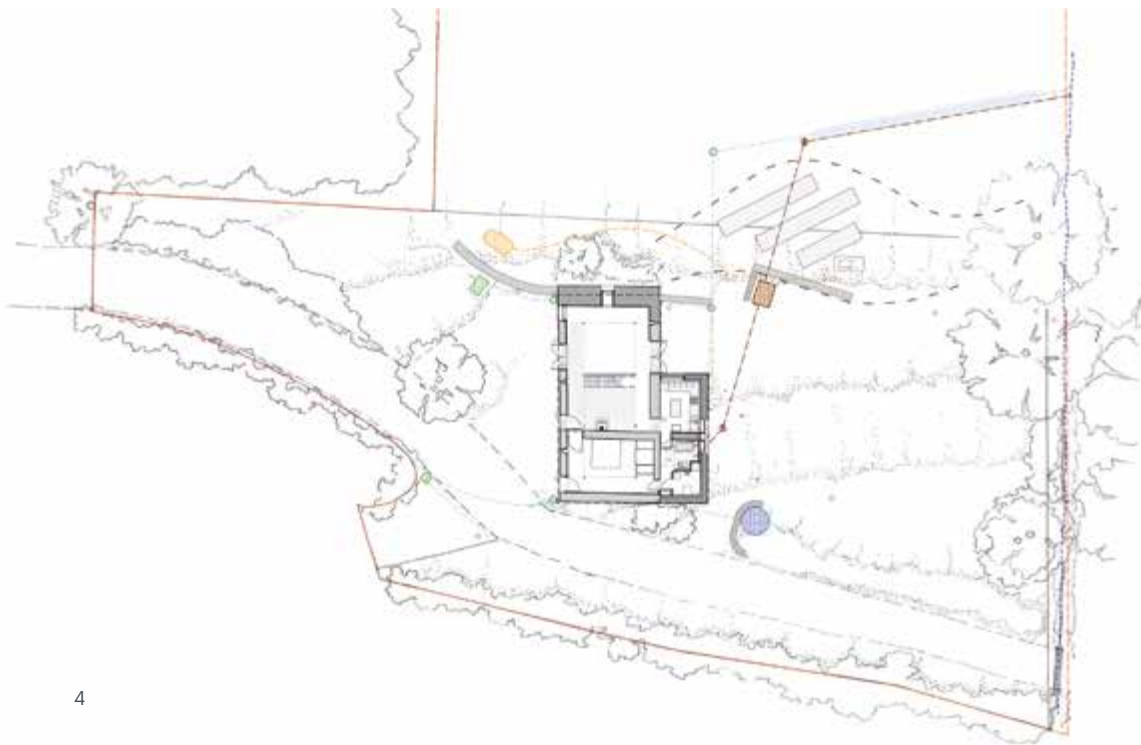
Thus, architectural manners are only part of the problem here. Who is actually taking up residence? Why, and how do they live there? Is it as an isolated idyll or well-grounded and connected to the many communities around it? Who did the conversion work, contractors from a distance, subbies from a city network or a loose family of rural locals all known to each other, feeding money into a local circular economy? These things matter.



3



Photos Julie Cook



4

assessment point scoring and suffocating bureaucracy. An opportunity for early retirement combining with family deaths and inheritances opened up new horizons.

The early-eighteenth-century Pwllhelyg Barn, recorded in the Royal Commission on the Ancient and Historical Monuments of Wales's *An Inventory of the Ancient Monuments in Glamorgan, Volume IV, Part II* (HMSO, 1988, pp. 534 and 552), is up a single-track road above Ynysybwll and reached by a rough track, a public right of way. It is up for sale. It is very much off-grid, no chance of mains electricity, no mains gas, no easy mains sewage. It is tin-corrugated-roofed, well worn, and rusted. It is hidden from the road by gnarled Welsh oaks, beech trees and other native species. It's a stone-walled barn in a clearing.

5



- 1 Local stonemason Tony Perkins: early day fabric explorations.
- 2 The cruciform section steel frame installed.
- 3 Still a farmyard setting.
- 4 Site plan
- 5 Approach elevation: largely unaltered openings.
- 6 Rear elevation with reconstructed gable.
- 7 Double-height living space.
- 8 Upper workspace.
- 9 Ground floor gallery.

7



6



The starting base for the conversion of the Pwllhelyg Barn above Ynysybwll in the south Wales valleys might not seem that promising.

An architectural writer/academic of thirty years' standing in London's architectural hothouse, and a photographer working on looking at sexuality, voyeurism and our desire for fantasy and escape in Western culture might seem a long way from Ynysybwll. The spark that brought them to Wales happened some time ago. It was a passion for Harley-Davidsons but more specifically converting them into trikes. Hank at Caerphilly is one of the few go-to trike converters in the UK. The landscapes of south Wales over time became gradually familiar.

After decades of commitment to teaching, working at the Architectural Association and South Bank and in parallel, since 2012, writing 24 well-respected essays to the *Architectural Review's* 'Reputations' series, Davies has a massive mental library of architectural references, but no experience of barn conversions. The passion for teaching has been finally expunged by research-

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9



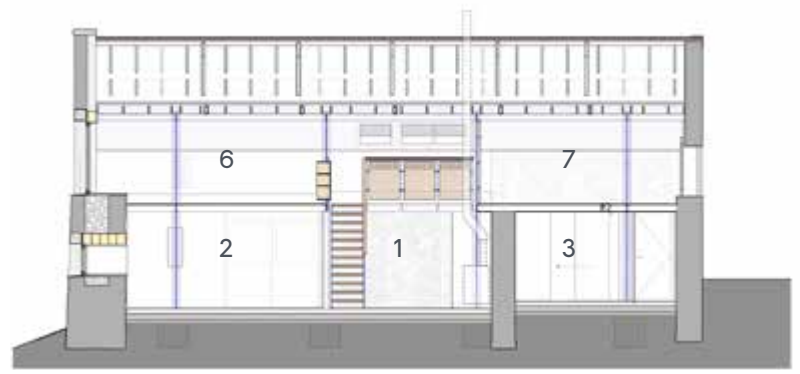
Davies and Cook rent a flat in nearby Ponty. An old, robustly detailed railway wagon is found on eBay. It is hauled across the valley and converted by a local carpenter into a domestic lived-in site hut to Davies's drawings. Showering for two years is done by a bucket of cold water hung from a tree with a fretwork of interwoven branches offering privacy. The years between wagon living and Ponty flat harden them up against too many luxuries. It was a long haul.

Through conversations in the local pub they find Tony Perkins, local stonemason and builder, who becomes essentially surrogate fabric architect, but practised in the old honourable tradition as an expert of the land and its materials (the timber structured metal-roofed pole barn behind the historic barn is all Perkins's work) – and so began a long list of networked local contacts in all trades.

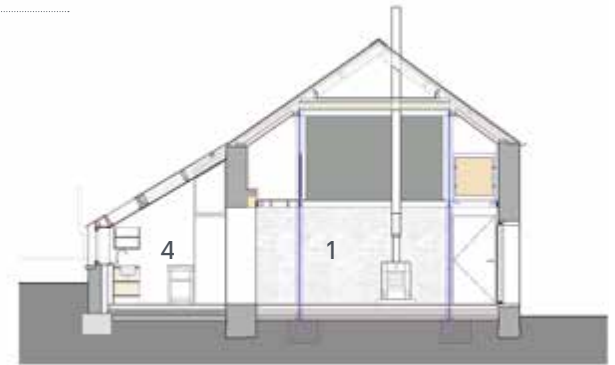
Paul Davies and Julie Cook asked a fellow academic and Forest Row architectural practitioner Nic Pople with assistant Sophie Woodhatch to do the heavy lifting, taking the whole project through all its regulatory processes. Davies, while qualified to part 2, has not practised for decades. Neither architect has built under the Welsh building regulations. A deep and respectful trust in each other's roles was paramount.

Inevitably, architectural references had to be given vent. A Mies van der Rohe 1928 Villa-Tugendhat cruciform-columned steel structure now strides through the barn holding the upper floor and insulated ceiling to the bat loft. To keep the frame pure and within Welsh regs required a 3,000-litre sprinkler reservoir tank outside, its top comfortably protruding from the sloping ground to the rear, alongside the wagon.

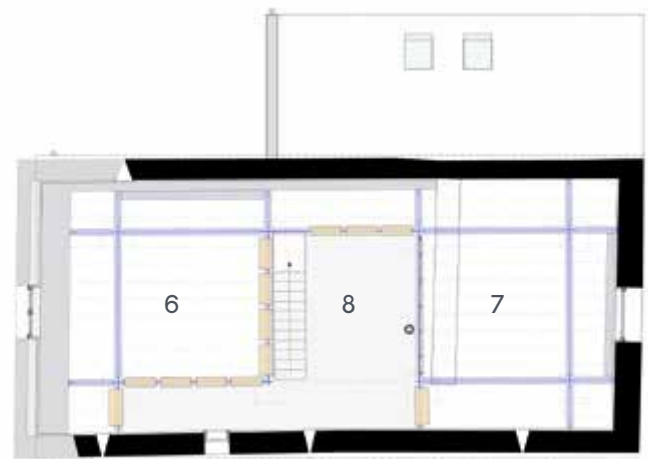
Wall colours are from Le Corbusier's 'Polychromie Architecturale' colour keyboards of 1931 and 1959. Kitchen storage includes 1926 'Frankfurt kitchen' lookalikes. There is an eBay-purchased Henry Tessenow radically exposed grandfather clock mechanism with no casing. The kitchen hood is a direct copy of those in Corbusier's 1954-56 Maisons Jaoul. The shower and pipework drawn by Davies and crafted by local plumber Andrew Thomas owes its inspiration to Mackintosh and Philip Webb's Standen' house, with even a knowing wink to John Young's extravagant flat in Hammersmith. The vintage shower head is from the US via eBay. There are Eileen Gray and Mies chairs, some gracing the ground-floor photo gallery. The steel-framed and timber balustrade storage units around the open stair have a touch of Pierre Chareau's Maison de Verre, but with chunky timber heels. The terracotta floor tiles with imprints of their manual making are sourced from the Middle East. The wickerwork stair balustrade by Clare Revera offers a countering softness to touch. Three of the original slit vents in



Long section



Cross section



First floor plan

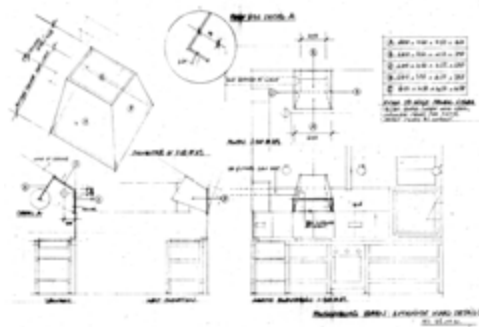


Key to floor plans and sections

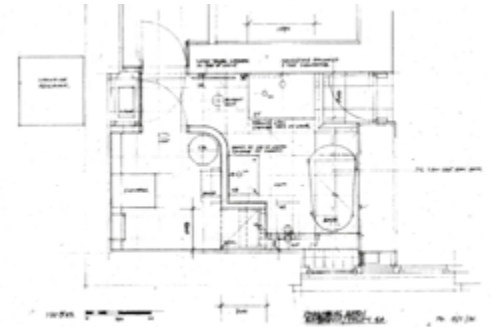
- 1 Living space
- 2 Gallery
- 3 Bedroom
- 4 Kitchen
- 5 Bathroom
- 6 Workspace Paul Davies
- 7 Workspace Julie Cook
- 8 Void above living space



Ground floor plan



Cooker hood drawing: Paul Davies



Bathroom and utility/plant room drawing: Paul Davies

the wall are left as open to the outside air, but inside, inward-opening chunky-section timber hinged shutters each with their own slidable smaller shutter for minimal vent when required, offer various level of ventilation. All the doors are of the same heavy solid-section timber along with their timber lever ironmongery.

This may all sound chic ‘museum-ish’ but it doesn’t come across that way at all. It feels eclectic, comfortable, unfussy, strangely permanent, resilient and rugged in places, aided by the decision to insulate the wall internally with an inevitably unevenly surfaced Ty-Mawr Eco-Cork 40 mm thick lime render.

A 1,500 kW/hr rig of PVs laid out in the landscape with battery storage, which on full charge will last for three days, along with a solar

water heating array on the roof is part of their off-grid renewables kit. But then bottled LPG serves the cooker, the Eco Stove, and a back-up boiler plus generator when needed in dire emergencies. ‘Being off grid’, says Davies, ‘feels good in the head and in the pocket’, until you are checking the LPG tank in the coming winter with rocketing fossil-fuel prices.

The most fought-over element was Davies’s and Cook’s insistent demand that they must retain the tin corrugated roof at all costs. Everyone tried to dissuade them particularly when they wanted to make transparent openings in it for daylighting the service spaces in the lean-to part of the barn. Instead, they simply slid full-length transparent corrugated sheets beneath the tin so that it reached the guttering and then fixed secondary framed double-glazing units to the rafters below. There

is no waterproof membrane layer beneath the tin. They talk of it as a ‘romantic’ decision hinting at it being sort of impractical and emotional as though they have to apologise for that. Some others who don’t know them, or that place, or its community, might see it as sentimental and contradicted by a possibly exotic interior.

It’s none of that. It wouldn’t enter their heads to suburbanise anything, tidy up the landscape and its levels. There is no car parking. They have a trike in a garden shed by the pole barn, it’s open-air transport, not for the faint-hearted. The barn as you approach it looks as it ever was. One chance for a big glazed opening above a door to light the upper floor interior was resisted. At the rear it just feels like a farmer’s backyard, with random objects and structures placed where they need to be. But, more importantly than all that, there has been built a social fabric very gradually over time with many hours in the local pub and with new-found friends around in the hills. Both Davies and Cook wear their intellectual gravitas with boisterous and sometimes bawdy humour. No doubt some locals may see them as pretty eccentric but then those valleys are full of characters. In talking about a ground worker on the project, Davies says:

‘I never even asked his second name, but he was there right at the start with the trial holes and he was there right at the end shifting the compost toilet. I was particularly taken by his attitude, which was so refreshing after living in London. He’s the kind of figure you find in any farming environment; he kind of comes with the property, however he would be very shy of any publicity.’

That’s part of the raw. Yes, it has been refined, but it’s not romantic. It belongs, deeply, physically and socially. Few barn conversions achieve that.



the detail



**Credits:**

Architects: Nic Pople Architects with Paul Davies

Logistics: Julie Cook

Structural Engineers: Peter Beresford, Structural Solutions

Steelwork Contractor: A J Lowther & Sons

Builders: Tony Perkins and Chris Den

Joinery: JW Joinery (South Wales)

Plumbing: Mark Badman and Andrew Thomas

Electricians: B Speck & Son

Sprinkler installation: RSP Sprinklers Wales

Solar Thermal: Tim Mayers, Rutland Renewables

Photovoltaics: Offgrid Engineering

Stove supply and installation: Ecco Stove

Fire Consultant: Richard O’Connell, The Fire Practice

Drainage Consultant: Clive Onions

Energy Consultant: Arcadian Architectural Services

Ecology: Rebecca Sheahan, East Ecology

Weaver: Clare Revera

- 1 Site gate; sign indicates raw refined.
- 2 Solid purpose-built joinery.
- 3 Robust farmyard ironmongery.
- 4 Bathroom special.
- 5 ‘Frankfurt kitchen’ reference.
- 6 German industrial light fitting.
- 7 View across double-height living space.
- 8 Woven balustrade.
- 9 Maison de Verre reference with chunky heel.
- 10 View down double-height void to living space below.



Main photos: Max Creasy

1

Reticence and modesty are consistent qualities of the best vernacular but slavishly pursuing its language of form and materials in any new extension may just be the lazy option. **Adam Voelcker** reviews a more subtle resolution. It deserved its award.



2

# Rural vernacular extended

3



A short story reads differently from a novel, and the process of writing each is different, too. But it will not necessarily have taken its author less time to write or have been less challenging; nor will it be any less noteworthy as a piece of literature. A Maupassant gem is every way as valuable as a Zola epic. Designing a small domestic extension or a hospital is perhaps similar. Once you delve into any form of creative pursuit, there is no end to the possibilities on offer, no matter what the scale is. The secret is to search for the hidden potential.

And this is exactly what Martin Edwards has done at a small extension to a house in south-west Anglesey. The clients' family had been staying here since the 1960s and bought the property around 1977. Comprising a traditional two-storey farmhouse and attached byre, it served well until more recently when alterations to accommodate the accessibility needs of a family member were required. Chiefly, this took the form of a small extension on the site of a fallen-down stone structure beyond the byre, for a new bedroom and bathroom, but the arrangement of the entire house was rethought at the same time.



**Subtle moves**

Edwards and his clients worked through a number of options, helped by models whose main parts could be swapped around in different combinations. The house, with its small, low rooms either side of a central stair, retained its character throughout; the byre, of two spaces, was more flexible and offered itself for further small rooms or for a bigger space. The favoured scheme placed the kitchen at one end and the dining room at the other, thus taking advantage of its bigish volumes. But the more challenging issue was the third part, the bedroom extension. The obvious solution would have been to build it on the footprint of the derelict structure, in line with the remainder, but Edwards and his clients resisted this because the extension would be too visually obvious from the access lane. By shifting it forward a few metres, it allowed a clump of trees to be kept at the rear and, more importantly, it broke the line of building and provided a lovely sunny corner at the front that also helped contain the garden. The extension is the same depth front to back as the remainder, and its roof the same pitch, so one roof crosses the other at mid-point, simply and casually in the way that you see on farm sheds.



- 1 View of new extension on site of former byre.
- 2 Principal elevation; extension on right.
- 3 Gable end to new extension.
- 4 View through dining space to new kitchen.
- 5 View through dining space to new extension.
- 6 Bedroom prospect to landscape.
- 7 Rear of extension.

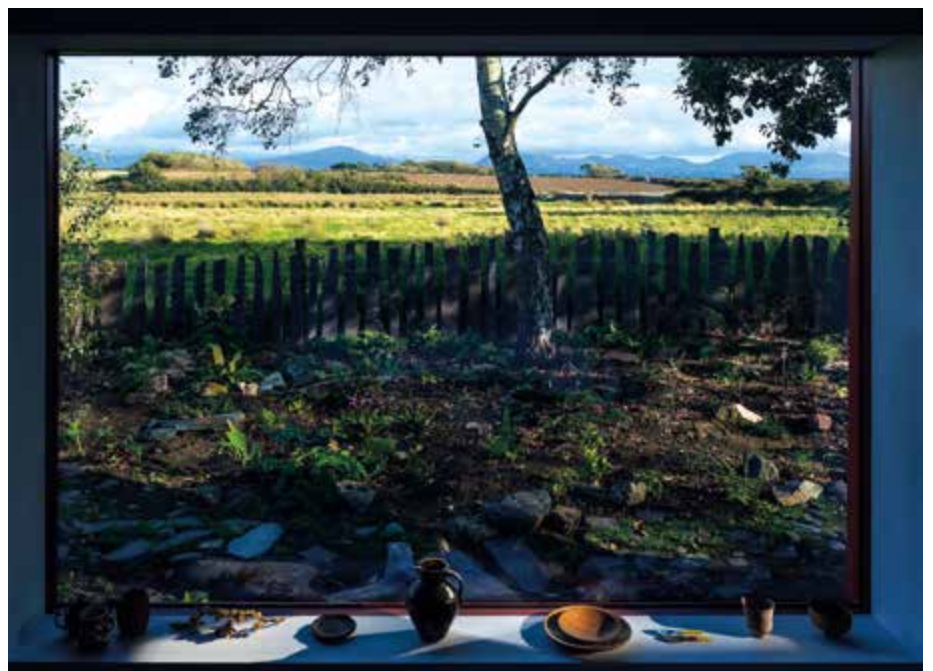
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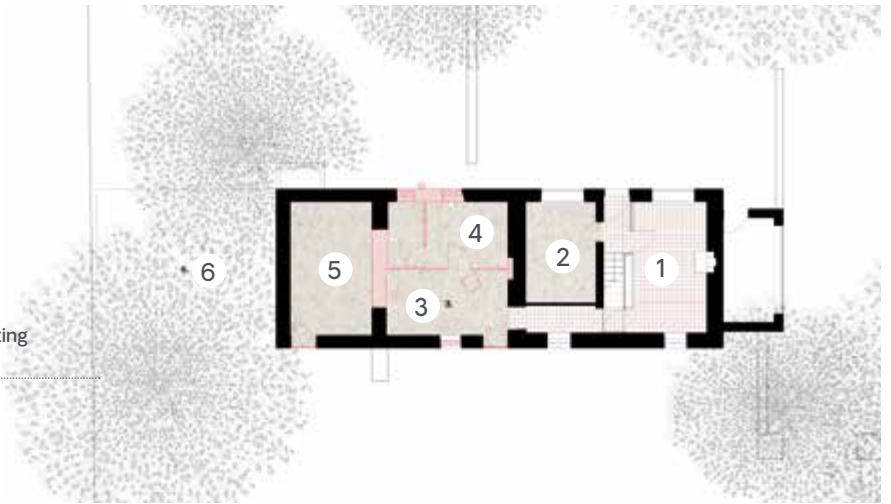
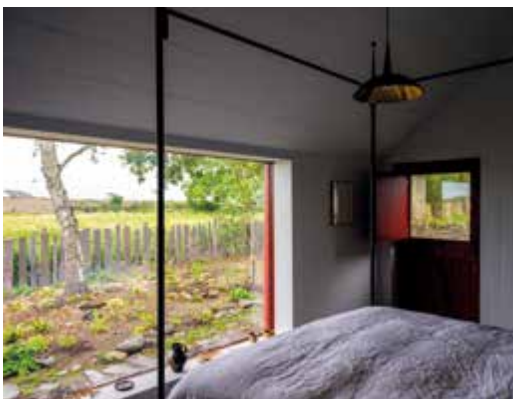


7



Edwards photographed agricultural buildings in the vicinity and clearly had these in mind when working on the project. What he wanted to avoid was barging in from the outside (his practice is in London) and imposing foreign ideas on this quiet, rural corner of Wales. This reticence, and modesty, has been the key to his approach throughout, both at the formal level and also in the detailing.

