

REINVENTING PRACTICE

RESOURCE PACK

GUERRILLA TACTICS



#RIBAGuerrillaTactics

RIBA  **Architecture.com**

How to use

Welcome to your interactive Resource Pack. We would like to take this opportunity to thank you for attending the RIBA Guerrilla Tactics Conference 2020.

This document offers a summary of the insights shared throughout the conference and provides links to recordings of presentations should you wish to watch them.

Clicking the arrow icon, like the one below, on each session summary will take you to the recording.



Tapping into the Software of the City	3
The Architect's Superpower: an Antropological Study	5
Behind the Scenes of Granby Street	6
Building the Vision and Connecting the People	8
The Power of a BIG Idea	10
Connecting with Your Social Purpose as an Employee Benefit Trust	11
Pioneering the Co-Operative Practice Model	13
Sharing Resources and Collaborating Between Practices	15
Rural Innovation	16
Housing System for a Highland Vernacular	17
The Rural as a Place of Production	18
Leveraging Paragraph 79 for Affordable Rural Homes	19
Crafting Digital Tools	20
Office Systems for Small Practices: Finding the Goldilocks Zone	21
Why We Make	24
Cultures of Making	25
Crafting Automation	27
Innovations in Timber Construction	28

Tapping into the Software of the City

Charles Landry, International Cities Advisor



Cities and their adaptation after a crisis

- Historically, pandemics have permanently affected how cities operate. From cholera in the 19th century to the Spanish flu of the early 20th, the need for adaptation has spurred innovation.
- Coronavirus induced lockdowns this year have been an inadvertent experiment in emission reduction. They have shown the benefits of a more sustainable future, in terms of increased air quality and biodiversity.
- Any changes we make to our urban fabric must answer the question: how do they serve the people living here?

The collaborative imperative in placemaking

- Increasingly, urban development emphasizes the importance of placemaking. The public sector's potential for furthering the common interest is returning to the agenda.

- Good placemaking makes use of the 'collective intelligence'. No one individual has all the answers but a group does, collectively.
- Truly sustainable placemaking requires trust: in the sharing and management of resources, for example.

Who are the city makers?

- If we seek to avoid a homogenous urban environment shaped narrowly by powerful commercial actors, we must re-think our ideas of who the expert is.
- Expertise should not be limited to a top-down or bottom-up paradigm. Sometimes the professional input of an expert is required; sometimes the resident's on-the-ground knowledge is more important.