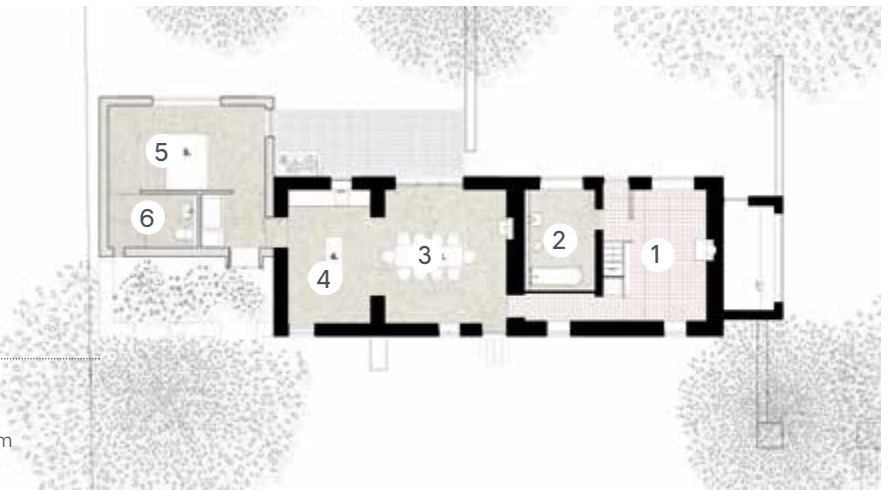
The house roof retains its old grouted slates; the byre had been roofed with asbestos sheet, and needed renewing. Slates would have been the favoured choice of certain planning authorities but fortunately the Anglesey planners were more open-minded. Edwards chose to re-roof the byre with corrugated sheeting more or less the same colour as the previous sheets; for the extension roof, he kept to corrugated sheeting but changed the colour to a rich brown. The same material continues down for the walls of the extension, while the stone walls of the remainder are whitened in the traditional way. It's a brave move and I think it's the right one, it says 'here we are in the twenty-first century, when we can do things differently from the way we did them in the past; this is a piece of new build that can express our times rather than kowtow to the past; it adds another bit of the historical jigsaw which makes the study of old buildings so fascinating'. It's a far richer solution than copying the past.



**Key to plan as existing before extension**

- 1 Living room
- 2 Bedroom
- 3 Kitchen
- 4 Bathroom
- 5 Store
- 6 Site of former byre

Plan as existing before extension



**Key to plan as proposed and built**

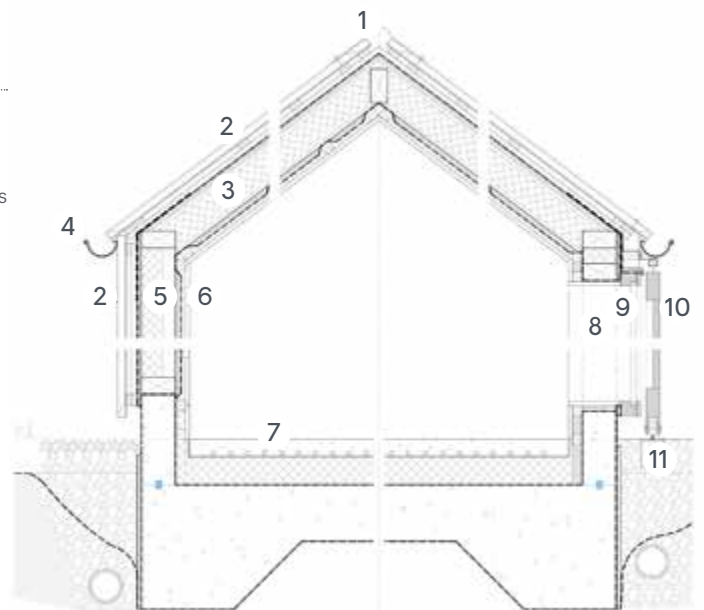
- 1 Living room
- 2 New bathroom
- 3 New dining room
- 4 New kitchen
- 5 New bedroom
- 6 New en-suite bathroom

Plan as proposed and built



**Key to cross section**

- 1 Ventilated bituminous ridge piece
- 2 Corrugated bituminous sheeting externally
- 3 Full-fill rigid insulation between rafters
- 4 Half-round PPC painted steel gutter
- 5 Part-fill rigid insulation between timber
- 6 Painted square-edged T&G boards internally
- 7 Pigmented concrete floor screed with underfloor heating
- 8 Painted softwood internal reveals and cills
- 9 Double-glazed unit with stained hardwood frame
- 10 Painted timber sliding shutter
- 11 Precast concrete lintel with runner track



Inside the building, there is more evidence of Edwards' resistance to imposing ideas from outside, or even preconceived ideas of his own. The key was to search for local clues, to make the most of what was already in the house or to use material collected by the clients. When one family member is a jeweller and another a cabinetmaker (and yet another an authority in the world of art, design and architecture), there was plenty of encouragement to go to town with the detailing. I could see almost nothing that hadn't been thought about.

#### Attention to every detail

The electrical installation has a clear strategy, with choice of materials and fittings dependent on location and route (*photo A below*). There's even a handsome light fitting designed and made by Edwards himself (*B*). The same care is given to the fixtures and fittings in the extension bathroom (*C*). In the house, timber boarding is kept where possible, even in the bathroom, where many would have removed or concealed it; in the byre and extension, the walls and ceilings are lined with square-edged painted softwood boards, which are beginning to open up (*D*). But I like this. It's what we would expect to see in a traditional cottage. It is relaxed and reminds us of the ways of nature. It's not over-precious in the way that architect-designed buildings can so easily be. Thought has gone into the shuttering for the concrete beam between kitchen and dining room (*E*) and into the big window that opens up to the

distant mountains of Snowdonia from the dining room (*F*). Kitchen fittings have been made by a family member, and items of ironmongery, like hooks and light fittings collected over the years by other family members, have been used where appropriate (*H*). Edwards says he loves this way of working, of assembling ready-made bits and pieces, making use of what you have. 'One way or another everything was curated', Edwards told me. The result feels as much museum as home, and it's delightful.

That it came at a cost is probably no surprise. Edwards is unhappy with some of the details as executed, for instance junctions on the extension (*G*). He had to make do with local expertise but is quick to point out that individual craftsmen and trades were often excellent; it was more that the standard contractual arrangement, in other words using a main contractor, was far from successful. But it is a credit to Edwards and members of the family (who helped run the contract) that there is very little evidence of this in the finished product.

One final word should be said about the planning. The starting point for the project was to adapt the house for use by a wheelchair user. But nowhere is this obvious. Doorways are wide, many of them with timber-boarded sliding doors hanging from honestly expressed wheels on rails, but they feel wide in order to create a relaxed, expansive atmosphere, not simply to allow a wheelchair through. The new extension is tailor-made for the wheelchair-bound family member, yet it feels anything other than clinical.

**'It may be a small project but there's a wealth of thought applied to it ... Like the short story it may not be epic in proportions but can still be excellent in a small way.'**

It may be a small project but there's a wealth of thought applied to it. The more I looked, the more I found. When a client can be so satisfied with the result of an often expensive and stressful building project, one feels, as an architect, that a worthwhile mission has been accomplished. Like the short story, it may not be epic in proportions but can still be excellent in a small way.

*Martin Edwards extension was awarded winner of AJ Small Projects 2020*

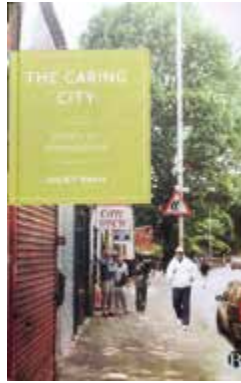
*Adam Voelcker is an architect living in Bangor. He was a co-author of the Gwynedd volume in the Buildings of Wales (Pevsner) series. He wrote a monograph on Herbert Luck North and, more recently, 'David Lea: An Architect of Principle'.*



the detail

# Book Reviews

Ethics takes centre stage  
arguing for the need to reinstate  
a robust infrastructure of care  
as core to any city's future



## The Caring City: ethics of urban design

Juliet Davis | Bristol University Press

*Clare Melhuish*

I met Juliet Davis some years ago through our respective work related to urban transformation of the Queen Elizabeth Olympic Park site in east London following the London 2012 Olympic Games. We were both concerned with the emerging shape of the Olympic Legacy and its implications for local people in the adjacent boroughs, whose lives had already been turned upside down by the scale and depth of urban remodelling that the games had mobilised. Davis's earlier book *Dispersal* is a compelling textual and visual record of the dislocation and displacement of small businesses and livelihoods from the park site that occurred. I was implicated in these processes as an academic from UCL, one of the new educational and cultural institutions lured into the park by lack of space in its central London location, and promises of a government-subsidised site in east London on which to build new facilities. I was also the author of a report on 'university-led regeneration', as we called it in UCL Urban Laboratory, which set out to examine the role of universities in these processes and, as centres of critical urban thinking, in the urgent need to establish the parameters for an ethical regeneration framework that would put the needs and 'right to the city' (in Lefebvre's formulation) of disadvantaged communities and overlooked neighbourhoods first.

Davis's ambitious new book, which introduces the concept of 'right to the city' in a powerful chapter on the need to safeguard continuity in urban neighbourhoods, effectively does this, issuing a challenge to all those professionals and financial agencies involved in urban design and 'development', who are more attuned to the needs of finance than of people or the ecosystem that sustain us all. Researched and written largely during the Covid-19 lockdowns, it is a direct response to the impact of the pandemic on our thinking about the need to reinstate robust infrastructures of care in our society, take immediate action on the climate crisis, and 'build back better', but it is also a sophisticated analysis of academic theories of care and their application to the field of urban design, which reflects years of engagement with these issues across sites such as the Olympic Park.

Parc Central Romantic Garden; photo Richard Bloom for Gustafson, Porter and Bowman



The central thesis of the book, drawing in a wide range of scholarship from across disciplines, is that in the wake of the much-maligned welfare state (and its supposed promotion of a ‘dependency’ culture among the beneficiaries of state-provided housing and social support) the hegemony of neoliberal capitalist models of development and urbanism globally has enforced values of freedom, autonomy and self-reliance that are directly opposed to those of interdependence and mutual care, resulting in a broken urban fabric and planet. Davis begins by tracing the source of ‘care ethics’ to the theoretical work of feminist scholars such as Gilligan, Fisher and Tronto, Held and Noddings in the 1980s and early ‘90s, and its subsequent application to the reconceptualisation of ‘infrastructure’ and interdependent human/non-human networks by scholars such as Puig de la Bellacasa, Rawes and Petrescu in the twenty-first century, which have had a powerful influence on architectural, urban and ecological thinking and less influence on actual practice. She then maps identified dimensions of ‘care’ as focused on needs, relationships, processes, and the future, on to the field of urban design which, as she points out, has often since the mid-twentieth century been ‘depicted by urban scholars as the antithesis of care’ (p. 22). Critical voices such as Jane Jacobs’ and Richard Sennett’s loom large from the past, and in response the book unfolds its thesis of ‘care through urban design’ in four chapters focused on placing, accessibility, atmosphere, openness, continuity/attachment, and tending of futures.

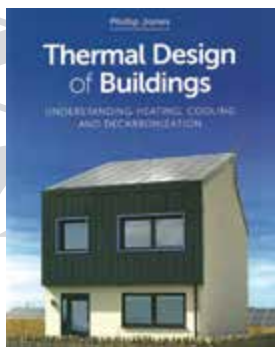
The book demonstrates a considerable achievement in its communication and fusion of quite complex critical theory from a wide range of sources with a pair of applied case study scenarios in each chapter, presented in some detail through interviews with the architects/designers and in some cases

*‘Has the concept of ‘care’ caught on in current architectural and design thinking as an apolitical substitution for the loaded term ‘welfare’ and as an avoidance of political critique?’*

residents or local inhabitants. A criticism would be that the selection of case studies, switching between quite diverse geopolitical and cultural contexts, which are not fully divulged, is not rationalised; and that, for a thesis that foregrounds the importance of grounding and ‘emplacing’ urban reproduction in the messy detail of real social needs, relationships, and value systems, the concept of ‘care’ itself is universalised (primarily by reference to Western scholarship) and decontextualised from the very different global social and urban contexts in which care is understood and realised as a value and a practice according to contrasting cultural, religious, philosophical, political and social organisational systems that are not explicitly referenced here.

However, this is a highly readable book that makes a vital contribution to the articulation of a political critique of global urbanism illustrated by clear examples of how to do things differently, as the clamour for change, particularly among the younger generations, increases inexorably in intensity. My concerns that the concept of ‘care’ has caught on in current architectural and design thinking as an apolitical substitution for the loaded term ‘welfare’, and as an avoidance of political critique, in fact is dissipated as Davis quietly but relentlessly built her challenge through the book to urban design to support ordinary people not only as carers of each other, but also as ‘earth carers’; to planning and design to stop being complicit in resource extraction and, like doctors, to ‘do no harm’ to the people they serve; and for economists and investors to embrace de-growth, long-termism, and ‘patient capital’ as the fundamental changes that are needed to preserve (a good) human life in symbiosis with earth for future generations. Indeed, the introduction of the concepts of ‘harm’, ‘justice’, and ‘rights’ in these pages are ripe for further and perhaps more emphatic development within the moral and legal frameworks that exist. This is a volume that should be read by all those involved in ‘building back better’, for the benefit of communities now, and generations to come, especially in areas like those around east London’s Olympic Park and others awaiting justice from those responsible for building cities.

# Book Reviews



## Thermal Design of Buildings

Phillip Jones | The Crowood Press

*Pat Borer*

Densely packed with 40 years of energy-related wisdom, all students and practitioners of architecture should have this book of knowledge and insights in their bloodstream.

For this reviewer, whose passion for low-energy buildings was 'born' at a time when it all seemed so very obvious to use the earth's income rather than its capital to satisfy our need for comfort, Professor Phil Jones was the rational, sane voice of a dedicated building physicist. His 40 years of research and teaching at the Welsh School of Architecture are condensed and presented in this book in a clear, no-nonsense way – from a holistic view of sustainability, energy, and climate change, right through to some detailed case-studies selected from those 40 years of research.

So, who is this book aimed at? It is not a popularist book, despite almost every page having a colourful explanatory diagram or a photograph of, for example, vernacular methods of cooling from around the world. No, there are many too many wonderfully dense and thorough explanations of environmental phenomena, formulae, example calculations, graphs, and tables for this to be a popular best seller. It must be for a student of building design – architect or engineer, either in education or a 'late developer'. It is a textbook, albeit one that takes a wide sweep through the development and understanding of environmental design, and displays a broad view of the current state of anthropomorphic climate change.

There are some welcome value judgements going on, subtly, behind the science. For example, thermal insulation materials are shown with the usual table (6.1) of  $\lambda$ -values (conductivity), but divided into 'natural organic', 'naturally occurring mineral' and 'oil-based', suggesting there may be other, holistic reasons for material choice. This is followed by graphs (fig. 6.9) showing how performance can also be assessed by comparing equal thermal resistance to embodied energy, with the organic materials performing the best. However, the facts are set out very fairly, with advantages, such as the breathability, moisture-buffering and sequestration (maybe) of organic materials being described, as against the cheapness and efficiency of oil-based materials.

There are also some charming, and radical, opinions, some of which may fly against current thinking in some low-energy circles – for example, that which the author refers to as a 'modern vernacular' approach to comfort:

'Achieving comfort by the more traditional means of radiant heat exchange and air movement might be considered

*‘There are also some charming, and radical, opinions, some of which may fly against current thinking in some low-energy circles – for example, that which the author refers to as a ‘modern vernacular’ approach to comfort.’*

a more pleasurable thermal experience of “thermal delight”, while using a tightly controlled air temperature is more associated with “lack of discomfort”, or avoiding problems; this follows the principle of “more good” rather than “less bad”.

This may seem to be a radical approach, but might chime nicely with current worries about chasing an annual heating load of 15kWh/(m<sup>2</sup>.a) by ever-larger south windows at the expense of the peak heating load, perhaps a better metric for a satisfactory low-energy building.

This theme of ‘more good’ rather than ‘less bad’ runs through the book, for example, in the last excellent chapter ‘Transition’, the author tells the truth about ‘top-down’ policies, saying ‘bottom-up follows the up-cycling concept of “more good”, whereas top-down approaches generally follow the “less bad” concept. Bottom up is potentially more engaged and comprehensive in relation to the needs of the inhabitants of the built environment’. Very well said – the proof of this statement is reflected in the online introduction to the independent Climate Change Committee’s 2022 report to the UK parliament ‘Current programmes will not deliver Net Zero’, which states that ‘there is a shocking gap in policy for better insulated homes’.

There are niggles of course: the odd ‘typo’ and some graphs are too small for old eyes to read. It is also slightly odd that in a book with many useful ‘rules of thumb’, that no mention is made of the handy, often free, computer programmes available to students, for those first stabs at design – designPH (as a friendly way into PHPP), Velux Daylight, Safaira, THERM, WUFI, and Brian Ford et al’s simple tool for assessing natural ventilation, Optivent.

All in all, this is a great book, densely packed with energy-related wisdom, with the perspective of a practitioner of 40 years – with much of that history being faithfully reported and commented on. There are occasional surprises (for example, there are more cold-related deaths in Australia than in Norway; ironing clothes uses more energy per year than making cups of tea – no contest!). This book is a must for any student’s reading list – students of all ages.

Climate Change Committee. *Current programmes will not deliver Net Zero*, 29 June 2022 [online]. Available at: <https://www.theccc.org.uk/2022/06/29/current-programmes-will-not-deliver-net-zero/> [accessed: 30 June 2022].

A salutary message for Welsh culture about its relationship and attitudes to modern buildings



## Modern Buildings in Britain: A Gazetteer

Owen Hatherley | Particular Books

Jonathan Vining

Hatherley hits the nail on the head in his introduction to the Wales section of *Modern Buildings in Britain* when he says:

‘Proportionally, nowhere has seen as many good modern buildings demolished or left derelict as Wales. There appears to be a general belief that anything modern is not worth conserving, or can be sacrificed to development at all costs; so the inventory of demolished buildings includes work that was in fact listed, such as the Brynmawr Rubber Factory; that should have been listed, such as Newport’s High School [...]; and an attrition of what still exists, such as the disgraceful dereliction of the stunning Brutalist Coleg Harlech.’

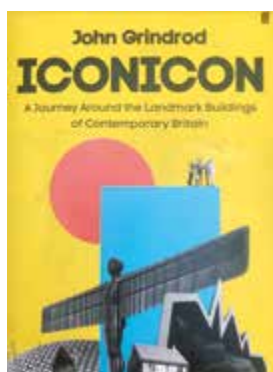
Hatherley’s tome, over 600 pages and 50 mm thick, is a huge achievement. As you might expect from him, it contains trenchant views, vivid language, and some laugh-out-loud moments. Beautifully designed in duotone with four blocks of colour photos bound in, it starts with an introduction to modernism and an (in places) idiosyncratic glossary of styles, followed by the main body of 14 geographical sections starting with Greater London before circling south, west and north and ending in Scotland. There are only a few houses included, owing to the difficulty of being able to visit them, and ‘Northern Ireland’s architecture belongs to Ireland’, apparently – so it’s just Britain and not the whole of the UK.

It’s incredibly refreshing that modernism in Wales is treated seriously, perhaps for the first time, in such a significant book. The country’s buildings are represented proportionally in number to the rest of Britain and, remarkably, are included fifth in the sequence of geographical sections and not at the end, after Scotland, as is customary. Other writers and publishers outside of Wales take note: yes, there are good modern buildings west of Offa’s Dyke, as *Touchstone* has illustrated over 25 years.

Of course, it’s easy with such a book to quibble over this particular building being included or that one being omitted, but I’d take issue with only a few of the 47 Welsh projects chosen by Hatherley. There are some significant omissions though, such as Trawsfynydd nuclear power station, while there’s no recognition of the attempts at a modern, regional architecture (for example, Bill Davies’s Plas Menai, Welsh National Outdoor Pursuits Centre, Llanfairisgair) nor of Wales’s huge contribution – particularly at the Centre for Alternative Technology for over 50 years – to the trajectory of sustainable building design.

It’s telling that while all the pre-war buildings advocated by Hatherley are listed by Cadw, astonishingly over 90% of the post-war ones are not. But, as he says, Cadw is still ‘notoriously blind to modernism’. He pulls no punches about the neglect of Gerald Latter’s work at Coleg Harlech (*Touchstone 2021*, pp. 18–21) either, which is ‘one of the real tragedies of modern architecture in Britain – a terrible collective failure, sickening in its implications’.

We urgently need a sound perspective on the last 40 years before we get taken up by the next 15 second news flash



**Iconicon: A Journey around the Landmark Buildings of Contemporary Britain**

John Grindrod | Faber and Faber

Tim Graham

We are in urgent need of perspective. The car crash of new daily events, the tweets, Instagrams, TikToks simply add to this sense of onrushing chaos. We need some clear heads to help us with what we are all facing.

Where have we been over the last 40 years? Could understanding this help make better sense of a saner strategy for tomorrow? Taking time to read John Grindrod's accounts of his epic exploratory journeys across 40 years of environment building in the UK might be a good starting point.

In his previous opus *Concretopia* he tried to make sense of how post-war visions either had the seeds of their collapse buried in their misunderstandings of the human condition at the outset, or had simply been corrupted by the market, a change of political party, or simply incompetent state bureaucracy. He travelled everywhere holding many conversations to make sense of 1945–80. Underpinning it all, however, was a constant admiration of that ambitious, post-war Labour programme to create a better and more equal world for all. In *Iconicon*, his sequel, he is travelling again, revisiting the high and low seminal architectural moments of the 1980s to the present day.

He divides the period into three parts; the final one 2010–20 he calls the 'Little Dark Age'. He could have made that the title for the whole 40 years, but of course in the 30 years before that there was so much bling, so many intriguing false dawns, so many iconic profligate sensations to distract us – and in between it all some genuine attempts to reconnect with that post-war ambition for justice and equality.

He begins in Wythenshawe where the rot sets in, the right-to-buy policies of Thatcherism. He roves across all of Canary Wharf and much of London's docklands and the legacy of the Olympics. The Prince of Wales's 1984 assault on the profession, his 'vision of Britain', are all put in crushing perspective by Grindrod's conversations with Poundbury locals. He exposes the faux antics of the private-sector volume housebuilders following the prince's lead, but never able to provide anything to match the best of council-housing Parker Morris standards for those most

in need. It took us 40 years until we had a Stirling Prize for the superb Goldsmith Street council housing in Norwich City by Mikhail Riches with Cathy Hawley, and he is also clearly bowled over by Peter Barber's solid socialist architecture of the likes of Ordnance Road in Enfield.

Grindrod takes on the rise of 'Tesco-bethan sheds and Business Parks', Bristol's out-of-town Aztec West; he roams the malls of Sheffield's Merry Hill and Gateshead's Metrocentre; everywhere he finds truth-telling locals. He takes us to the Millennium Dome (he has an understandable soft spot for the red-suited highly talented Mike Davies, Rogers's right-hand architect of that extraordinary structure). Grindrod confronts the boosterish regeneration of Manchester and Liverpool (he has another soft spot for FAT's intellectual sharp-man Charles Holland). He clearly approves of Gateshead's Angel of the North. He picks apart those extraordinary buildings of post-devolution democracy, although I would quarrel with him over his reading of the Senedd. He warms to the Wales Millenium Centre (he had good conversations with Jonathan Adams about more than the centre). He tackles the Cheesegrater, the Gherkin (which he admires), and the brutal realities of the Shard.

His final four sections all feature the word 'austerity', the stripping out of fundamental public services that began with Thatcher and ended with Osborne and Clegg's opportunistic post-2010 turning-of-the-screw-until-the-pips-squeak-even-tighter, until we are all now out on strike, some of us only in our heads.

Grindrod is our modern-day equivalent of William Cobbett's *Rural Rides*, maybe less vituperative and loud, more nuanced, but with the same searing eye to spot the disabling distraction of all these 'icons'. In his conclusion he observes that 'in some ways the period of 1980-2020 represents the mirror image of the post-war era [...] the consequences are not pretty [...] we have crept back to the conditions and mentality of the 1930s'.

If you are still in a frantic rush, then buy the book, and just read the searing final critique on pp. 458–461. Read the rest later, and while you're at it have at your side Owen Hatherley's astonishing gazetteer, *Modern Buildings in Britain* (see p.61).





# Honing the practice of home

The brain drain in Welsh architecture is not all one way. Some return and modestly, but with tenacity, in very small practices, they demonstrate a determined commitment to quality domestic architecture. One who took that journey was Michael Argent. Janet Marshall reports.



Above and below, a classic of the Argent genre, the 'Matchbox' house, Freshwater East.

Right, the Cambridge architecture school 1962 cohort, Colin St John Wilson top left.

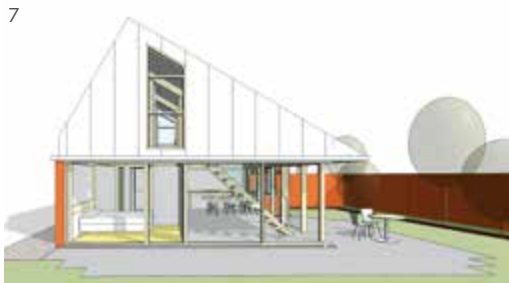
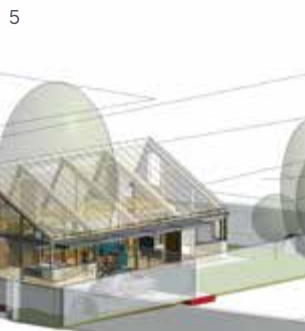


From an early upbringing in a village pub near Tenby to Cambridge in the 1960s, Argent joined the architecture intake of '62. Leslie Martin and Colin St John Wilson had added Peter Eisenman to the Cambridge staff, followed by John Meunier and Barry Gasson (of later Burrell Museum fame). Christopher Alexander was making waves with his 'pattern language'. Eisenman encouraged a blend of formalism and abstraction (via gestalt exercises) 'a holy grail that was always elusive and impossible to shake off thereafter'.

After graduation in 1965, Argent took a job at Ronald Ward and Partners working on Millbank Tower and an executive's house in Nigeria.

The next step, from the hothouse into the fire, was a move to the Architectural Association (AA), 1967-69. Peter Cook (with other Archigram members), Cedric Price and Keith Critchlow ramped up the intellectual temperature (practicality being low on the





**‘Cambridge rationalism and the AA’s bias towards liberating technologies have proved a formative blend – engendering an aspiration towards a bespoke kit-of-parts architecture in an all-embracing grid.’**

agenda). Buckminster Fuller and Tom Wolfe gave lectures. Norman Foster, Richard Rogers and Nick Grimshaw were available for the odd crit. For a year Argent shared a Kentish Town flat with Christopher Day, then studying sculpture at Regent Street Poly, another who was to return to deepest Pembrokeshire later in his career.

They were heady times. Cambridge rationalism and the AA’s bias towards liberating technologies have proved a formative blend – engendering an aspiration towards a bespoke kit-of-parts architecture in an all-embracing grid.

Argent turned down job offers from Leonard Manasseh and Ernő Goldfinger to work at Rice Roberts Architects on Harpenden and Ashford sports centres. He met his artist wife, Olivia, at the nearby Central School of Art.

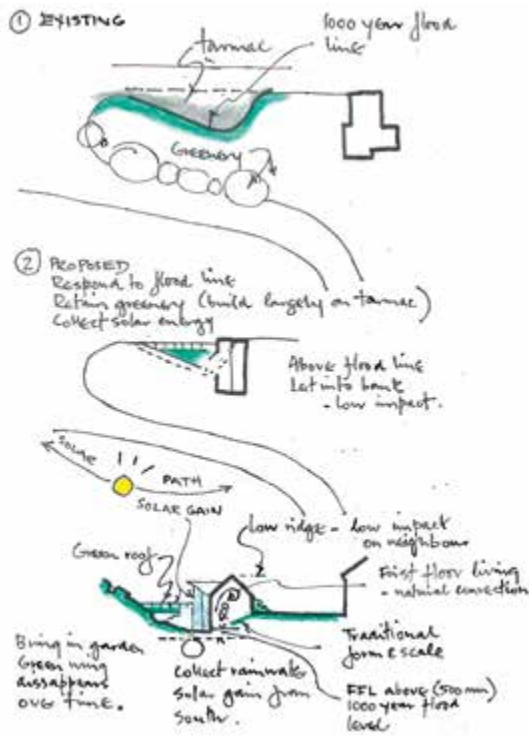
In 1975 Argent returned to Pembrokeshire, initially to Dyfed County Council and then to take over his father’s building business in the early 80s, along with his brother (also Cambridge trained). They were thrown in at the deep end, learning building at the sharp end.

Argent Architects moved into the well-heeled environment of Penally a few miles from Tenby in the early 80s. It was a live-work house. It’s still the office all these years later. Notable early projects were a Tenby doctors’ surgery and a new gallery for Tenby Museum. The important decision to get into CAD was taken early. Argent’s brother left for the USA in the early noughties, but ahead of that the firm took on a 17-year-old assistant, Adam Chandler. After years of mentoring, and immersed in every project, that assistant is now 40 and a partner. Argent’s eldest son Owen, who trained at the Welsh School of Architecture and cut his teeth in London, has also recently returned to Wales to join the practice.

That energy and ambition excited by those heady years in the 60s was always going to rub up uneasily with residents and planning officers in Penally. A battle ensued over Argent’s new house, shoehorned as it was on to a tight and very steep triangular site adjacent to the office. Its cruciform plan over two storeys within a brick-clad frame was an unfamiliar form and language. Over time the naysayers have seen that what might at first seem outrageously foreign to the local vernacular, now deftly merges into the landscape. At the



- 1-3 Woodlands, Penally.
- 4-6 Quillcot, Penally.
- 7-9 Shangri-la, New Hedges, Tenby.



1

**‘Argent’s houses are often ‘upside-down’ in plan and section with the living space in a singular volume at the top to gain the distant, often sea, views.’**



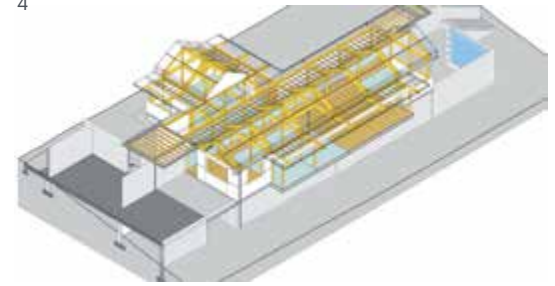
2

centre of that cruciform plan was a splendid dining table, the heart and hearth, around which other levels, half levels, spaces and functions spin effortlessly – a generous and celebratory expression of comfortable inhabitation.

Strangely, given Argent’s mostly new-build work, his most publicly known project, the one that took him to a UK-wide audience, was a conversion, turning the former Tenby lifeboat station, perched above the sea, into a dwelling for an Irish client, (*Touchstone*, issue 11, December 2011, pp.20–23). Kevin McCloud’s ‘Grand Designs’ gave it the predictable treatment. Argent was almost invisible, the clients had supposedly designed it all. But they knew differently – that it was Argent’s skills that made it into such a well-resolved and life-enhancing home. The locals at least were informed via a generous and effusive full-page spread in the local paper.

Argent’s houses are often ‘upside-down’ in plan and section with the living space in a singular volume at the top to gain the distant, often sea, views. The more enclosed sleeping spaces are below with service spaces at the rear. The geometry of the fully expressed glulam timber

4



structural grid marshals the floor plan and fits the detailed habitat like a glove, adding rhythm and human scale. Construction elements come to site as a kit with joints fully machined and detailed so that a Japanese-inspired simplicity of post and beam is the prevailing aesthetic. Structural fixings are minimally expressed. (The renowned award-winning architect John Pardey would recognise the intent and respect the execution.) Speed of assembly to achieve a sheltered space quickly is essential. The tartan grid and Louis Kahn’s ‘served’ and ‘servant’ spaces inform the palette of plan moves, stemming from Cambridge rigour. The resolved, unfussy, internal volumes and external forms relax into the discipline of the structural grid. There is by now a well-developed and regularly used kit of secondary elements, such as the storey-height, beautifully made and very well insulated timber/aluminium composite windows, and SIP panels spanning between glulam rafters.

Argent, with his younger partner’s pressing, has wrestled with the embodied energy and carbon performance of all items of the kit. Their latest house project on the outskirts of Tenby, Shangri-La at Freshwater East, moves towards design-build, linking up with two young local carpenter/joiners. Like Walter Segal before them, the aspiration is for small tool, almost Allen-key, assembly of easily handled parts. They’ve thrown a scaffolded shelter over the whole assembly. Years of experience of fully thought-through integration and carefully planned separation of servicing and structure means there are few surprises and no unthought collisions. The house is being assembled at astonishing speed.

Now 79, Argent with his assistant, is still pushing the envelope. Returning to Wales as a solo practitioner has enabled Argent to persistently explore and develop some fundamental design principles – a thing much envied by some of his more cosmopolitan fellow students of yesteryear. The intellectual injection of those early adventures abroad still resonates, but the brain and heart are comfortable and fully committed to making well-designed homes in Wales.



3



- 1, 2 Concept sketch and completed house. Chandlers Lodge, Sageston, the home of Argent’s assistant who has been with him for 23 years.
- 3 Merrifields, Amroth.
- 4 Mill Park Street, St Florence.

# touchstones

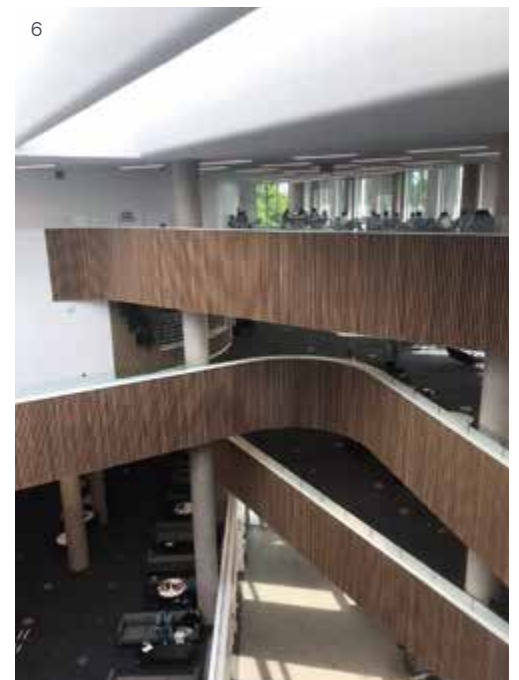
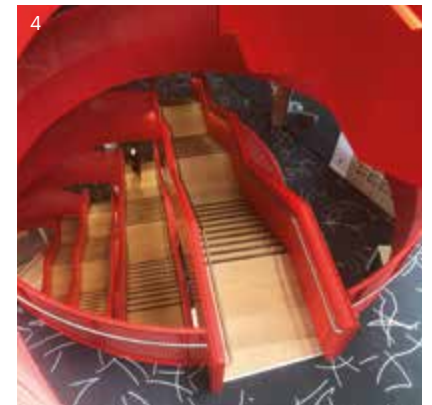
## AWARDS FOR 2023

It's been a lean and complex time on the building awards' front throughout the years of the pandemic. Those buildings submitted in 2020 were moved to 2021, but then in January 2021 RIBA president Alan Jones confirmed that any of these submissions coming forward for award in 2022 would need to be a full year in occupation, and critically would require solid post-occupancy evaluation (POE) of its use, indicating adjustments made, and most importantly through POE those optimistic carbon predictions would also be tested in use. At last POE was to be formally embedded in architecture's processes if you aspired to win gongs.

Did all this hesitation, rolling over, and changes in submission criteria affect the volume of submissions? In Wales they were certainly very lean in quantity for 2022, with only two RSAW awards, the Grange Pavilion (*see pp. 26-28*) and a Loyn & Co house in Gower (2).

Even at the UK level, the RIBA awarded only 29 in 2022, contrasting with 54 in 2019. The richer years of awards in Wales pre-2018 (nearly all new-builds) seemed to be born of the post-devolution journey to raise the level of ambitious patronage for cultural and higher-education buildings in Wales and, of course, a string of individual houses for the uber wealthy.

Cardiff University has been on this journey with its estates department more recently willing to embrace advice from the university's world-renowned architecture school, at least into some of their early procurement discussions. 2023 may see a slew of schemes come forward for awards. The Park Place Centre for Student Life by FCBS Studios (6), the sbarc/spark building by Hawkins\Brown (4), the Abacws building (bringing together the School of Computer Science and Informatics and the School of Mathematics) by Stride Treglown with Adjaye Associates (1), and last but not least, of course, the retrofit of the Bute Building in Cathays Park for the Welsh School of Architecture (5) (*see pp.38-41*). No doubt not to be outdone, Swansea University Bay Campus will be sending in the Centre for Integrative Semiconductor Materials (CISM) building by Stride Treglown too (3).



Jonathan Vining



Jonathan Vining



## RETROFIT – LAST

No one with a responsible concern for architecture's carbon consumption can have missed the very public spat over new-build versus retrofit on the Oxford Street Mark & Spencer store in London. Heritage Declares and SAVE scored a memorable win when former cabinet minister Michael Gove called the project in. The preservation lobbies have a new string in their bow, 'embodied energy'.

Although we have been slow in Wales to appreciate the best of our twentieth-century architectural heritage, it is enormously welcome that the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) is devoting some of its resources towards encouraging a public appreciation of the modern and that the recently created C2o Cymru is highlighting those buildings in danger of going unthinkingly under the demolition hammer (*see p. 36*). Owen Hatherley would be pleased (*see p. 61*).

As Jonathan Vining noted in *Touchstone 2021* (p. 23), the very distinctive 1981 brutalist school in north Wales, Argoed High School near Mold (*above left*) was one of those under threat. He argued it should be listed. A new school is to replace it (*see right*). In south Wales near Barry, another school, the 1973 Bryn Hafren school by the much-respected Percy Thomas Partnership's Dale Owen (*above, top middle*) has also been reduced to rubble.

The Argoed case is of added interest because as noted in our last issue (*Touchstone 2021*, p. 50), there is a new national-scale kid on the block in Wales for new school production. Entitled WEPCo, not only is the funding mechanism novel, but seemingly a whole national programme of new schools will be design-delivered by the London architectural firm of Sheppard Robson. One has to assume that this shift in delivery was intended to be a qualitatively upward trajectory. Why do it

otherwise? On inspecting the design and access statement for the Argoed replacement, there is no hint that embodied-energy concerns and retrofit were ever considered. Of course, there is a powerfully argued list of negatives as to why the brutalist school is inadequate for contemporary educational needs, but that's a post-hoc argument, justifying a decision already made.

It's the same at Barry by HLM Architects, not a WEPCo project (*see top right*). Nothing is said of the architectural merit of the existing school's original design or its designer, and equally importantly the embodied carbon in Dale Owen's original was never assessed against the embodied carbon of HLM's new-build.

Of course, improving the architecture of schools sets a particular procurement challenge. In many cases a council's ownership of a school site, coupled with the necessity of keeping the existing school working during new improvements, ends up in a simple formula: build the new on the playing fields and when complete, transfer the teaching, and knock

down the old school, and replace it with new playing fields.

This is the formula for the new 3–19 school in Abergavenny by Rio Architects (*above, centre bottom*). Again, the existing buildings are dismissed in a few sentences as poorly performing. There could have been a serious investigation of adjacent county-owned greenfield sites for replacement playing fields. The existing buildings with all their embodied carbon could have been upgraded for a host of community and commercial uses.

In the 1980s, Hampshire County Council, always setting the benchmark for creative school procurement, commissioned Edward Cullinan Architects to retrofit the existing SCOLA system-built Calthorpe Park School at Fleet. It utterly transformed the school into a joyous environment. It must have been done somehow with the existing school teaching in situ. Was it an early testing of the thesis for retrofit first? The words 'embodied carbon' weren't then even part of the debate. We will never know. It remained a one-off.



# touchstones



**‘This vision was to ‘create a nationally significant health “nucleus” underpinned by a new institute of life sciences for Wales...’**

local community, health-seeking visitors and tourists, create new local jobs, and strengthen, nationally, educational links between Bronllys and other national academic centres and tourism.’ They would ‘develop the existing chronic pain service as a centre of excellence, a service for military veterans, care home provision, a centre for commercial health and well-being treatments supported by a small hotel and developing opportunities for community business in catering, landscape and maintenance’.

Building on the two remarkable hospital buildings in this valley, its vision was way ahead of its time in its interpretation and overlapping of health and well-being and farming and tourism. It also cannily saw an opportunity for a rural site with capacity for development that would add diverse employment opportunities to the local economy.

It came to nothing. Bob and the prince fell out when Bob went off script. Loyal courtiers are not supposed to do that.

Eleven years on current visions are more modest. Pentan Architects of Cardiff was asked by the Powys Teaching Health Board to create a modern and flexible interactive learning, research and conference facility for the health board in one of the huge range of buildings on the site, the Grade II-listed Basil Webb Hall (*above top and left*), where the infamous ‘enquiry by design’ event took place. This is to be now called the ‘Bronllys Rural Academy of Learning’. Earlier lessons sadly were not learnt.

The visionary initiative has now moved across the valley to south of Talgarth where the Black Mountains College’s new radical degree has been validated by Cardiff Metropolitan University. The Featherstone Young scheme for an education that is essentially an adults’ version of Forest Schools’ philosophy is currently in for planning permission.



to do one of the prince’s favourite pastimes in 2011: ‘enquiry by design’. The collaborative process aimed to offer a long-term vision for Bronllys Hospital, a former tuberculosis facility known originally as the South Wales Sanatorium designed by Edwin Thomas Hall and Stanley Hall in the arts-and-crafts style, opened by King George V and Queen Mary in 1920. But its remit was much wider than that, it looked regionally and included the Mid Wales Hospital, Talgarth (originally the Brecon and Radnor Joint Asylum), which closed in 2000.

This vision was to ‘create a nationally significant health “nucleus” underpinned by a new institute of life sciences for Wales, comprising the Bronllys Hospital site with existing and new services for Bronllys and Talgarth. This “nucleus” would be supported by the existing well-being offer within the region, and vice versa, such businesses as researching into plants used to make medicines, organic farming, and healthy activities such as walking and cycling within the countryside. The duality of this health nucleus and regional well-being offer would provide many new opportunities and facilities for the

## VARYING VISIONS OF HEALTH

**Once upon a time there was a prince and a pauper...** (pause) ... that’s not quite accurate. There was a prince who was initially entranced by the progressive visions of a well-known Cardiff property surveyor. Let’s call him Bob.

At Bronllys, a few miles over from Talgarth, Bob on the prince’s behalf assembled a huge number of environmental, health and well-being professionals, local residents and stakeholders, and some of the prince’s architectural entourage

## THE WEIGHT OF HISTORY

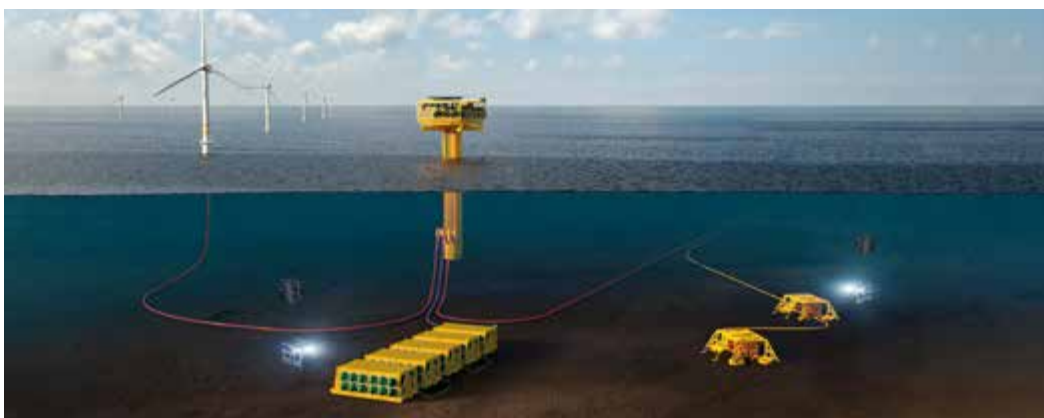


**You're a conscientious councillor on your planning committee.** In front of you is a scheme for 718 new flats right in the very heart of your city-centre ward. A good place, you think, to find affordable homes for all those service workers on whom, after all, the whole city economy depends. But, no. There will be no affordable units in the scheme. You draw a breath; why is that? The answer comes: the independent

district valuer following his negotiations with the developer has made it clear that although your council officers thought they could squeeze £20 million of developer contributions towards public betterment of your ward, there is only £2.2 million. Any more would, according to the district valuer, make the scheme unviable. You would naturally like to see the full figures. You can't; those negotiations have to be confidential. You can't expect developers to publicly reveal their balance sheets. No developer would submit themselves to such scrutiny. That would undermine market competition and confidence. The bubble might burst. They would have to reveal how much they bought the site for, what their profit margin was.

OK, you think, so what's the bigger picture around this industrial wasteland of a site. You are aware there must be other developments nearby in the offing. How do they relate to this current application physically and socially? Might they offer affordable housing instead? You and a fellow councillor request a site visit to get that fuller picture, but you don't win a majority vote on that. You would still like to know about the adjacent sites. 'Legally', says one of the senior planning officers 'you are only allowed to comment on

the scheme before you'. You are still curious. You did think of asking why for an earlier scheme proposal on the same site by the same developer, the density was so very much lower, a maximum of eight floors, and yet now you are faced with 29 floors; but then stop yourself, that earlier scheme is not the one in front of you, is it? You keep that question to yourself. You feel the weight of history on you. Will you persuade others to stick their necks out and refuse the scheme, delaying the investment decision? But you know how these things work. Promoting investor confidence here will hopefully trigger the adjacent developers to follow on. The infrastructure for this site sets things up for the adjacent site. Will you and maybe a few others be the ones that question the fundamental basis of this Gaderene rush for more city regeneration, for tonnes more carbon? Will this just be a cry in the wilderness? You have been given such a well-presented explanation of the project in hand by a very competent planning officer. You sense the weight of history. You stay quiet. The scheme is passed unanimously. And so, on we go. Is this a fiction? It certainly is an intense but polite and reasonable drama (*for more on this see pp.16-21*).



## STANDING ON OUR OWN

**It's curious sometimes how the political and the commercial** riff off the same PR message for utterly different ends. We may all remember those Scottish independence bravura claims, that oil from the North Sea would by some miracle become essentially Scottish, and thus finance the independent government and its economy. What happened to that?

Now it's the same for Wales and renewables. Of course, the job-generation potential is still somewhere in the promotional mix, where politicians and industry in need of complicit publicity boosts, trot out neatly rounded-up job-generation claims, but that's a sideshow now in among the febrile talk of an independent Wales. The sales pitch is dominated in every renewables project, both by state and commerce, as to how many 'homes' in Wales could be powered by each installation (always a seemingly astonishing figure, nothing is said about powering industry, transport or all our EVs), and then even more bombastic claims are made that Wales by 2030 will be able to generate all its electricity needs from renewables, as though the national grid can be terminated at Offa's Dyke. I am not sure the big beasts in the field like RWE and TechnipFMC would see it that way as they invest billions in creating this new infrastructure. As with water and gas before, pipes don't stop at borders (*see pp.8-11*). We're all in it together, for now at least.

# touchstones



## LOOKING TO THE FUTURE

It is possible that if we really drop our carbon footprint by 45% in the developed world by 2030, maybe as most physical changes in our environment will be met through modest retrofit, invisible to the street, then the public's interest in, or dismay at, contemporary architecture will simply subside along with the carbon to zero from its current low base of engagement. Are we seeing this already? Is this partly why there was no Gold Medal or Plaque of Merit for architecture awarded at this year's National Eisteddfod of Wales?

Given the multitudes milling through Y Lle Celf at the Tregaron Maes on a drizzly August Tuesday this year, you would have thought taking the time to hear a spoken tribute presented with exquisite images on the work of the late David Lea, who many consider as Wales's greatest contemporary architect, would at least fill a room of 20 chairs. But no; very few takers.

Of course, from a devolved nationalist perspective, the Birmingham-born Lea built little in Wales even though he lived in the heart of Snowdonia for over 40 years. The irony is that all of his architecture was so deeply informed by those decades in the mountains (*see pp.74-77*) and his one major building in Wales, the WISE building at the Centre for Alternative Technology (CAT), still shines like a beacon on that journey to a truly low-carbon environment that is at one with nature and the elements.

Gwyn Stacey, a senior tutor for the MArch course at CAT, who was taught by, and taught with Lea, gave the most eloquent of tributes.

But maybe, after all, the public really did prefer to look at the future, rather than talk about the past. So many at Y Lle Celf stopped and admired the three projects on display by this year's £1,500 Architecture Scholarship winner, Sonia Brookes, of the CAT MArch course and now working for Architype (above). Not only had Sonia absorbed all the beauty, poetry and sensibilities of Lea's architecture, but she produced the finest dissertation and technical study ever produced in the 14 years of the course's existence. So, the skills of David Lea and the remarkable building know-how of his professional partner Pat Borer, appeared carried forward for the future (*see also pp.44-46*).



## TAKING TIME OUT ON THE MAES

**There's been a lot of pausing for thought on many fronts. The lockdowns gave many people time to think and reassess.**

The beating cultural heart of Wales, the National Eisteddfod of Wales, has not executed its peripatetic show for three years. Looking online at art, craft and architecture on a digital Y Lle Celf might satisfy a few, but one needs the visceral presence of it all and, most importantly, the conversations.

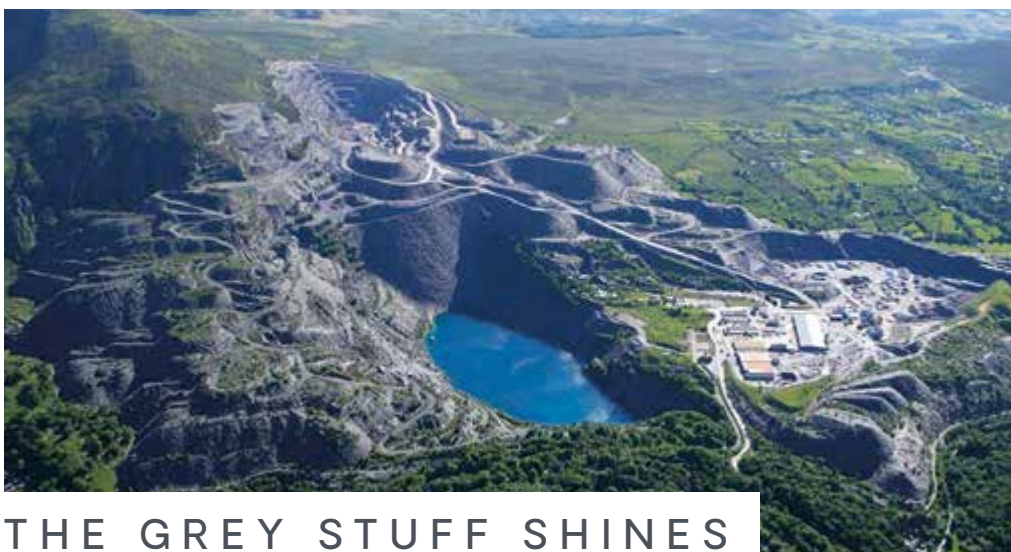
With reduced annual income for three years things haven't looked too rosy for the National Eisteddfod. Was this a time to change gear, reset the dial, rethink formats? The National Eisteddfod's arts officer of some 25 years' standing, Robyn Tomos, stood down from his post in 2021, (*see Touchstone 2021*, p. 54). Replacing him and his management of the architectural-awards selection process has not been a smooth transition.

For the first time in all the period since the Design Commission for Wales first led and funded the architecture Gold Medal and Plaque of Merit process with its accompanying show at the National Eisteddfod, always aided by the RSAW, there was no show of the best architecture in Wales at Tregaron's Y Lle Celf this August. Instead, the annual student architectural prize was the visual focus of this year's architecture section (*see left*).

Over the years all sorts of formats have been tried to bring the inspiring architecture of Wales to the public on the Maes. Almost inevitably with the awards of the RSAW and RIBA running in parallel, shortlists for the Gold Medal and these national and professional awards have tended to be closely in sync. The list of submissions for RSAW awards for 2022 was very lean too. There were no awards in 2020 or 2021.

In the three most recent architectural displays at Y Lle Celf running up to the last one in 2019, large-scale photographs by James Morris of the top schemes certainly held their own spatially alongside the videos, the sculpture, the painting and crafts. As the former BBC's arts editor, Will Gompertz, remarked in his hugely positive coverage of the Llanrwst National Eisteddfod of 2019, no other country in the world has a different team of arts selectors for a what is in essence a one-week-only, changing-location-every-year national gallery of arts, craft and architecture. That quality alone, of taking the best of architecture to a different corner of Wales every year, is reason enough for a huge re-injection of energy to make Y Lle Celf architecture show of 2023 one to be remembered. Given the exhilarating energy shown at this year's student-led show at the Welsh School of Architecture (*see pp. 42-43*), and our country's commitment to 'future generations', is this the Eisteddfod's way forward for architecture?





## THE GREY STUFF SHINES

**Since 1 August 2021 Wales has four Unesco world heritage sites:** the Castles and Town Walls of King Edward in Gwynedd; Blaenafon Industrial Landscape in south-east Wales; Pontcysyllte Aqueduct and Canal in north-east Wales; and most recently the Slate Landscape of Northwest Wales, whose sites spread from Bangor in the north to Tywyn 71.5 miles to the south – a huge sweep.

Like industrial archaeologist Richard Keene's relentless campaigning for the fellow industrial landscape around Big Pit and the ironworks of Blaenafon over more than a decade, memorialising the slate industry has its unstinting champion, David Gwyn. But like Keene's singular obsessions, Gwyn needed state backing coming mostly in the 10-year lead given by Gwynedd Council's Roland Evans, deputy head of services for economy and community, aided by Hannah Joyce, senior strategic regeneration officer, and then the inevitably unaccounted hours and hours of other Gwynedd Council and Snowdonia National Park Authority workers with community volunteers, not to mention professional consultants (*see right*). It's an act of ambitious self-belief in their culture and their forebears who made this distinctly special place and culture.

Like major national infrastructure, the high-wire argument for gaining Unesco designation is that it will open doors to all sorts of other potential funding to be invested in the local economy. After all, the average wage in the constituency of Dwyfor Meirionnydd was the third lowest in the UK in 2019. The Slate Landscape documentation points to the Cornwall and West Devon Mining Landscape Unesco designation, which it is claimed generated £3.8 million further investment a year. One wonders how much of that came through the physical spectacles of the Eden project, the new national maritime museum in Falmouth, and further new extensions to the Tate St Ives.

There may be the endlessly sensational zip-wire experiences over this slate landscape already claiming to create hundreds of jobs for local residents, and £215 million to north Wales in five years (does anyone seriously audit all these claims?), but David Gwyn makes it very clear 'we do not foresee many major new-builds at present within the world heritage site [although] there may be some significant conservation and reuse projects': redevelopment of the National Slate Museum in Llanberis; repurposing the Hafod Owen engine house in Gilfach Ddu, and other conservation and

**'Like major national infrastructure, the high-wire argument for gaining Unesco designation is that it will open doors to all sorts of other potential funding to be invested in the local economy.'**

access projects across Dinorwig and Gilfach Ddu. There could be work at Manofferen slate mill, the buildings around Dorothea pumped hydro, and some might see some irony in funds going to a potential major renovation and conservation project on the external walls of Penrhyn Castle, whose slave-trading and slate-worker-exploiting owners are not exactly the poster boys of north-Wales culture.

Inevitably the world-renowned Welsh Highland Railway, which brought all the slate to Porthmadog harbour, has already been fortunate enough to secure substantial NLHF funding for Boston Lodge works, its major maintenance facility.

Of course, the archetypal reference points for world heritage sites are the pyramids and the Taj Mahal, but there will be none of these show-off expressions of unequal power. Penrhyn Castle in all its brutal ugliness already does that. The architectural building ambition, it seems, will be appropriately modest; this architectural landscape of abandoned slate works already offers so much visual extravaganza. Modest, valuable retrofits may slip into a few slate carcasses perched on those precipitous slopes as illustrated in the Canolfan Awyr Agored Rhosydd (Rhosydd Outdoor Education Centre) project by CAT MARCH student Cara Anwyl Williams at the Rhosydd Quarry, disused since 1954 (*see pp.72–73*).

Is this modesty missing a trick? The zip-wire experience offers a clue. Surely, the atmospheric experience of this quite extraordinary slate moonscape could be massively heightened by judicious new physical interventions, taking people into unique startling material confrontations never possible for those former workers. We might be in awe of them more and remember them better.



# Celebrating the ruin



The Unesco World Heritage Slate Landscape of Northwest Wales may currently have modest architectural ambitions. Maybe they could add this scheme by CAT M Arch student **Cara Anwyl Williams** to their portfolio.

**C**anolfan Awyr Agored Rhosydd (Rhosydd Outdoor Education Centre) is proposed to be located in Rhosydd Quarry, Gwynedd, a disused quarry, lying empty since 1954. The site sits on a plateau between the valleys of Cwmorthin and Croesor, in the shadow of Moelwyn Mawr.

The programme for this project is predominately an outdoor education centre, but also includes a small-scale quarry preservation centre, following the recent granting of Unesco world heritage status to the slate landscape of northwest Wales (*see p.71*). Rhosydd was a small-scale quarry of ‘fringe’ concern.

The outdoor education centre is aimed at school-age children, with facilities to teach students skills in mountaineering and caving. The on-site accommodation would have a capacity of 36 students and seven staff. The constellation of Urdd residential centres across Wales form the functional precedent for this programme.

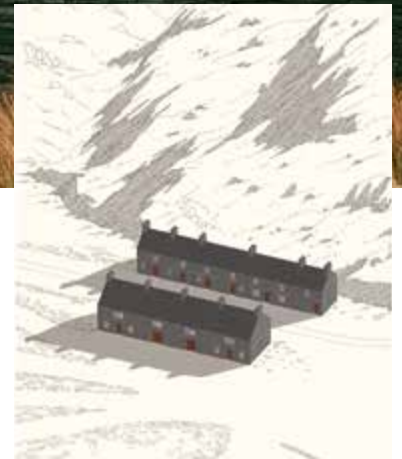
Existing buildings on site are two rows of former barracks and the remnants of the former mill and smithy. The existing buildings sit on either side of the adit entrance.

The outdoor education centre’s sleeping quarters would be within the mitigated ruins of

the barracks, while the public and educational facilities would be in a new building that would stand within the footprint of the former mill building. The main form-reference for the new building was the two imposing gables of the former mill.

An external covered walkway on the mill’s east face would be framed by a regimented sequence of slate pillars that would overlook the ‘street’ between the two rows of barracks. Moving onwards towards Cwmorthin valley, a new arterial route through the site would lead to the adit entrance and the popular walking route towards Rhosydd Tyllau and Moelwyn Mawr.

The barracks’ design intent was to celebrate the mitigation of the ruins, introducing a new material, brick, to infill the voids in the slate facade, with the new roof structure clad externally in standing-seam zinc sheeting. The new barrel-vaulted extensions take their influence from the local agricultural vernacular, specifically a corrugated-iron-clad Dutch barn built on a stonework plinth. A glazed roof circulation route would separate the mitigated ruin from the new extension, delineating clearly between the old and new.





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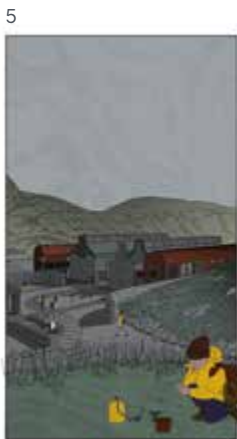


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Facing page, top, the ruined Rhosydd barracks.

Facing page, right: Top, the north and south barracks as originally built, offering quarrymen notoriously poor and brutal conditions of shelter.

Centre, the ruined barracks as they are today.

Bottom, a new purpose found; an enlightened place of outdoor education for young people.

This page:

- 1 Cross section perspective showing new accommodation added to each of the two retrofitted barracks.
- 2 Ground floor plan with new sleeping quarters in the barracks, right, and left the public and educational facilities in a new building on the footprint of the former mill building.
- 3 A new world of discovery; learning, landscape and culture.
- 4 Sectional model of additions to the barracks.
- 5 View of the Rhosydd site from reservoir.
- 6 Immediate site entrance.
- 7 View from south barracks to north barracks entrance.
- 8 Ground floor bunkhouse with interior window to hallway.
- 9 South barracks first floor bathroom.
- 10 Boot-room and drying room.

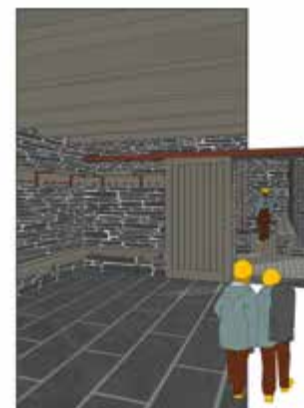
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# Tributes

## David Lea

9/09/1939 – 8/04/2022

Many would claim that David Lea was Wales's greatest current architect. Yet, as *John Sergeant* observes, in an utterly modest way, all of Lea's life's ambition and deep sensitivity can be found in his home and landscape at Ogoronwy. Further reflections are offered by one of his clients, *Anne and Peter Segger*, and a fellow academic and architect, *Professor Wayne Forster*.



## Rootedness

*John Sergeant*

We are all rooted in 'home'. We speak of being homesick and homeward bound. But David's home, Ogoronwy, above the village of Llanfrothen meant more to him than a Freudian nest. The phrase 'the valley spirit will never die' was important to him, I think he found it in the writings of Lao Tzu: it offers us a spare clue to all his place meant to him. Although profoundly English, and he never learned to speak good Welsh, he was totally rooted in this fold of the foothills of Snowdonia.

Ogoronwy is hidden in a tumble of back roads and small valleys between the Cnicht, a minor Matterhorn, the high peaks beyond, and the north-east corner of Cardigan Bay. It is a two-storey, nineteenth-century stone cottage and from it the glittering sea, normally steely grey, can be seen. The area around Llanfrothen has attracted a surprising number of extraordinary people: the sculptor David Nash, pianist Bernard Williams, novelist Patrick O'Brian, writer Jan Morris, Marxist historian Eric Hobsbawm (who finally left because of the 'appalling' weather), and of course architect Clough Williams-Ellis, whose interventions are all around. Both the philosopher Bertrand Russell and prime minister David Lloyd

George had local connections. Frank Lloyd Wright visited Clough's Portmeirion in 1939, and hated it.

David and Arwen Irene's two children went to primary school in Croesor at the foot of the Cnicht and then to secondary school in Harlech. Fireworks at the Brondanw Arms, Llanfrothen, universally known as Y Ring, gave him great delight and he was overjoyed when the long, low village shop and meeting place that he designed finally gained young tenants who opened the food shop, bakery and café it deserved. He would surely have left a greater building testament than the lovely Catholic counselling centre in Porthmadog had the area been more economically advantaged. An hour's drive away southwards was Machynlleth, the birthplace of the Centre for Alternative Technology. It is here over decades in his long architectural friendship with Pat Borer that David found a patron in Wales that valued his talent.

We are living through a moment when children over ten are more involved in a private, virtual world than the real; when many never leave the city and never see the stars. In this sense, David Lea's 'rootedness' is deeply relevant. We can dispose of the argument that he was privileged in this: he left London and an assured architectural practice to devote 40 years of his life to a wet and economically deprived place. Its riches were won by long patient physical work, and after it, he was rewarded by being able to walk anywhere, for hours or days, through the most beautiful

mountains imaginable. You can leave the garden (of Ogoronwy) and you are there. Once we walked together all day north through mostly bog, always up, with Snowden coming nearer, to Pen-y-gwryd, the hotel where the team that first climbed Everest trained. Later he told me that all the land we had traversed was radioactive: rain from Chernobyl fell there. We walked back next day by the old slate-quarry railway route past Beddgelert.

Many of us came to Gwynedd as students and worked on stone-cottage restorations, first on Hendre Selar, then Nant Pasgan-mawr, on the Rhinogydd, a former hunting lodge that David and friends bought together. The seeds of a life in Snowdonia were sown. After finding Ogoronwy he simplified the house and then worked on the 'given' of the site. The bothy was a single storey, single-room dwelling of fine stone with a massive fireplace, its alignment at right angles to the house, older, more sheltered. He 'grew' it southward incorporating existing ruinous stonework to form, in sequence, an office, an arched entrance from the west, and finally his studio, a slate roof uniting everything. Part of the stream was diverted to feed a shallow pond at the feet of this long wing: the 'tail' of Aalto's summer house, which he visited with Richard MacCormac, was surely in his mind. The sound of water is everywhere.

From north to south this wing is of 40 cm-thick stone, at the north lit by two traditional windows, while at the office light is amplified



by skylights. The entrance is slate-paved, and construction becomes more complex with the studio. Stonework reduces from waist height to the west public side, to nothing facing east to the stream, and then it returns massively to terminate the whole with a fireplace set in a gable. A beautifully-detailed timber frame takes over, fully glazed to the landscape view and vertically boarded with cedar opposite. Each board is fixed by pairs of copper nails, their heads proud, not driven home. They must have been drilled before driving, an entirely Japanese sensitivity: David's long stay in Japan (1975) was never forgotten and informed his increasingly minimal attitude to material, fixings and site. This shows strongly in the entry sequence. You see the house, but its central door is denied because it is below and the access track goes past; you arrive in a triangular court bounded by an ash and oak-covered outcrop, covered in menacingly huge boulders, the back of the bothy wing, and the north of the house. You descend to its back door and sheltering porch across bedrock, undulant and raw. It is slippery in rain. An estuary

temple comes to mind: your feet traverse the sand and gravel of the place before entering.

In the beginning David was alone and living frugally. John Seymour's *Self-Sufficiency* was in the air; David planted wheat. He used to bake something he called bread, and a type of gruel that tempted strong men not to return. Contour beds were dug for vegetables on the west-facing slope in front of the house, then abandoned as being too windy, gravitating slowly to the extreme north beyond the bothy and workshop. Irene joined him, and with her, sheep. He bought more rough land to the east and north, full of secret hollows and spreading trees: there are remnants of what appear to be ancient stone circles, mysterious. Their children Teleri and Trystan appeared. Two memories are strong. Seated on the Jacobean oak settle carved with 'Man proposes, God disposes', I watched Teleri making theatrical descents of the stair, each time in different attire. And on one supremely wet day I saw Trystan and friends *tobogganning* down the grass on plastic sacks, everything was liquid.

David Lea thought through the challenge of building when the planet's carrying capacity in truth limits it, knowledge he sensed and absorbed long before the climate emergency that now confronts architecture and much else. This arose from the delight that the natural world gave him and a fierce awareness that it must be defended: the sparkle of light on water, scent of wet earth, sound of birdsong; all of which Ogoronwy has in abundance. He sensed the fragility inherent in a world given over to rapacity. Many young architects came to work at Ogoronwy and took away a life-long sensitivity to light, local materials, and ecological commitment. The mindset that lies behind the WISE building at CAT and his determination to make a better world grew out of this home as much as his head.

*Above, the context of Ogoronwy. Bottom right, David Lea commemoration event at CAT, 24 April 2022. (photo:Jonathan Vining)*

## David Lea

A place of peace  
*Anne and Peter Segger*



Peter Blundell Jones

Unlike many incomers to west Wales in the 1970s who bought derelict houses and immediately embarked on building projects, here at Blaencamel we lived in a weathertight but totally unexceptional farmhouse from where we concentrated on developing and campaigning for organic horticulture. After more than 20 years we re-examined our living arrangements and felt ready to make a change.

David was a long-standing friend with whom we shared many environmental interests and values. We met up only occasionally so it was a happy coincidence when Peter bumped into David at the Royal Agriculture College in Cirencester where he had designed a new building.

So, we approached him for help with our project. We explained that we wanted to extend Blaencamel but were not in favour of the typical house extensions in this area, namely, building on the back of the house and then rendering the whole lot to hide the join. We wanted, somehow, to reflect in our house what we felt we were aiming for in our organic growing at Blaencamel. We wanted to use our own materials from our well-endowed farm; wood from oak and ash trees, sheep's wool, stone from a little quarry on the farm. And we wanted an ecologically sensitive design. David accepted our request for help.

On his first visit to us as our architect, he asked us 'what do you want? What is not right about how things are now?'

'More space!', we replied, after 20 years of the younger generation cluttering the living room. 'More light!', because cosy as they are, these old Welsh houses can be very dark. 'An office!', since the kitchen table was permanently covered with papers. 'More storage space!', there was so much clutter. And we also wanted to be able to appreciate our beautiful garden without having to don waterproofs and wellies just to step outside.

But, what David saw that we needed, clearer than we saw for ourselves, was a space for peace and quiet, a place to rest and unwind.

What we have now is a spacious uncluttered living area, with skylights that bathe us in light all day, and unexpectedly provide a star-scape at night. Our own oak and ash surround us and we are kept warm by sheep's wool packed into the walls. We can step out of doors in our socks on to the four courtyards or patios, one on each corner of the building to match the passing sun or rain.

When David visited, often on his journeys from north to south Wales, he would check how things were. His interest in the building continued past the completion date. He wanted to see how the building was being used, how people moved

through it, how the rain was behaving. On one visit, noticing the ever-increasing and teetering piles of books, he sat down and designed bookshelves, which we had built.

Yes, the rain still does come in sometimes, when the wind blows in a certain way, and despite David's best efforts. The lime work had to be adapted on different sides of the house to match the prevailing weather. And although there is now ample storage, with ship-like lockers in every spare space, they can only be accessed by crawling on the floor and breaking fingernails. The big, heavy, glazed sliding doors, which we suggested to him were fine when we were in our 50s, but what about when we were in our 70s? The response was 'put your shoulder to it, girl!', which I have done, and which has worked so far, so he was quite right.

We started out on the exercise of extending Blaencamel as friends, and we finished so. This was at least partly owing to David's humility as a person. Now we have lost our friend, but we have been given a beautiful house, which will last for generations to come, and a gentle education in the importance of good design.

## David Lea

Poet of the necessary  
Wayne Forster



Tim Soar

For most of its period of operation, Design Research Unit Wales (DRUw) based in the Welsh School of Architecture benefitted from mentoring from a few distinguished critical friends. These included David Lea, whose contribution varied from conversations in studio over work in progress when he would drop in for a cup of tea while visiting Cardiff.

More formal occasions included visits to Ogoronwy to discuss the possibility of a contemporary architecture rooted in place or region, and an exchange of notes amounting to a conversation about the WISE building and Margam eco-discovery centre, published in *Touchstone*.<sup>1</sup> David also generously assisted Dr Heidi Day in her doctoral studies on the vernacular as a model for design.<sup>2</sup>

Before berating the standard of architecture in modern Wales as drab, unoriginal, ignorant of genius of place, Jan Morris claimed that there is no such thing as a Welsh architecture, only the distinctive hallmark of the conciliatory power to unite a structure to its setting.<sup>3</sup>

It's doubtful if this distinctive ability endures, but through his drawings, projects and buildings David Lea demonstrated mastery of this.

The success of much of David's work rests upon his ability to see the rich possibilities of simple means. A primary function of architecture

is to address the senses. To do this David used a deceptively lean and taut set of principles set out in an essay as profound as Peter Zumthor's *Thinking Architecture*.<sup>4</sup>

David Lea's design principles:

- Authenticity
- Naturalness
- Ecological responsibility
- Transparency
- Serenity

This quote of Itoh Teiji appears in the marginalia to Adam Voelcker's interview with David Lea in *David Lea: An Architect of Principle*:

"To discover wabi, one must have an eye for the beautiful, yet it is not an aesthetic understood only by the Japanese of old, but a quality that can be recognized by anyone, anywhere who is discriminating and sensitive to beauty"<sup>5</sup>

The success of David's work rests upon that sensibility and his ability to see the rich possibilities of simple means and his ambitions to address the senses. Throughout architectural history, forms and tectonics have been organised to affect the qualities of sight, sound and touch.

In his commentary on the Bridge Pottery, Cheriton for *arq* Dean Hawkes noted:

### References:

- 1 David Lea and Wayne Forster. 'Two-way conversation'. In: *Touchstone*, RSAW, issue 18, December 2011, pp. 2-8.
- 2 Heidi Day. *The vernacular as a model for design: design studies for the contemporary Welsh house*, unpublished doctoral thesis, Cardiff University, October 2013 [available at: <https://orca.cardiff.ac.uk/id/eprint/57159/>].
- 3 Jan Morris. *Wales: Epic Views of a Small Country*, Penguin Books, 1998, pp. 311 and 337.
- 4 David Lea. 'Fake or Real?' In: *Planet: The Welsh Internationalist*, number 138, 1999/2000, p. 78.
- 5 Adam Voelcker. *David Lea: An Architect of Principle*. Artifice, London, 2015, p. 28.
- 6 Dean Hawkes. 'Necessity and Poetry: David Lea's Bridge Pottery'. In: *Architectural Research Quarterly*, volume 6, number 2, 2002, p. 139.

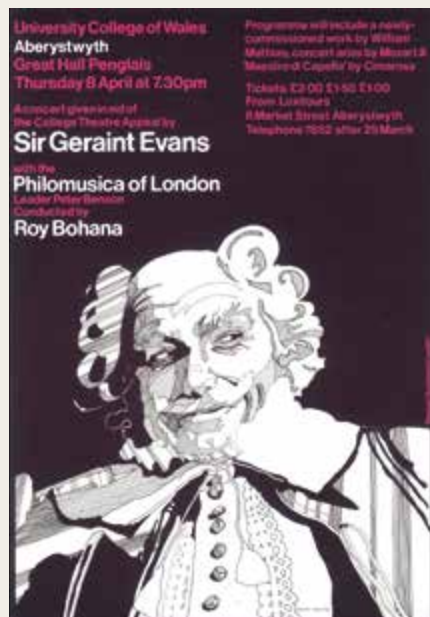
"The success of this modest project rests upon its architect's ability to see the rich possibilities of simple means. A primary function of architecture is to address the senses. Throughout architectural history forms and tectonics have been organized to affect the qualities of sight, sound, touch. Working in the specific context of the riverside at Cheriton, David Lea has brought diverse qualities and quantities of light into the building. He frames and controls views out to the surrounding nature and to nearby church. The sounds of the Burry Pill are quietly heard in the calm acoustic of the building. The simple materiality of the larch structure is agreeable to both the eye and the touch. In all of this the necessary becomes poetic."<sup>6</sup>

The critical point to be stressed is that all these qualities are neither arbitrary nor whimsical. They are based on careful observation and understanding of the nature of buildings summarised, in the case of houses, by Lea on four sheets entitled 'Living in nature'. The translation of the necessary into the poetic is a precise and meticulous process. The lesson of the deceptively simple design is that this possibility is present in all and any architectural project, whatever its size, purpose, location or budget. The pity is that it is all too seldom realized.

DRUw has lost a mentor, but Wales has lost its one architect of international significance.

## Brian Shields

5/12/1937 – 4/11/2021



Brian Shields, who has died aged 83, was the designer and art editor of *Touchstone* from its inception in 1996 until 2007. He was a masterly graphic artist, full of creativity and wit, exceptional attention to detail, and a natural eye for typography. His influences ranged from the Bauhaus, great graphic designers such as Milton Glaser and Alan Fletcher, through Russian modernism, to the harmonic proportions of the golden section. With a career spanning both analogue and digital print processes, he nevertheless regretted the loss of the now-redundant craft processes and the skills that he taught to people before the arrival of Apple Macintosh computers in the mid-1980s.

Brian Shields was born in 1937 in Sunderland the son of Harold (known as Bob), a bomber pilot and flight instructor, and Lilian (née Crowder), who was always known as Nippy thanks to a stint as a waitress in a Lyons' Corner House tea shop. The early life of he and his younger sister, Ann, was peripatetic owing to their father's career in the Royal Air Force.

After the war, the family lived for three years in the Colony of Southern Rhodesia (now Zimbabwe) before Harold was posted back to Gloucestershire where Brian attended Cheltenham Grammar School. At that time, he planned to go into the RAF like his father. Brian was very keen on rugby and played for Gloucester Schoolboys. His art teacher, who was also the coordinator for the team, recognised the artistic talent that he had shown in school and advised him to go to art college.

Again, the family had to relocate, this time to Yorkshire. With the endorsement of his father, Shields applied to Doncaster School of Art where he studied from 1955–57 for an Intermediate Certificate in Arts and Crafts. He was introduced to the 'new graphics' in which modernism became part of the history of graphic design, reflecting the nature of modern society and featuring bold colours, simple shapes, and modern typefaces.

Shields then applied to the Central School of Arts and Crafts (now Central Saint Martins), London. Here, he found his métier, studying graphic design from 1957–60. The school was renowned for its creativity and experimentation under its principal William Johnstone (1897–1981) and was the place to be for ambitious design students at the time. It relied on successful practitioners for teaching with big names in graphic design such as Alan Fletcher (1931–2006) and Hans Schleger (1898–1976) acting as tutors, and Colin Forbes (1928–2022) as head of graphic design. These all provided the school with valuable contacts in industry and through one of them, in 1960, Shields obtained a placement with the Monotype Corporation (one of the two type foundries at the time) as a junior designer in its advertising department in Fetter Lane, London working mainly on magazine adverts for typefaces.

He worked there for a couple of years before moving to Arthur Maddams Design Associates in Slough, the principal of which had also taught Shields at the Central School, with much of the work of this small practice being for the pharmaceutical industry.

In 1964, Shields was recruited to work in Japan, but he was unable to establish exactly what he might be working on when he arrived there. Undecided, he travelled on holiday to Paris to visit a friend who worked for Galeries Lafayette. Shields visited the design studio there and was blown away. He met the art director, Jacques Laveau, who was looking for extra staff and asked Shields to send him four pieces of work and a contact telephone number. He did this on his return, and Laveau rang him on receipt to offer him the job of designer.

The assistant art director at the time was Jacques Dehornois (1931–2010), of some fame, who made the cover illustrations of Len Deighton's inimitable 1965 book of 'cookstrip' French recipes as black and white graphics with annotated instructions, *Où Est Le Garlic*. With the help of a new designer, Geneviève Salaun, Shields became fluent in French within a couple of months. Shields worked on many poster designs, covers for press release packs for couture collections, gift wrapping paper, press advertisements and the like, and was promoted to assistant art director when Dehornois left. 'It was the highlight of my young life', Shields wrote, 'such great and talented guys'.

He returned to the UK after three years and in 1968 began work for the head of graphics of the BBC in London. When a vacancy appeared at BBC Wales in Cardiff, Shields offered to fill the position temporarily. Later, he took over as head of graphics in Cardiff, which resulted in Shields living in the city for the rest of his life. While





working at the BBC's building in Newport Road, Cardiff, he employed a freelance illustrator, Sue Llewellyn, with whom it turned out he was to share his future. They were married in 1968 and 'his partnership with Sue was a relationship of equals [...] two strong characters, two exceptional creative talents, he was incredibly proud of her work and they regularly collaborated on projects'.

During his time at BBC Wales, Shields started working on a freelance basis for the Welsh Arts Council (the forerunner of the Arts Council of Wales). In 1970, he was successful in applying for a post that arose at Cardiff College of Art for a senior lecturer in graphic design. He taught there for two years while also building up his freelance practice.

In 1971 he formally established Design Systems with the aspiration to develop an exceptional design practice based on graphic

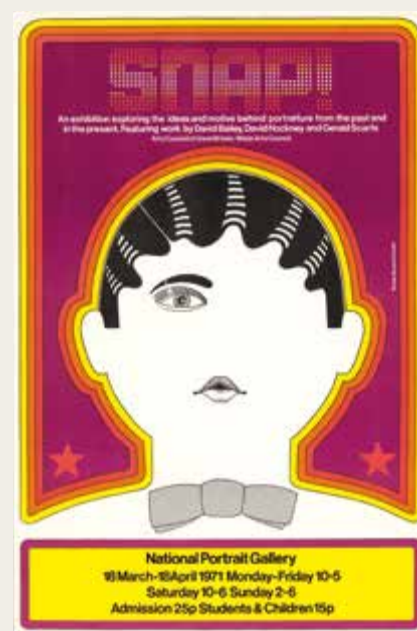
design combined with some exhibition work. Soon, Shields was joined by Peter Gill (born 1947), whom he had taught at Cardiff College of Art. Design Systems prospered although, intentionally, the practice never exceeded five or six in size.

Posters for the Welsh Arts Council's art, music and literature departments set the benchmark in Wales at the time with the one for the travelling exhibition Snap!, initially at the National Portrait Gallery, London, winning the British Poster Design Award for 1971-72. The posters for concerts by major orchestras featured characterful figurative illustrations by Sue Shields, deep background hues and bold typography. The series of six or more 'poster poems' featuring the best of Welsh poetry were set over evocative colour illustrations, again by Sue Shields. They were iconic publications in

Wales in the 1970s and were even republished four decades later, albeit with different typography.

In 1981, Shields founded Matrix Communications with Andrew Reed. Much of the work throughout the 1980s was for large organisations such as Harlech Television (HTV) (now ITV Wales and West), Johnson & Johnson, Simbec Research and Welsh Water, and included press release packs for television programmes, annual reports and accounts, promotional literature and sales brochures. Matrix also prepared a new corporate identity programme and brochure for the architectural practice Alex Gordon Partnership.

Owing to the amount of graphic design work that Shields was carrying out for HTV at the time, he joined with a communications company based in Aberystwyth to form Strata Matrix, opening up further corporate opportunities and Welsh-language work. Shields designed the briefing documents for the Cardiff Bay Opera House architectural competition in 1994, but his favourite commission from that period was the branding and publicity material for Celtica, Machynlleth, which opened in 1995. For this tourist attraction, Shields designed a compelling and evocative logo





based on the head, which he said ‘for the Celts was not only a prized heroic trophy but also a profoundly religious symbol representative of a deity and suggestive of supernatural powers and wisdom’. This was combined with suggestions of other Celtic imagery such as a hawk's head, a vortex, and a cromlech.

Shields left Strata Matrix in 1997. Through an invited competition, he had won the commission to become the designer and art editor of the new journal of the Royal Society of Architects in Wales (RSAW), *Touchstone*. The first 17 issues of this were produced under his keen visual eye. Readers were enticed by the list of contents beautifully laid out on the distinctive covers – a masterstroke, unique in architectural publishing. Inside, graphic devices such as the ‘t’ and ‘s’ ‘droppers’ and idiosyncratic page number icons provided legibility and orientation. Eminently readable typography and

judicious use of images in terms of choice, size and crop all supported the enterprise to make *Touchstone* the record of architectural culture in Wales around the turn of the millennium and after. He was made an honorary member of the RSAW in 2002 in recognition of his contribution to the intelligent communication of architecture to a wide public audience.

Other work in an architectural context included The Welsh Housing Design Awards brochure in 2004, the book of Monica Cherry’s survey of post-war architecture in Wales, *Building Wales | Adeiladu Cymru* (2005), all the graphics for the RSAW’s spring and winter conferences, and corporate identity, stationery and promotional literature for the multi-disciplinary Cardiff practice WynThomasGordonLewis.

Shields was elected a member of the Designers and Art Directors Association (now D&AD) and,

in 1977, was awarded the Queen’s Silver Jubilee medal for services to design in Wales. His work is held in several public collections including the National Portrait Gallery, London, the Arts Council of Wales collection and the National Museum Wales.

*Jonathan Vining*

Brian Neville Shields, graphic designer and typographer; born Sunderland 5 December 1937; married Susan Llewellyn (née Badger) 1968 (two daughters); died Cardiff 4 November 2021.

*More images at Brian Shields’s posterity website: [www.brian-shields.co.uk](http://www.brian-shields.co.uk)*

## Lynn Moseley

26/11/1937 – 11/02/2022



Llwydcoed Crematorium (*above right*) is one of a trinity of outstanding crematoria built in Wales at the end of the 1960s; all are listed at Grade II\* and bear comparison with any built in the UK in the post-war period.<sup>1</sup> Llwydcoed Crematorium (built 1969–70, RIBA Architecture Award, 1971) was designed by Lynn Moseley of HMR Burgess + Partners, who died in February at the age of 84.

David Lynn Moseley was born into the rural, Welsh-speaking community of Carno, Montgomeryshire in 1937 as the second of three sons of a Congregationalist minister of nearby chapels at Creigfryn and Llanwnnog. Like his brothers,<sup>2</sup> he was educated at Caterham, a school in Surrey that had been founded in 1811 to provide boarding education for sons of such ministers.

He left school in 1955 to study architecture at the University of Liverpool School of Architecture where the charismatic Dewi-Prys Thomas (*Touchstone 2016*, pp. 31–33) was Moseley's mentor. He graduated with first class honours in 1960 and then studied for a doctorate, which he obtained in 1963. This early non-historical PhD in architecture investigated the use of linear programming as a design tool to optimise circulation in complex buildings.

In 1963 Moseley won joint first prize in an architectural competition organised by the *Western Mail* for the 'Design of a Welsh House'. The assessors commented that his design 'evolved specifically within the Welsh image, and yet [was] entirely modern and "non-traditional" in its form'. His design did not 'contain allusions to farmhouses or other vernacular Welsh buildings' but was nevertheless 'most affirmatively a Welsh house'.

Moseley moved to Cardiff with his wife and two young children and from 1963 he taught as a

senior lecturer at the Welsh School of Architecture – one of a few appointments at the time by Dewi-Prys Thomas (who had taken up the headship in 1960) to bring intellectual aspiration to the school.

In about 1966 he left academia to become a partner of HMR Burgess + Partners alongside David Burgess, Wyn Thomas (*Touchstone 2017*, pp. 56–59) and five other partners. Here he was highly respected by clients, particularly through his work with housing associations, and he strengthened the relationship the practice already had with the former University of Wales Institute of Science and Technology (UWIST). Moseley led the preparation of the development plan (October 1974) for the ultimately unrealised proposal for relocating UWIST to a site at Llantarnam, south of Cwmbrân, but his designs for student accommodation in Cathays, Cardiff and for UWIST's Aberconway Building off Colum Road, Cardiff (c. 1985) were executed. He designed also the Aberfan disaster memorial garden (1974), which won a Civic Trust award.

However, it is Llwydcoed Crematorium that is regarded as Moseley's most significant architectural work. Formed of four blocks of white, roughcast rendered walls with steeply pitched, slated roofs that form a 'fractured pyramid', interlocked with three open wreath courtyards, it fits admirably into its landscape context. It seemed to sum up what was thought at the time might comprise a modern Welsh architecture and the ancestral roots of Llwydcoed's formal characteristics can be traced back to ideas that Dewi-Prys Thomas was exploring in the late 1950s, including in the house Entwood, Birkenhead (1959, see *Touchstone 2016*, pp. 32), when Moseley was a student at Liverpool.

After 20 years at HMR Burgess + Partners, Moseley relocated to London in 1986. Now known as Marian Lynn Moseley, she became director of development of Circle 33 Housing Trust (a large housing association now part of the Clarion Housing Group) where she is remembered for her knowledge, expertise and inspirational leadership. Moseley became acting chief executive in 1993 before retiring from full-time employment in 1997, following which she was appointed to the Lord Chancellor's panel of independent planning inspectors.

Moseley moved back home to Wales, to a barn conversion near Llandegfedd reservoir, and continued to use her expertise through voluntary work, including serving four years as a council member of the Welsh Federation of Housing Associations, before enjoying full retirement in the neighbourliness of Rhiwbina Garden Village.

*Jonathan Vining*

David Lynn Moseley, also known as Marian Lynn Moseley, architect: born Carno 26 November 1937; married Pat Evans 1958 (one son (deceased), one daughter); marriage dissolved; died Cardiff 11 February 2022.

### Notes:

- 1 The others are Margam Crematorium (F D Williamson & Associates, 1969) and Mid Glamorgan Crematorium, Coychurch (Fry Drew and Partners, 1969–70): see *Touchstone 2016*, p. 11.
- 2 His Honour Judge T Hywel Moseley, QC (1936–2020) and Elwyn R Moseley, CBE (b. 1943).

1



## A vast intention for Vastint

2



3



An experienced planning professional in Wales recently wrote ‘if planning said that the maximum scale of development in any city including Cardiff were say eight storeys, as would happen in any other European city or planning system, none of these confidential developer-district valuer negotiations on site viability, balancing development density with community betterment, would happen. Essentially, the planning system would be putting a limit on the extent of speculation in property, allowing more focus to be put on other matters. This is why cities in other parts of Europe are so much better’.

For decades the political aspiration in Wales’s capital city has been to be thought of as a ‘European city’. The scattergun of follow-the-money towers that have appeared over the last decade in the city have undermined that aspiration. But someone was listening.

Founded in 1989 in the Netherlands, Vastint Holding BV is now developing projects in many European capitals. A development arm of Vastint, Moxy Hotels, is visible in many European and UK cities. One is coming to Cardiff.

Its parent organisation, Interorgo Holding AG, owned by the Interorgo foundation, was spun off in 2016 from Inter IKEA Holding. The civilised and social democratic progressive values of IKEA have survived even though there are now no legal connections with these origins.

Vastint UK, which is developing projects in London and Leeds, purchased the 10 ha ‘Embankment site’ on the River Taff in Cardiff in 2016, an under-used, low-quality set of industrial spaces that have been in decline over 30 years. Sited between Curran Road to the east, Penarth Road to the north and the eastern bank of the River Taff, architect 3DReid with landscape architect Planit-IE have had an outline planning application approved for 2,500 homes, and 54,000 sqm of business space, which includes leisure, hospitality and retail. They have given a ‘pre-commitment to the council for a contribution of 12.5% affordable housing [and] the council has the opportunity to acquire an additional 100 units as the development is delivered’. That all sounds the usual developer PR list, but this has a different level of design ambition.

It may be only a stone’s throw away from Rightacres’ Central Quay development with one of its towers at 29 storeys (*see pp.16-18*), but it is light years ahead in its approach to urban design, pedestrian-dominated streetscapes, green infrastructure and, yes, a very recognisable ‘European’ urban block grid with landscaped inner spaces that are a maximum of eight storeys high. A riverfront park and new walkway with a pedestrian/cyclist bridge over to Grangetown will be another vital element knitting together formerly separated communities. As the grid approaches the river it breaks up into a loose geometry of eight-storey single buildings. The temptation for higher ‘landmark’ buildings has not been entirely resisted, one as it approaches Central Quay and the other, on the southernmost corner of their site. Whether they survive the good mannered and respectful conversation with Cardiff’s planning officers, who see this scheme as setting a new benchmark for the city, is yet to be decided. A European-quality city may be edging closer. ■



1

## Channelling the view

People get stranded, disconnected in cities by poor, short-term urban planning. There has to be a long view. The remaining residents of the Channel View estate at the point in Grangetown where the River Taff broadens out to enter the impounded lake of Cardiff Bay, feel neglected. The majority council-owned, three- to four-storey properties for rent have to cope with anti-social behaviour exacerbated by lack of surveillance and poor design. A 13-storey tower block for elderly residents has ‘substantial structural issues’, is substandard in accommodation, is awkwardly placed strategically on the site (generating convoluted highways routes), and blocks connectivity to the residential development of Windsor Quay to the south. The estate feels disconnected from its adjacent greatest green asset, The Marl. The river also hems them all in. There is no crossing point to the city and Hamadryad Park to the east nor clear-link routes to Grangemoor and Heol Ferry to the west. These all need re-knitting together.

Powell Dobson Architects has been working closely with city planning officers on legibility, identity, and making a sense of place through the new development. There will be tree-lined streets, new footways and cycleways with rain gardens, swales and structure planting. A new square will be created at the junction of Main Avenue. Some of the new housing will be formed around landscaped squares that are open on one side and connect visually to a re-landscaped Marl. Biophilic design incorporating growing spaces and play spaces are all part of the mix. These housing forms will incorporate houses, flats and also link into two eight- and 11-storey towers with corner balconies offering views to the channel and the bay.

Existing residents of the estate will be offered the opportunity of new homes in the development. A complex construction phasing process for the development will hopefully allow that to happen smoothly, but regenerating around existing residents is always challenging. A new purpose-built facility for the elderly residents of the former tower will be located nearby, but not within this development. The council is seeking a development partner. Channel View in its reincarnation will be an important chance to revive the ambitions for the best of council housing and urban design in the city. ■



- 1 The existing tower block surrounded by 3-4 storey blocks of apartments. The tower is to be demolished due to ‘substantial structural issues’ along with the other lower blocks and will be replaced by the new scheme that will offer better connections to all the surroundings and across the river.
- 2 New courtyards open up and physically connect to the site’s greatest green asset, the Marl’.
- 3 Landscape infrastructure plan.



2



3

# The landscape of health

**N**evill Hall Hospital, Abergavenny has a magnificent asset – its landscape. There can be few places of healing in Wales where in a ward you feel as if you are lying among the trees with a backdrop of the mountains. Set in the magnificent former private gardens of Nevill Hall, the complex's first phase was designed by Percy Thomas Partnership and opened in 1969. The great landscape architect Sylvia Crowe was brought in to ensure the beauty of its surrounding mature trees and shrubs would all be enhanced by the design.

Later phases were added by 1974, but the most seismic change came with the decision to transfer all major surgery and maternity services to the brand-new special critical care centre at the Grange University Hospital at Llanfrechfa in 2021 (see *Touchstone 2021*, pp. 24–29).

With the maternity and labour wards no longer in use and antenatal vacating a long, single-storey wing, health board estates decided before hiring an architect that this south-facing part of the hospital adjacent to an existing secondary entrance was the best site location to add a new satellite radiotherapy unit. IBI Group was selected to design the scheme.

The cancer services of the new unit will be delivered by Velindre NHS Trust (see also p.88). Aneurin Bevan University Health Board is the client-employer. The new building (*right and bottom left*) will be designed to Passivhaus principles, maximising roof space for PVs, using triple glazing, heat recovery, additional solar shading, air-source heat pumps, and substituting ground granulated blast furnace slag (GGBS) for cement. The new building has to connect at level with the existing hospital ground floor so that others in the hospital can access it direct. The unit could not be a standalone building out in the landscape.

The design and access statement is a little coy about the proposed building's impact on existing trees and shrubs. It says simply there will be 'no-dig' construction techniques to protect existing tree-root networks and it 'will need to consider mitigation and compensation measures for any loss'. Some of the existing upper-level, south-facing wards will have a roof of PVs rather than the former cedar trees to look through to the Blorenge mountain beyond. But everything has been done internally in this new unit to connect visually the generous places in its new interior to that splendid landscape.



Only those with very long memories will know how well the Percy Thomas practice and Sylvia Crowe wove the new buildings in between existing trees and shrubs. Even though a wood of 100 trees was added beyond the tranquil lake of the original hall garden at the turn of the millennium (scent gardens and outdoor exercise machines have also been added to the landscape), it is extraordinary how little the therapeutic benefits of nature are being fully grasped as a key part of our healing processes. There are ideas in the local community that further pedestrian and cyclist access, allied to new possible growing spaces, could be woven into the existing landscape on the edge of the hospital grounds to connect the hospital better to other adjacent green spaces and the town beyond. This might allow the wonder of Sylvia Crowe's retained landscape to be experienced more fully. Currently it is very much a 'hospital site'. ■



## A respite for all

To those with 24/7 caring responsibilities for a severely disabled member of the family, 'respite care' tends to imply an occasional forced separation for the carers to recharge their batteries. But, if you have a wheelchair-bound child who suffered a brain haemorrhage aged 2½ weeks, yet whose life experience at the age of 39 has included travelling regularly in winter with his support workers and family to Europe, to ski in the Alps, then respite can be understood from a different perspective. In Switzerland they have holiday facilities to fully cater for the disabled, even in groups of 20 plus with disabled young people and family members, organised by The Silverlining Charity. The benefits to health and well-being of all are palpable.

Are there such holiday facilities for rent in Pembrokeshire a little closer to home? Sadly not. It's not just a matter of a few ramps and disabled toilets needed, and equally it's not just a technical and spatial challenge (though that can be complex), but it should be a place where the beauty we all yearn for around the hearth and out in the wild landscape can be shared seamlessly by all. So, the respite, the break, the holiday is for everyone.

With the support of Silverlining confirmed and with the architect Chris Loyn being one of the founder parents of the charity Cerebral Palsy Cymru (formerly Bobath Cymru), which has also offered its support, there is a respite-for-all project planned adding a new addition to a clearly defined cluster of farm buildings known as Trefacwn, Noddfa Farm and Noddfa Camping, just to the south-west of Llanrhian, on the very edge of the Pembrokeshire Coast National Park.

There will be three defined bedrooms, laid out to suit family and carer/support worker interaction in a variety of combinations – flexibility is important to meet specific needs – together with living/kitchen/dining spaces. There will be provision also for a therapy room to double as a fourth bedroom, with fold-down bed, should needs require. In addition will be ancillary spaces – stores (for wheelchair(s), equipment, battery charging), plant room, boot room, utility room and, of course, fully equipped bathrooms/wcs to cater for the disabled. All areas will be fully accessible, with flush thresholds both inside and out, providing a generosity of circulation and movement throughout. The external garden spaces are all to be accessible, including the sheltered central courtyard, and large areas of openable glazing that will help merge inside to outside, both physically and visually.

Adopting a fabric-first approach, with a highly insulated, well-sealed, low-maintenance envelope, solar panels are proposed above the inner circulation route around the courtyard. Heating will be via a ground-source heat pump. Water run-off from the roof is to be naturally attenuated by the green roof planting, taken to interlinked wildlife ponds, one in the courtyard, the other in the outer garden area, then discharging into the existing watercourse that runs along the northern edge of the site. The single-storey structure is to be primarily timber framed, faced externally with corten steel and draped with planting, to embed the scheme into its setting. On the roof, will be a field (right).

The site is already enclosed, hidden on three of the four sides, leaving exposed only the southern edge bounding the road. This too is to be screened, with a traditional *clawdd* constructed along its length, topped with new native hedge planting to complete the concealment by subtle layering.

Chris Loyn, his severely disabled son and family, will be keen to put their names down on the renting list when it opens. This will be a very special respite home from home, and also a place utterly transformational, a new horizon for all. ■

To support Cerebral Palsy Cymru go to: <https://www.cerebralpalsycymru.org>



**‘It should be a place where the beauty we all yearn for around the hearth and out in the wild landscape can be shared seamlessly by all.’**



# Book ending finds new beginning

Twenty-two days after the tense moments around the investiture of the Prince of Wales at Caernarfon Castle in 1969, he was down in Brecon cutting the ribbon at the opening of a new library on Ship Street, designed by the county architects' department under the direction of the county architect, J A McRobbie.

A radical contemporary design befitting the shifting functions of library services and responding to new building materials and construction methods in the post-war period, the Brecon County Library is a good example of how these made it possible to create new building forms to enclose large, well-lit, open-plan spaces without great expense or monumental scale.

One wonders whether any courtiers showed the 21-year-old prince a photo of the row of medieval buildings it replaced as he cut the ribbon. Was this when his allergy to the 'modern' began?

The building is now Grade II-listed and empty. Like so much of our public realm, austerity

had forced the closure and then mergers of functions, this time the library service and many other operations are consolidated in Brecon's neo-classical Y Gaer 'attraction' (see *Touchstone* 2021, p. 65).

Curiously, Cadw's listing description says 'the appearance of the library at Brecon purposefully does not conform to the traditional Brecon street architecture of narrow fronted buildings of stucco and slate but has been designed as a modern building which is unobtrusive and in keeping with its location'. It certainly has a strikingly vertical rhythm created by its canted walls in plan and long tall strips of narrow fenestration. This was a possible forerunner of that strange period of architectural fashion where daylight for libraries was to be strictly minimised so that deep-plan buildings could be totally mechanically controlled, recycling the heat from their artificial lighting that was forced to be on all the time. The canted plan does offer



Jonathan Vining

intimate reading spaces with fine glimpses up Ship Street to the crossroads at the top of the hill.

But all is not lost. The property has been transferred to the Brecon Beacons College, part of the NPTC Group of Colleges, which along with another town-centre property transfer, the Watton Mount building, will allow the college students to more easily inhabit the centre of town (this being a much more attractive proposition than being stuck out in the Penlan suburb). It will aid the economy of the town centre too.

Let's hope, like the young prince, they can celebrate the opening of their new town-centre life in a sensitively treated retrofit of this fine piece of modernism. C2o Cymru and the RCAHMW will be closely watching what happens next. ■



Wales has only a small number of post-war listed buildings, and Coychurch Crematorium is among the most important of them. It was designed in the mid-1960s by the practice of Maxwell Fry and Jane Drew. Fry is considered to be one of the leading figures in twentieth-century British architecture.

He gave the following account of his approach to the design of Coychurch Crematorium in a lecture to the RSA in 1969:

'Foremost in my mind were two things: first, purity and clarity in the functions of what was to take place, and secondly, the need everywhere

## Time and space for the bereaved

for what would comfort and console, in large elements and small. And hovering over these the need to connect it all with history, to embed it into the region as part of the language.'

At the conclusion of Fry's lecture comments were invited from the floor. One of these was concerned specifically with the need for suitable social space around the dispersal cloister, to provide space and time for mourners to pay their respects to the bereaved family. Fry's reply made it clear that he had not made provision for this. He conceded that it had been an oversight on his part.

'The idea of the social occasion comes fairly newly to me and obviously it affects design. Several of the points you have raised, I think, are what should form part of a really good brief to-day, and it is obvious that things have moved on and new problems are arising in quite recent times which might affect crematorium design quite a lot.'

Over 50 years later, Jonathan Adams and Partners' new sheltering element for that dispersal cloister aims to resolve the problems first acknowledged by Maxwell Fry even as Coychurch Crematorium was being built.

Because it is primarily a shelter, the most prominent feature of the new dispersal cloister will be its roof. It will provide the opportunity to create the distinct architectural language that will differentiate the new structure from the original building. The roof will use a 'handkerchief vault' form that is familiar from historic religious buildings of different faiths, the shape produced when a dome is placed over a square space. The dimensions of the domes will follow the spacing of the columns that support the existing dispersal cloister roof, so that the new structure will appear to grow from the original. ■





## Leading homes to ultra-low carbon

Sadly, substantial levels of transitioning to zero carbon doesn't happen with the click of a switch. It takes time, but it's coming, at least for those projects led by government grants. Appropriately they are taking a lead for those most in need.

The Welsh Government's Innovative Housing Programme (IHP) round 3 is now rolling out. Following a successful evaluation by the Welsh Government's independent assessment panel, Stride Treglown's ultra-low carbon scheme for 144 homes at Gower View Road, Gorseinon, Swansea for Pobl Group received £10 million of public funding for its £27 million scheme. It is on site. The scheme is made up of two thirds affordable homes (split between low-cost home ownership and social-rental housing) and one third market housing.

The homes will have high levels of thermal efficiency surpassing even the Future Homes Standard and have been designed to achieve EPC 'A' rating and a SAP score of 96 or above. Many homes are predicted to be net-zero carbon in terms of regulated operational energy over the course of the year. Through a combination of fabric-first principles, solar panels, battery storage and heat recovery ventilation the architecture will do its bit to lower residents' heating and electricity bills.

Local material sourcing was essential for the critical panelised wall and roof system design. Factory visits were made to local timber suppliers.



The project opted for a category 2 (under MMC definitions) closed timber frame panel as this involved more factory-based fabrication and included lining materials and insulation but also pre-fitting of triple glazed windows and doors enabling greater control of quality and performance for airtightness. The panels provide U-values of  $0.13 \text{ W/m}^2\text{K}$  and airtightness  $\leq 1 \text{ m}^3/\text{h/m}^2$  at 50 Pa. The insulation used was a wood fibre blown in at the factory. The frame is constructed from Welsh timber sourced from a sawmill in Hereford. (Does 75 miles count as 'local'? Maybe it simply confirms what was revealed in *Touchstone 2021*, pp. 12–15, about Wales's capacity to create a timber building industry.) Materials were chosen for their ability to be vapour open so that any moisture that does enter the structure can naturally migrate to the outside and evaporate away.

To ensure homes were mortgageable, extensive consultation was undertaken with NHBC and other third-party insurers in conjunction with the housing associations.

The carbon impacts related to the production of materials and construction stages were measured using life-cycle carbon assessment tools (*for more on this see pp.44–46*). By tackling these 'upfront' carbon impacts, a staged approach may arrive at net-zero carbon buildings. Aligning with the RIBA's '2030 Climate Challenge', life-cycle carbon assessment and extensive post-occupancy monitoring is a condition of Welsh Government funding. It is hoped this will enable a holistic understanding of the carbon footprint of these homes and will be used to inform future decarbonisation policies. Let's hope the volume house-builders are watching closely, but then they might turn round and say, well, give us a £10 million grant for 144 houses and we'll follow suit. ■



## Our long-term health and well-being

**Y**ou have to be prepared to be in it for the long haul if you really want to raise the bar in architecture and urban design.

Phil Roberts and David Powell, the design lead and project director respectively for the new Velindre Cancer Centre, have been pushing the envelope in the field of design and construction for a number of years. Roberts has a very long track record in Wales of progressive architectural patronage and Powell has led on the development of high-profile hospitals in Alderhay and Bristol.

The project, the new Velindre Cancer Centre, is a strategic contribution to the Transforming Cancer Services initiative involving the regional health boards of south-east Wales and will embed a 32,000 sqm facility for specialist non-surgical cancer treatment and support services in an attractive landscape setting approximately 1 km north-west of Whitchurch village, Cardiff.

The end of July 2022 saw the outcome of a nine-month long competition resulting in the selection of the Acorn Consortium, which comprises Sacyr Infrastructure UK (part of a Madrid-based infrastructure operator and developer company Sacyr S. A.) along with abrdn (formerly Standard Life Aberdeen) and Kajima Partnerships. The architect is the London branch of White Arkitekter, a Scandinavian practice that embraces almost 800 staff based in 12 countries and whose opening strapline on its website simply states that 'our vision is that all our architecture will be climate neutral through design excellence by 2030'.

This project is being conducted under the Welsh Government's Mutual Investment Model

procurement route. Professor Phil Jones (*see p.60*) ex-head of the Welsh School of Architecture, with Arup, Camlins landscape, Down-to-Earth's clinical evidence on well-being environments, and terrific support and advice from Design Commission for Wales (providing 25 case studies around the subject of timber construction and environments for health-care projects), have all played their part. The aim is to start construction after March 2023 for a large-scale landscaped campus master plan that includes a new Maggie's Centre, new bus routes, new walking and cycling paths, and eventually a new metro station developed by Transport for Wales linking in with Whitchurch village's existing active travel infrastructure.

As the existing cancer centre vacates its current buildings to move into the new accommodation, the Cardiff and Vale University Health Board will become responsible for the old cancer hospital site.

The project's intent, the consortium claims, is for low-carbon construction using off-site machined modular timber frames sourced in Wales. There will be ground-source and air-source heat pumps with PVs feeding an efficient building form, designed 'fabric first' with an extremely well-insulated and air-tight envelope. The art strategy for the project is being coordinated by Simon Fenoulhet.

If the project lives up to its imagery, and the vast wealth of serious and progressive intent behind every single aspect of its development, then it will be truly worth the wait. ■

## Johnson Blackett: one to remember



**'N**o man has done more to change the face of Newport than Mr. Johnson Blackett. He cannot set foot in any part of the town without seeing a monument to his part in reshaping and rebuilding it', wrote the *South Wales Argus* in January 1962.

In 36 years as a distinguished deputy and chief borough architect of Newport, Johnson Blackett (1896–1984) was responsible for the design of over 6,000 dwellings (including four major estates at Gaer-Stelvio, Ringland, Malpas and St Julian's), 15 primary schools, four secondary schools, a fire station, old people's homes, clinics and other buildings, not to mention being the consultant architect for Uskmouth B Power Station – then the largest in Europe. Many of these projects were award winning, such as the Gaer estate, praised by the renowned historian J M Richards in *The Architects' Journal* as one of his projects of the year for 1949.

The role of public service architects in the twentieth century is a compelling one. It was only from 1900 that architects' departments began to appear in local authorities: the City of Hull was the first county borough in Britain to appoint an architect with the status of a chief official with a separate department. In Wales, both Swansea and Newport established departments in 1912, with Charles F Ward being the Newport's first borough architect and Blackett's predecessor. By 1957, there were 135 architects' departments in Britain, employing a quarter of all RIBA members, and for many architects, the public-service route was a chosen career path, not a second-best option. The decline from the mid-1960s because of restrictions on capital spending was exacerbated by the Thatcher government's abolition of the Greater London Council in 1986 and the winding down of new town corporations, but public service architecture still remains strong in some areas today... ■ *Jonathan Vining*

*Touchstone will be looking at the architecture of public service in Wales in next year's issue.*

# Between the devil and the three small Cs

... Editorial continued from p.03

a Grangetown-type process for the thousands of other communities across Wales with similar environments to, and levels of deprivation comparable with, the Grangetown ward.

Maybe we need to accept that to really make this all work the funding of such a skills' offering inevitably has to occur from groups that operate outside the marketplace of capitalism and the current dominant modes of commercial architectural practice. Some private-sector architects, of course, have operated for a long time in this creative 'enabling' mode often on a pro-bono basis while keeping themselves still able to pay their employees and the mortgages; but five years of conversations? Is that really do-able, and don't forget the student labour came free (more than 200 students were involved on the Grange Pavilion alone)? Is this really a feasible model to apply to the countless deprived communities that will demand these services?

And we have to also ask ourselves that while Cardiff University's commitment is laudable how many other institutions are there in Wales willing to fund such community resilience-building?

Equally, isn't the system of frantically spending vast time resources bidding to the Moondance/Esmée Fairburn/Garfield Weston-type charitable equivalences, and then to the commercial philanthropists and government lotteries, likely to be a system creaking at the seams as demand inevitably builds?

Maybe we need to rewind. Maybe we should revisit earlier turns of this merry-go-round as John Grindrod has done (*see p.62*).

## Architecture as a civic service

It was once every young talented architect's dream post-1945 to be a public-service architect, a civic service (for that is what essentially the university's role has been for the Grange Pavilion.) The NHS may have had its origins in a bottom-up, Tredegar-community-funded caring system, but Aneurin Bevan knew you could not wait for every local community in the UK to mirror that. Bevan knew something outside the market had to occur nationally and very fast if it was to break through and really make a difference.

Understanding what led to the collapse and dismantling of confidence and investment in public architects is important, because in Wales they are very thin on the ground now. We need to know how it is for the few who survive.

One might ask the same question as to why the best talent in town planning has left local

authorities and gone to developer-supporting independent consultancies? How did this occur? Was the system corrupted, devalued? No one fought for its better qualities because the alternatives opening up were just too comfortable, so much better paid?

Do we need to remember the sudden flowering of late 1970s early 80s 'community architecture' and why its equally sudden evaporation occurred as it became absorbed under the wing of the then Prince of Wales and sidelined by a rush for bling in architecture fuelled by big bang extravagances. We should remember ACTAC, the Association of Community Technical Aid Centres, seeking to put architectural advice on the streets of many towns open to all, and ponder why that faded from view (the housing retrofit crisis certainly demands such a service). We should think very hard about these things, learn from them, and be wide-eyed and recognise that the three Cs, community, capitalism and climate instability, don't rub along well together when the going gets really tough – as it will. There is no sign in Gareth Jones's reports on future visions for Cardiff and Swansea that being wedded so firmly to the old developer-led boosterism is going to be questioned any time soon, or that system collapse may require a very different prioritising of resource concentration from those city's institutions (*pp.16–21*).

As so many of the strikes this year have indicated, the necessary and best of essential

public services have been stripped bare for too long. Enough is enough. Other delivery systems have gainfully and imaginatively tried to step in and plug the gaping hole, but the overstretching cannot be obscured by media over-promotion of the few lucky, exciting and rightly inspiring community winners.

So, in running up to the next issue of Touchstone in 2023 we will investigate and speculate on whether a reinstatement of public service architects in Wales is urgently needed and will seek to answer some of these challenging questions about whether a dramatic refocusing of architectural service is long overdue.

As McVicar and Turnbull reminded us, quoting the words of the philosopher Karsten Harries, 'the task of architecture is that of helping to articulate a common ethos in order to help us dwell in a disorienting world'. The disorientation coming will be massive. We need to kit-up quickly. Are we ready?

*Patrick Hanmay: Editor*

For further detailed reading about the Grangetown Cardiff Community Gateway programme and the Grange Pavilion project go to:

<https://grangepavilion.wales/>

<https://www.cardiff.ac.uk/community/our-local-community-projects/community-gateway>

<https://www.cardiff.ac.uk/people/view/116676-mcvicar-mhairi>

Weeping by David Garner





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# Directory 2022

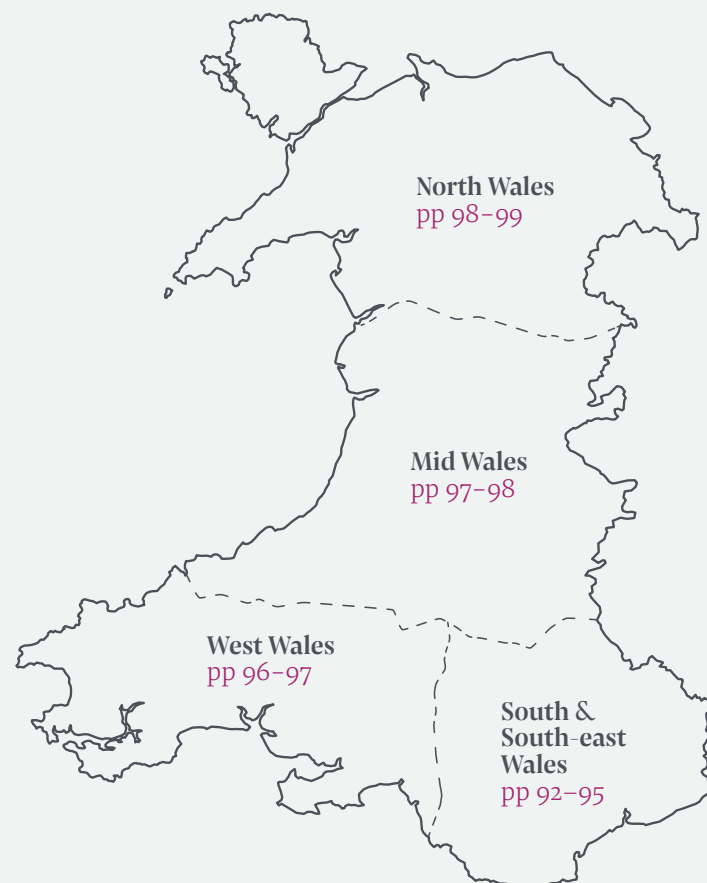
The following pages of Touchstone 2022 comprise a directory of architectural practices in Wales. The directory is divided into four areas, as indicated on the map. Within each area, architectural practices are listed under the town in which (or nearest to which) they operate, in alphabetical order of the business name. At the end of the directory section is a list cross-referencing practice names to page numbers.

All the architects featured in this directory are members of the Royal Institute of British Architects (RIBA), which means they are highly skilled professionals trained to turn clients' aspirations into reality. Many also operate their businesses as RIBA Chartered Practices (denoted by \* in the listings) indicating that they comply with strict criteria covering insurance, health and safety, and quality management systems.

Architects offer guidance on all the aspects of a building project from design and cost through to planning and construction. Architects have a unique ability to see things from the widest possible perspective as well as focusing on the small things that can make a big difference to a project.

The Royal Society of Architects in Wales and its parent body, the Royal Institute of British Architects, offer a free-of-charge service to tailor a shortlist of practices with the appropriate skills and experience for every type and size of project. The 'Find an Architect' service is available at <https://www.architecture.com/find-an-architect/> – and you can also email [clientservices@riba.org](mailto:clientservices@riba.org) or ring RSAW on 029 2022 8987.

To find an individual RIBA/RSAW member by name, go to <https://members.architecture.com/directory/default.asp?dir=3>



# South & South-east Wales

## Abergavenny

### **CRSH Architecture and Energy\***

One the Orchard, Llanellen Road, Llanfoist, Abergavenny NP7 9NF

CRSH Architecture and Energy specialise in design led architecture and energy efficiency. Projects include sensitive renovations and retrofits of existing buildings and new build schemes with good spatial design and the highest level of sustainability at their core. Their new build house, Un y Berllan, won Best Eco Home 2014 and was shortlisted for the 2013 National Eisteddfod Gold Medal for Architecture. We welcome enquires from all sectors.

**Contact:** Steven Harris  
01873 853 238  
mail@crsh-arch.co.uk  
www.crsharchitects.co.uk

## Barry

### **Dennis Hellyar Architects\***

Unit 15, BSC, Hood Road, Barry Waterfront, Barry, Vale of Glamorgan CF62 5QN

Dennis Hellyar Architects is an RIBA Chartered Practice. The Founder Dennis Hellyar is an award-winning Chartered Architect with over 20 years' experience. Passionate about Sustainable and Innovative – Architecture and Design, all clients benefit from our collaborative approach to their project. Every project in the office, receives the same rigorous methodology utilising State of the Art Virtual Building Information Modelling software to achieve the optimum design, in response to the brief and budget.

**Contact:** Dennis Hellyar  
01446 500720  
dh@dennishellyar-architects.com  
www.dennishellyar-architects.com

## Brecon

### **Mundo Architecture\***

2 Wheat Street, Brecon, Powys LD3 7DG

At Mundo we design the inside and allow our interiors to inform the external shell.

We continue to enjoy working in different sectors, keeping ideas fresh: office to restaurant to landscape to residential. Our Concept designs share a common thread: one of a journey through spaces that strive to reveal the best of each and every site with natural light being a key element in our work.

**Contact:** Agnieszka Pearson  
01874 624775  
agnieszka@mundoarchitecture.com  
www.mundoarchitecture.com

### **Torcail Forsyth Architecture**

Llwyn Cor Studios, Trecastle, Brecon, Powys LD3 8UH

Architectural practise, founded in 2006, engaged in a broad field of activity across the commercial, retail, restaurant and hotel, residential and ecclesiastical sectors. Expertise in development in protected areas and sites of special scientific interest. Extensive experience of listed and historic buildings. Situated in Brecon and working on projects across Wales, the West Midlands, the South West and in London.

**Contact:** Torcail Forsyth  
01874 638 156  
torcse@mac.com  
www.torcailforsytharchitects.com

## Bridgend

### **PJL Architect Limited**

2 Court Road, Bridgend CF31 1BN

We are an architect's practice based in Bridgend town centre and offer bespoke building design and management services. We are able to offer a broad range of architectural services, managing projects from inception to completion.

Our specific areas of expertise, in both the commercial and residential sector include the refurbishment, re-modelling and adapting of existing buildings for new uses.

Examples of our work can be seen in the Project Section of our website. These include residential, commercial, retail and leisure projects.

01656 660 004  
mm@pjl-a.com  
www.pjl-a.com

## Cardiff

### **Ashley DAVIES Architects Limited**

15 Pickwick Close, Thornhill, Cardiff CF14 9DA

ADA specialises in historic building conservation – repairing, restoring and adapting historic and listed buildings – and the design of insertions and extensions to historic buildings. We also undertake and prepare Heritage Assessments, Heritage Impact Statements, Conservation Plans and Detailed Condition Assessments, and provide assistance with funding applications. Principal, Ashley Davies, is a Chartered Architect, an RIBA-accredited Specialist Conservation Architect and a Supporter of the Institute of Historic Building Conservation, with 30 years' experience.

**Contact:** Ashley Davies  
07413 000 761  
ashleydaviesarchitects@gmail.com  
www.ashleydaviesarchitects.co.uk

### **Austin-Smith:Lord Ltd\***

One Dunleavy Drive, Cardiff CF11 0SN

Enhancing Life and Environments by Design. Austin-Smith:Lord provides services in architecture, conservation, interior, landscape, urban design and masterplanning. With a world-wide portfolio of award-winning projects across a wide range of sectors, we employ around 60 people in five studios. Encouraged by a legacy of innovative leadership, all members of the practice are committed to achieving architecture of the highest order, combining commercial viability and sustainability with intelligent and elegant design solutions. As a highly collaborative and creative practice with a commitment to quality, we consistently provide our clients with a level of design and service excellence that exceeds expectations. Additional offices in Bristol, Glasgow, Liverpool, and London.

**Contact:** Martin Roe  
029 2022 5208  
cardiff@austinsmithlord.com  
www.austinsmithlord.com

### **Brian MacEntee Architecture & Design\***

Top Floor Mackintosh House, 136 Newport Road, Cardiff CF24 1DJ

BMAD Ltd is an award winning, design led practice with experience of working across several different sectors. Our services include architectural design, interior design, project co-ordination, planning applications and construction detail design. Offering the right advice and design solutions, we often implement our in-depth knowledge of the current permitted development legislation, to ensure your project achieves planning and has good buildability. We pride ourselves on always working closely and collaboratively to produce innovative designs that cater to individual requirements, creating spectacular spaces that are truly bespoke.

**Contact:** Brian MacEntee  
029 2049 0237  
info@bmadltd.co.uk  
www.bmadltd.co.uk

### **DB3 Architecture\***

2 Callaghan Square, Cardiff CF10 5BT

DB3 Architecture is a leading, award-winning consultancy providing an architecture-led, multi-disciplinary service including architectural design, project co-ordination, building services design, low carbon design consultancy, drone surveying, interior design and conservation. Our approach to design and operations provides a comprehensive, client focused service for schemes throughout the UK. Creativity is at the heart of our service and we focus on the development of real value for our clients. We challenge ourselves to envision and deliver projects that make a positive difference to our clients.

**Contact:** Matthew Savory  
07718 809476  
matthew.savory@db3group.com  
www.db3group.com

### **Davies Llewelyn and Jones LLP\***

The Maltings, East Tyndall Street, Cardiff CF24 5EA

The practice was founded in Cardiff in 1974 and has, from its earliest time, specialised in working with public sector clients including local authorities, health authorities and housing associations in the provision of both new and refurbished social housing, elderly persons housing and health care projects up to £5m in value. The practice has developed expertise in industrial and commercial development and the refurbishment of existing industrial, commercial units and offices for private sector clients.

**Contact:** David Davies or Wyn Jones  
029 2046 4433  
daviesllewelyn@aol.com  
www.daviesllewelynandjones.co.uk

### **Downs Merrifield Architects\***

The Studio, 5 Cefn Coed Crescent, Cardiff CF23 6AT

Downs Merrifield Architects specialise in high end residential and hospitality work, bringing design quality and a highly personalised service to all our clients. We believe that well-designed environments which optimise daylight and are crafted from natural materials, create environmentally sustainable buildings which will be long lasting and exceed expectations. Our niche practice has grown from the two founding partners' many years of experience in the commercial and luxury sectors, plus our new partner Rob Boltman. This has enabled us to create a unique perspective to all of our designs, combining practical sustainability with attention to detail, together with full virtual reality rendering. Our projects include one-off homes (including Passive Haus), residential refurbishments, hotels, large housing developments, listed buildings and a green energy park.

**Contact:** Nic Downs, Carolyn Merrifield or Rob Boltman  
029 2167 2672  
info@downsmerrifield.com  
www.downsmerrifield.com

### **Gaunt Francis Architects\***

23 Womanby Street, Cardiff CF10 1BR

Gaunt Francis Architects is a creative commercial design studio that blends business acumen and technical excellence with design creativity. Formed in 1997, the practice has delivered award-winning projects throughout the UK from its offices in London and Cardiff. The practice has an enviable reputation in its four work sectors - working, caring, living and learning. We strive for environmentally responsible, cost-efficient, beautiful places and buildings; passionately believing that good design will always create value. Additional offices in London.

**Contact:** Toby Adam  
029 2023 3993  
info@gauntfrancis.co.uk  
www.gauntfrancis.co.uk

### **Hiraeth Architecture**

The Maltings, East Tyndall Street, Cardiff CF24 5EA

Hiraeth Architects: Embracing the past, creating the future.

Whether we're making a relic relevant or a house a home, we combine a deep understanding of the site with innovative, low carbon, low impact design. We put our clients at the heart of our process and are best known for our twin specialisms:

- Low carbon design, including Passivhaus certification, using natural based materials for high performance, whole building systems.
- The conservation, alteration and evolution of sites and buildings of sensitive and specialist interest.

**Contact:** Rob Thomas  
029 2035 1645  
office@hiraetharchitecture.co.uk  
www.hiraetharchitecture.co.uk

### **HLM Architects\***

Suite 104, The Creative Quarter, Morgan Arcade, The Hayes, Cardiff CF10 1AF

HLM is an award winning, leading design practice which combines flair, imagination and passion to create innovative, sustainable 'Thoughtful Designs'.

Our talented team offer a holistic set of design skills including Architecture, Landscape, Urban Design, Interior Design, Environmental Design and Master-Planning to all projects. We work across a wide range of sectors, including Education, Health, Defence, Hospitality/leisure & Culture, Justice & Emergency Services, Asset & Workplace and Living & Communities throughout the UK with additional offices in London, Sheffield, Glasgow and Belfast.

We create places of education that inspire, healthcare environments that nurture, homes that are part of thriving communities, and infrastructure that is sustainable in every sense. Our design philosophy put people at its centre.

**Contact:** Gareth Woodfin, Studio Director

### **Holder Mathias LLP\***

The Bonded Warehouse, Atlantic Wharf, Cardiff CF10 4HF

Holder Mathias has created projects of enduring value for over fifty years. Our reputation is built upon high quality design within a sound commercial framework, creating solutions that make a real contribution to our clients' success. Operating throughout the UK and into Europe from Cardiff and London, Holder Mathias combines specialist expertise in retail, leisure, urban residential and workplace design together with a recognised approach to integrated, sustainable mixed-use development.

Whether providing strategic advice on complex mixed-use schemes, specialist leisure design expertise, or technical resources for construction; Holder Mathias brings a powerful combination of creativity, commercial awareness, commitment and capacity to deliver.

**Contact:** Stephen Hill  
029 2049 8681 / 0771 547 6667  
enquiries@holdermathias.com  
www.holdermathias.com

### **IBI GROUP (UK) Limited\***

105-106 Creative Quarter, Morgan Arcade, Cardiff CF10 1AF

Proud recipient of a 2022 RSAW Welsh Architecture Award and RIBA Chartered Practice (20009958) with specialists across commercial, education, healthcare, science and knowledge-based R&D, residential and senior living sectors. We are a team of dedicated professionals who share a common desire - to help our clients create liveable, sustainable, urban environments. Our experience encompasses architecture, urban design and masterplanning, interior design and landscape architecture. Approved across all leading procurement Frameworks, we're delivering exemplary built environments with sustainable outcomes. We understand the importance of vision and strategy as well as the practical requirements of delivery, working with our partners from inception through RIBA 0-7 stages including post-occupancy review.

**Contact:** Andrew Street, Studio Director  
029 2044 8900  
andrew.street@ibigroup.com  
www.ibigroup.com

### **Kotzmuth Williams Architects\***

Canton House, 435-451 Cowbridge Road East, Cardiff CF5 1JH

Established in 2003, our Cardiff based practice provides a bespoke design service tailored to each individual client.

We aim to create well considered modern buildings that are sympathetic to their surroundings. Our designs are a response to our clients objectives, the location, landscape, views and orientation. A significant number of our projects are in sensitive contexts, including work to listed buildings and within conservation areas.

We take pride not just in our design work but also in our understanding of construction, materials and detailing that makes for complete service.

**Contact:** Siôn Williams  
029 2178 0001  
office@kwarchitects.com  
www.kwarchitects.com

### **Latter Davies\***

6 Park Grove, Cardiff CF10 3BN

We aim to combine creativity with a rigorous approach, providing elegant solutions and efficient buildings responding to the needs of users and the environment. Experience across a spectrum of building types in the private, public and charitable sectors throughout Wales and beyond, including:

- the adaptation and refurbishment of listed and historic buildings.
- healthcare and special needs care buildings.
- private housing; new-build, remodelling, refurbishment.

Yn darparu gwaith creadigol a gwasanaeth drylwyr ledled Cymru a thu hwnt.

**Contact:** Gwyn Davies

029 2023 1833  
admin@latterdavies.co.uk  
www.latterdavies.co.uk

### **Lawray Architects\***

Greenmeadow Springs, 1 Cae Gwyrdd, Tongwynlais, Cardiff CF15 7AB

Lawray Architects is firmly rooted in Wales. We formed in Cardiff over 40 years ago, before exploring the north Wales market from Wrexham and then exporting our warm, comfortable yet professional approach to the wilds of London.

We believe in preserving the identity of place and balancing the desires of all stakeholders, through logical yet challenging explorations of the brief, to achieve outstanding results that are of true benefit to our clients. Additional offices in Wrexham and London.

**Contact:** David Hughes

029 2052 8140  
cardiff@lawray.co.uk  
www.lawray.co.uk

### **Lloyd Britton Architect Limited\***

13 Sturminster Road, Penylan, Cardiff CF23 5AQ

Less is more (more or less...) – a small architectural studio providing bespoke and tailor-made architectural services and solutions on a broad range of project types in urban and rural locations throughout Wales. Work is undertaken on commissions ranging from commercial and domestic new buildings, extensions, refurbishments and conversions including listed buildings / buildings in conservation areas as well as interestingly challenging sites and development opportunities. The practice encourages the client to be an integral part of the design process working closely with the client to provide advice and guidance from concept to completion.

**Contact:** Lloyd Britton

07967 017 749  
lloyd@lbarchitect.co.uk

### **Maredudd ab Iestyn RIBA\***

16 Preswylfa Street, Canton, Cardiff/Caerdydd CF5 1FS

Yn dathlu mwy na chwarter canrif o adeiladu'r Gymru newydd.

An award-winning practice established in 1994. Our projects feature site specific responses to new builds, contemporary insertions or additions to existing buildings and sensitive conservation and alterations to listed buildings.

Working with clients from the private, public and commercial sectors we have designed a wide range of projects throughout Wales and beyond.

**Contact:** Maredudd ab Iestyn

029 2063 4297  
abiestyn@btinternet.com  
www.abiestyn.com

### **Pentan Architects\***

22 Cathedral Road, Pontcanna, Cardiff CF11 9LJ

Pentan Architects is an award-winning design practice, with over 25 years' experience in the residential and supported living sectors. The practice holds an excellent reputation in innovation and sustainable design. People are central to our architecture and we are exponents of place-making as critical to all projects. Our portfolio of work extends across Wales and the South West, ranging from small innovative housing projects to specialist care-homes and extra-care housing, and large residential developments and master-planning.

**Contact:** Andrew Hole / Alun Lock

029 2030 9010  
info@pentan.co.uk  
www.pentan.co.uk

### **Powell Dobson Architects\***

Suite 1F, Building 1, Eastern Business Park, St Mellons, Cardiff CF3 5EA

Powell Dobson is one of Wales' largest independent architectural practices dedicated to the design and delivery of outstanding buildings. We aim to design buildings that are an inspiration to their users, provide a strong identity whilst responding to their context and that fully embrace our commitment to sustainable design. Our approach is to always embed sustainability in our design process and through research and innovation led projects, we continue to develop our awareness of new technologies in environmental design, low carbon and the wider well-being agenda.

"Our aspiration is to continue to design outstanding buildings and places that inspire, enrich and perform whilst making a significant contribution to the ongoing sustainability of our local and national environment" As a practice we endeavour to work at the forefront of design excellence in all our projects. Through our residential studio we champion the principle of Social Architecture and how, through design, it impacts on the health and well-being of the community that use our buildings and spaces. Social architecture is an approach which we believe forms the basis of good place making.

**Contact:** Ann-Marie Smale

03333 201 001  
www.powelldobson.com  
Twitter: @PDArchitects

### **Prichard Barnes Architects**

18 St Andrews Crescent, Cardiff CF10 3DD

Prichard Barnes Architects is a contemporary British architectural practice based in Cardiff. Led by its founding partners, architects Shaun Prichard and James Barnes, the practice is committed to excellence in architectural design. Prichard Barnes Architects can provide a full architectural design service from concept design to construction supervision.

Formerly Hatcher Prichard Architects, the practice has successfully embedded thoughtful design and sustainable principles using Building Information Modelling (BIM).

**Contact:** Shaun Prichard

07920 057 880  
shaun@prichardbarnes.co.uk  
https://prichardbarnes.co.uk/

### **Sillitoe Architectural Services**

Earlsford, Ty'r Winch Road, Old St Mellons, Cardiff CF3 5UW

Sillitoe Architectural Services is a Christian architectural practice built on traditional values and the use of hand-drawn draughtsmanship, in order to provide a friendly, personal and professional service.

Services include design, planning and building regulation applications, project management, CDM principal designer, listed building consent applications, including statements of historical significance.

Consultancy: design and access statements writing, model making (including display models in plaster); hand drawn and painted visualisations to a very high standard.

**Contact:** Geoffrey R. Sillitoe

07833 961 798  
geoff@geoffreysillitoe.com  
www.geoffreysillitoe.com

### **Stride Treglown\***

Treglown Court, Dowlais Road, Cardiff CF24 5LQ

Stride Treglown's Cardiff studio is proudly focused on the needs of our clients and the people that use our projects, creating inspiring, sustainable spaces that genuinely work. Our diverse portfolio includes award winning schools, exemplary higher education buildings, cutting edge tech and innovation facilities, patient-centric healthcare schemes and leading edge environmental residential design. With over 20 years in Wales, our Cardiff studio is one of Stride Treglown's nine regional offices across the UK. We are a certified B Corporation, and an employee owned practice with creativity and technical excellence at the heart of everything we do. We create space and places that people love to use.

**Contact:** Pierre Wassenaar

029 2043 5660  
pierrewassenaar@stridetreglown.com  
www.stridetreglown.com



## **TDArchitect\***

19 Conybeare Road, Victoria Park, Cardiff CF5 1GB

TDArchitect provide architectural design and consultancy services for people, businesses and organisations across Wales and SW England. Our range of services cover everything from CAD drafting; eco-refurbishment advice; feasibility studies and surveys; planning and tender advice and on-site, contract and project management. Recognising that every project is unique, we provide a personal service tailored towards your particular brief and budget, producing individual design solutions to exceed your expectations and requirements.

**Contact:** Cathryn Teagle-Davies

029 2034 2465  
info@tdarchitect.co.uk  
www.tdarchitect.co.uk

## **Chepstow**

### **Hall + Bednarczyk Architects\***

The Coachworks, 12A Lower Church Street, Chepstow NP16 5HJ

Hall + Bednarczyk Architects has gained prominence as one of Wales's leading younger practices, with a track record of multiple RIBA award-winning projects for residential, commercial and public architecture. It aims to create confident well-judged modern buildings in contexts which are frequently sensitive and multi-layered, including pristine landscapes, protected historic buildings and conservation areas.

In 2016 the practice was the recipient of the National Eisteddfod Gold Medal for Architecture and Welsh Building of the Year in the RIBA Awards.

**Contact:** Martin Hall

01291 627 777  
mail@hallbednarczyk.com  
www.hallbednarczyk.com

## **Dinas Powys**

### **Studio Walmsley Architects\***

Tŷ Carreg, Old Farm Mews, Dinas Powys CF64 4AZ

Our objective is to go beyond client aspirations and to exceed their expectations by means of a poetic response to the brief, through an architecture concept driven, perhaps by its structure, or the physical characteristics of the landscape of a place, its fabric and its community. Our approach is to find an appropriate architectural language often on projects where new fabric is stitched into old. Individual or small groups of houses is our specialism.

**Contact:** Jacqui Walmsley

07971 833 046  
jacqui@studiowalmsley.com  
www.studiowalmsley.com

## **Newport**

### **Caroe & Partners Architects**

The Estates Office, 25-26 Gold Tops, Newport NP20 4PG

Caroe & Partners was founded in 1884 by W.D. Caroe, a major figure in the arts and crafts movement. We specialise in the conservation, repair and adaptation of all types of historic buildings and sites in Wales and England. Our in-depth skills cover all aspects of traditional construction, maintenance and repair. We enjoy working closely with our clients, to design thoughtful repairs and to make imaginative proposals for modern or traditional alterations and new work.

**Contact:** Jane Chamberlain

029 2057 7585  
newport@caroe.co.uk  
www.caroe.co.uk

### **KWL Architect Limited\***

Poplar House, Hazell Drive, Newport NP10 8FY

KWL Architects is a multi-award-winning practice, formed in 2001 and based in Newport, the Practice has significant expertise in the design and development of care villages, extra care housing, care homes and specialist care facilities, as well as undertaking a range of other commissions.

The practice has completed developments throughout the UK, for a broad range of clients including charitable trusts, housing associations, not for profit organisations, as well as commercial developer/operators.

**Contact:** Philip Lewis or Neil Ross

01633 817171  
kwl@kwlarchitects.co.uk  
www.kwlarchitects.co.uk

## **Penarth**

### **Loyn + Co Architects Ltd\***

88 Glebe Street, Penarth, Vale of Glamorgan CF64 1EF

Principal Architect Chris Loyn set up practice in 1987 and founded Loyn + Co Architects in 1992. This year we celebrate 30 years of Loyn+Co, from the outset we have been one of the few architects in Wales to champion contemporary design. During its history the practice has enjoyed recognition for its achievements in architecture through published projects and many significant awards and nominations including RIBA Stirling Prize, various RIBA Awards including winning The Manser Medal twice (the only Practice ever to do so), Sunday Times House of the Year and the Eisteddfod Gold Medal for Architecture which the practice has won three times.

The practice philosophy favours working as a team, operating in a studio environment where we share ideas and collectively review design development through each stage of a project's evolution. With a wide range of experience, specialisms and skills our team is committed to delivering high quality schemes true to their original concept, relevant to our time and unique to their site and to their client.

**Contact:** Chris Loyn, James Stroud, Victoria Coombs

029 2071 1432  
architecture@loyn.co.uk  
www.loyn.co.uk

# West Wales

## Carmarthen

### Nicole Jones Architect RIBA\*

6 Myrddin Crescent, Carmarthen SA31 1DX

We offer modern sustainable architecture as well as the refurbishment of listed buildings and barn and chapel conversions. Our style is always approachable and professional.

The practice is involved in a broad range of projects from residential to small commercial projects. We also specialise in refurbishment of dental surgeries.

We undertake work in Wales, Southern England and Germany.

01267 230 762

n@nicolejones-architect.co.uk

www.nicolejones-architect.co.uk

## Haverfordwest

### David Haward Associates Ltd\*

Twll Dwrgi, Goat Street, St David's, Haverfordwest SA62 6RQ

We are a well-established practice with a reputation with both clients and contractors, for providing high quality designs that maximise the building's potential and meet our clients' expectations. Several contractors have used the practice when extending or making alterations to their own homes, due to our innovative design and well-coordinated drawings, which allow ease of construction on site. Additional office in Clynderwen.

Contact: David Haward

01437 729090

mail@dhaarchitects.co.uk

www.dhaarchitects.co.uk

### iDeA Architects

3 Castle Terrace, North Street, Haverfordwest, Pembrokeshire SA61 2JH

iDeA Architects was established in 2007 by Kevin Thompson and Chris Evans to focus on low-energy, sustainable design. Both directors have a wealth of experience in the public and private sectors.

We offer competitive design services for residential, community and public projects, as well as 'low impact' self build schemes, conversions and adaptations with the aim to provide good, contemporary design with high environmental performance standards that will add long term value.

The practice also offers valuable experience in 'place-focussed' regeneration working with commercial, civic and community organisations, and engaging with artists and planning associates to explore new opportunities for our town centres.

Contact: Kevin Thompson

01437 769 639

kevin@idea-architects.co.uk

www.ideaarchitects.co.uk

### Oochitecture\*

The Royal, Trafalgar Terrace, Broad Haven, Haverfordwest SA62 3JU

Oochitecture is a creative practice based in Broad Haven, Pembrokeshire. We deliver projects for our clients across south Wales and beyond. Passionate about both design and the process of building, we enjoy taking projects from inception to completion guiding our clients along the way.

We have a wide range of experience including residential, education and commercial projects and provide full design services and project management.

Contact: Michael Bool

01437 457 501 / 07508 884 988

info@oochitecture.com

www.oochitecture.com

## Llanelli

### W Griffiths\*

Falcon Chambers, Thomas Street, Llanelli, Carmarthenshire SA15 3JB

W. Griffiths are an experienced proven RIBA Chartered Practice comprising a long established, practical and cooperative team of people confident across all sectors from inception to completion in UK. Additional offices in London.

Contact: Christopher Griffiths

01792 651532

chris@wgriffiths.co.uk

www.wgriffiths.co.uk

## Narberth

### Steve Hole Architects LLP

7 Northfield Road, Narberth, Pembrokeshire SA67 7AA

Steve Hole RIBA has been in general practice in Narberth since 1981, specialising in domestic architecture, but also with extensive commercial experience. We have developed considerable experience in identifying potential development opportunities, undertaking planning feasibilities and marrying such potential with suitable developer clients. The practice also operates as a general local practice and undertakes architects' services for one off property developments, conversions and extensions, often dealing with historic and listed buildings.

Contact: Steve Hole

01834 861 422

info@stevholearchitects.co.uk

www.stevholearchitects.co.uk

## Newport

### Julian Bishop – Architect

Dan y Garn, Mountain West, Newport, Pembrokeshire SA42 0QX

Practice specialising in Sustainable Architecture since 2001, however as an Architect, I have been committed to sustainable design since the 1970s, when energy conservation was undertaken on an intuitive and experiential basis. Dyfi Eco Parc, designed in the 1990s included a year long objective, and subjective in-use study by a Westminster University research team, including the early use of air pressure testing and thermography.

Since 2008 the practice has been using PHPP for all domestic new build, also working to improve existing buildings with EnerPHit. The practice works in West Wales from a self build studio office, also designed and built to Passivhaus domestic and carbon neutral standards.

Contact: Julian Bishop

01239 821150 / 07970 041377

mail@julianbishop-architect.co.uk

www.julianbishop-architect.co.uk

## Pembroke

### Acanthus Holden Architects\*

Watermans Lane, The Green, Pembroke, Pembroke Dock SA71 4NU

Acanthus Holden is a RIBA Chartered Architectural Practice that has provided comprehensive design services extending from inception to completion on site for more than 25 years, with an established reputation for building conservation, and the and the creative reuse of old buildings.

The practice is also acknowledged as one that pursues an environmentally sensitive and sustainable approach to projects, which in recent years has extended to the design of several Passive House buildings in west Wales.

Acanthus Holden can provide both architectural and planning services for projects, a desirable and streamlined combination for many clients.

Contact: Peter Holden

01646 685 472

architects@acanthus-holden.co.uk

www.acanthus-holden.co.uk

## Pembroke Dock

### Pembroke Design Ltd\*

16 Meyrick Street, Pembroke Dock,  
Pembrokeshire SA72 6UT

PDL Architects & Surveyors offer a friendly, client focussed service by our experienced design and technical team. We create better buildings and environments that are environmentally sensitive and highly sustainable. Through close communication and good design, we work to better our client's expectations on every project, contemporary or traditional, providing cost effective, highly sustainable and stimulating spaces in which to live, work or learn.

**Contact:** Julian Mansel-Thomas  
01646 683 439  
pdock@pembrokedesign.co.uk  
www.pembrokedesign.co.uk

## Swansea

### Air Architecture\*

19A Catherine Street, Swansea SA1 4JJ

Innovative and dynamic spaces within a sustainable context. Air can provide a unique response to problem-solving based on discussion at all stages of design development with 3D sketches and models, involving other specialists as necessary. Site analysis to assess function, orientation, space, light, lifecycles and use of local materials. Collaboration with specialists in materials and craft-based systems. Shortlisted for Architects' Journal Small projects award, Leaf International Interior Design Awards (Best use of space), Winner of Gower Society Annual Design Award.

**Contact:** Robin Campbell or Helen Flynn  
01792 060 013  
robin.campbell@airarchitecture.co.uk  
helen.flynn@airarchitecture.co.uk  
www.airarchitecture.co.uk

## Tenby

### Argent Architects\*

1 Montrose, Penally, Tenby SA70 7PU

Following on from our Grand Designs project at Tenby Lifeboathouse, AA are on a roll - with several interesting houses on the go in stunning locations. We are also working on hotel and care home projects and an interesting local heritage scheme.

We favour timber post and beam technology for its human scale, flexibility, speed, sustainability and low impact on context (see also editorial pp.63-65).

**Contact:** Michael Argent  
01834 845 440  
admin@argent-architects.co.uk  
www.argent-architects.co.uk

# Mid Wales

## Aberystwyth

### DB3 Architecture\*

30 Heol y Wig, Aberystwyth, Ceredigion SY23 2LN

DB3 is an architecture-led, multi-disciplinary consultancy including architectural design, surveying, conservation and project management. Our approach to design and operations provides a comprehensive, client focused and fully bilingual service for public and private projects throughout Wales. Our office at Aberystwyth specialises in housing, education, community, cultural, library and conservation projects. We have a local, dedicated and experienced team who take pride in the wide range of architectural projects we deliver.

**Contact:** Iwan Thomas  
01970 624 688  
iwan.thomas@db3group.com  
www.db3group.com

### Hughes Architects\*

Harbour House, Y Lanfa, Trefechan,  
Aberystwyth SY23 1AS

The practice was established in 2001 with the aim of bringing high quality architecture, learnt in big cities across the world to mid Wales. Within two years the practice had grown considerably and had projects across the UK and whilst the geographical spread of our projects is still vast, our core values remain the same, wherever we have the pleasure to be working. We have expanded to provide architectural design, planning, and building engineering services to support our clients on a range of schemes.

We are a close-knit team drawn from a variety of backgrounds and experience and this is reflected in our work. We enjoy working in this wonderful part of the world, learning with our clients and creating their dreams. Additional offices in Newtown and Welshpool.

**Contact:** Doug Hughes  
01970 602 600  
enquiries@hughesarchitects.co.uk  
www.hughesarchitects.co.uk

### Mathew Tench Architects and Associates Ltd

Studio 2, Creative Arts Unit, Aberystwyth Arts Centre,  
Penglais Campus, Aberystwyth University,  
Ceredigion SY23 3LG

We provide the full range of architectural services, including design, planning permission, building regulation approval, ecological advice and building contract administration.

The business was founded by Mathew Tench who has worked in mid Wales for 25 years and possesses a wealth of experience in design, planning and project management. We approach every job as a unique challenge and exciting opportunity to build unique spaces meeting each client's criteria and enhance the quality of the environment.

**Contact:** Mathew Tench  
01970 611 439 / 07866 481 086  
mathew@mathewtencharchitects.co.uk  
www.mathewtencharchitects.co.uk

## Machynlleth

### George + Tomos Penseiri: Architects Cyf\*

Cambrian House, 12 Heol Penrallt, Machynlleth,  
Powys SY20 8AL

George + Tomos was established in 2003 by Arwyn George and Dafydd Tomos, who have extensive experience of projects throughout Wales and beyond. Based in Machynlleth, we offer a bilingual service and combine creative design ideas with the use of sustainable construction techniques. We are a young team with a real passion for our work, always aiming to ensure the best results for our clients. We make buildings that work well, make the best possible use of site and budget, are technically and ecologically advanced, and suit their surroundings and context.

01654 700 337  
georgetomos@yahoo.co.uk  
www.georgetomos.co.uk

## Newtown

### Hughes Architects\*

29 Broad Street, Newtown, Powys SY16 2BQ

The practice was established in 2001 with the aim of bringing high quality architecture, learnt in big cities across the world to mid Wales. Within two years the practice had grown considerably and had projects across the UK and whilst the geographical spread of our projects is still vast, our core values remain the same, wherever we have the pleasure to be working. We have expanded to provide architectural design, planning, and building engineering services to support our clients on a range of schemes.

We are a close-knit team drawn from a variety of backgrounds and experience and this is reflected in our work. We enjoy working in this wonderful part of the world, learning with our clients and creating their dreams. Additional offices in Aberystwyth and Welshpool.

**Contact:** Richard Lewis  
01686 610 311  
enquiries@hughesarchitects.co.uk  
www.hughesarchitects.co.uk

## Welshpool

### Hughes Architects\*

18 Berriew Street, Welshpool SY21 7SQ

The practice was established in 2001 with the aim of bringing high quality architecture, learnt in big cities across the world to mid Wales. Within two years the practice had grown considerably and had projects across the UK and whilst the geographical spread of our projects is still vast, our core values remain the same, wherever we have the pleasure to be working. We have expanded to provide architectural design, planning, and building engineering services to support our clients on a range of schemes.

We are a close-knit team drawn from a variety of backgrounds and experience and this is reflected in our work. We enjoy working in this wonderful part of the world, learning with our clients and creating their dreams. Additional offices in Newtown and Aberystwyth.

**Contact:** Doug Hughes

01938 553 436

enquiries@hughesarchitects.co.uk

www.hughesarchitects.co.uk

## North Wales

### Bala

#### Rhys Llwyd Davies – Architect | Pensaer\*

Swyddfa Heulwen, 29 Y Stryd Fawr, Y Bala, Gwynedd LL23 7AG

Rhys Llwyd Davies runs a small rural practice working mostly in north and mid Wales. We regularly work on a range of projects including domestic, public and commercial buildings. The practice was established with the aim of improving the rural built environment by concentrating on the character of buildings, spirit of place, and sustainability. We encourage a contemporary vernacular architectural language and have established a reputation for sensitive alterations / renovations of traditional and historic buildings.

01678 521 450

post@rhysllwyddavies.co.uk

www.rhysllwyddavies.co.uk

### Conwy

#### Donald Inshall Associates\*

Y Becws, Pool Lane, Conwy LL32 8PZ

Donald Inshall Associates is an award-winning architectural practice and historic buildings consultancy, specialising in the care, repair and adaptation of historic buildings and designing new buildings in sensitive sites. We believe that change is continuous and that buildings are, in effect, 'alive'. Historic buildings should be constantly maintained and sensitively adapted so they may be lastingly used and enjoyed. All of our projects are unique and balance the preservation of a place with the need for considered intervention to ensure its continued vitality. We have worked on seminal buildings in Wales, such as the four Castles of Edward I with Cadw, Plas Newydd for the National Trust, and numerous commissions for private individuals.

**Contact:** Matt Osmont

01492 592378

conwy@insall-architects.co.uk

www.donaldinsallassociates.co.uk

#### Mallindine Architects\*

Erw Lydan, Conwy Old Road, Penmaenmawr, Conwy LL34 6YF

We are a small practice based in North Wales with 30 years of working with private clients specialising in re-modelling houses and apartments and also providing Interior Design services. Additional offices in London.

**Contact:** Mark Mallindine

07775 690 951

mark@mallindinearchitects.com

www.mallindinearchitects.com

#### Rhian Evans Architect : Pensaer\*

Studios A/B, Bodnant Business Studios, Ffordd Penrhyd, Tal-y-cafn, Conwy LL28 5RS

Sole Practitioner in the Conwy Valley, offering new build and refurbishment residential projects through all RIBA stages, in addition to small scale commercial work. My focus is working with lay and experienced clients to achieve buildable solutions that deliver both quality and value.

I can recommend Structural Engineering Services with each project via an associated company at the office.

Gwasanaeth drwy gyfrwng y Gymraeg ar gael.

**Contact:** Rhian Evans

07787 503 520

re@rhianeansarchitect.com

www.rhianeansarchitect.com

#### Saer Architects

9 Ashdown House, Riverside Business Park, Benarth Road, Conwy LL32 8UB

Saer are a team of architects based in Conwy, with projects covering north Wales and north west England. We have over 30 years combined experience working in housing, regeneration, agricultural, education and masterplanning. We are a young practice with a strong passion for sustainable and community led design. We offer a bilingual service and aim to work closely with our clients to deliver contemporary high-quality buildings that complement their surroundings and context.

**Contact:** Sarah Davies, Gethin Jones, David Parry

01492 472 478

studio@saer.wales

www.saer.wales

### Dolgellau

#### Eric Edwards

1 Ffordd y Gader, Dolgellau, Gwynedd LL40 1RH

A well-established multi-award winning small rural practice since 1977 operating within the heart of Snowdonia National Park and throughout north and mid Wales. Specialising in works on listed buildings, barn conversions, single dwellings, commercial buildings, including dental & vet surgeries, sports buildings, caravan parks and sites for shepherds' huts and pods. Providing bilingual service.

**Contact:** Eric Edwards

01341 422 436

## Hawarden

### Ainsley Gommon Architects\*

The Old Police Station, 15 Glynne Way, Hawarden, Flintshire CH5 3NS

Ainsley Gommon is a leading Chartered Practice of Architects and urban designers with a broad range of experience that includes housing, extra care, supported living, urban regeneration, education, healthcare, industrial, conservation and community projects. By promoting environmental responsibility and innovation in all our projects, we adopt a low-carbon approach in the design, construction and operation of our buildings and landscape designs and are signatories to the Placemaking Wales Charter. We work proactively and collaboratively with clients, consultants and contractors, using the latest BIM technology, to deliver high quality projects on time and within budget. Additional offices in Birkenhead, Merseyside.

Contact: Simon Venables

01244 537 100  
wales@agarchitects.co.uk  
www.agarchitects.co.uk

## Llangefni

### Russell-Hughes Cyf\*

56 Bridge Street, Llangefni, Ynys Môn LL77 7HH

Russell-Hughes Cyf is an RIBA Chartered Practice originally formed in 1989. Since formation, the practice has developed a wide range of completed building projects both in the public and private sectors. The diversity of the commissions undertaken is a feature of the practice's work.

The practice has a track record of successful commissions in the educational, commercial, residential, leisure, health and community care, industrial and museum sectors. Current project values range from £10,000 to £4.5million. In addition to its base in Llangefni, Russell-Hughes Cyf has an office in Galeri, Caernarfon.

Contact: Owain D. Evans

01248 722 333 (Llangefni);  
01286 685224 (Caernarfon)  
info@russellhughes.co.uk  
www.russellhughes.co.uk

## Mynytho

### Huw Meredydd Owen / V&O\*

Nant, Mynytho, Pwllheli LL53 7SG

Creu cysylltiad rhwng cymdeithas a'i gwerthoedd, meithrin ei chyfoeth drwy greu "lle". Creu pensaernïaeth anweledig? Efallai.

Making a connection between society and its values, nurturing its richness by creating "place". Creating invisible architecture? Perhaps.

Contact: Huw Meredydd Owen

01758 712 581  
huw\_nant@icloud.com  
www.huwmeredyddowen.com

## Pwllheli

### Dobson:Owen\*

3 Thomas Buildings, New Street, Pwllheli, Gwynedd LL53 5HH

Cwmni pensaernïol profiadol yn ymrwymedig i wrando ar anghenion a dyheadau ein cwsmeriaid gan ddarparu gwasanaeth o safon gyda gwreiddioldeb a gweledigaeth a chyda'r dyfnder gwybodaeth angenrheidiol ar gyfer prosiectau adeiladu heddiw.

An experienced architectural design practice, we value listening to the needs and aspirations of clients providing a value added service with originality and vision and with the depth of knowledge necessary for today's construction projects.

Contact: Rhodri Evans

01758 614 181  
post@dobsonowen.com  
www.dobsonowen.com

## Wrexham

### Lawray Architects\*

The Byre, Croesnewydd Hall, Wrexham LL13 7YP

Lawray Architects is firmly rooted in Wales.

We formed in Cardiff over 40 years ago, before exploring the North Wales market from Wrexham and then exporting our warm, comfortable yet professional approach to the wilds of London.

We believe in preserving the identity of place and balancing the desires of all stakeholders, through logical yet challenging explorations of the brief, to achieve outstanding results that are of true benefit to our clients. Additional offices in Cardiff & London.

Contact: David Hughes

01978 357 887  
wrexham@lawray.co.uk  
www.lawray.co.uk

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[www.ibstockbrick.co.uk/specification](http://www.ibstockbrick.co.uk/specification)



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## Less is less

Nitin Bathla wrote in the October issue of the *Architectural Review* that 'instead of embracing the alternatives of degrowth and addressing the private property paradigm at the heart of the current intersectional crises, problems are being resolved as they always have been, by going to the deeper and further frontiers of fossil capitalism, by turning to even more violent and ecologically destructive ways of extraction [...] The carbon technocracy and the complicity of architecture and spatial practice within it, is preparing society for what American writer Roy Scranton calls "learning to die in the Anthropocene", rather than showing a way forward from the extractive property relations under fossil capitalism'.

Is that overdramatic?

While Tory and Labour party clarion calls for a commitment to 'growth' have utterly different and opposing visions of which sectors of the UK economy need growing, what they share along with the architecture industry is that they are stuck in the old mantra groove of believing that technological innovation will sort it for us and that, as ever, 'more is less'.

The only meaningful game in town should be 'less is less'. Will any UK politician be courageous enough to remind us of the untenable inequality and disparity between our carbon consumption habits and most of the global south, and between those of the struggling 80% and the 20% comfortably-off in the UK?

Maybe many of us should heed artist Loraine Morley's revisiting of the Lord's Prayer (left) and its associated phallic imagery of over-consumption and be prepared to positively turn down the dial rather than, as is currently occurring, being forced to consume less through the warring impacts of an unhinged dictator.

The three wall hangings by Loraine Morley (left) were part of a larger wall installation entitled *Weapons of Mass Destruction*. Portraits from the Late Anthropocene that was shown at the *Salon des Refusés* exhibition at the Aberystwyth Arts Centre between June and August 2022. This show ran in parallel with *Y Lle Celf* at Tregaron's 2022 National Eisteddfod.

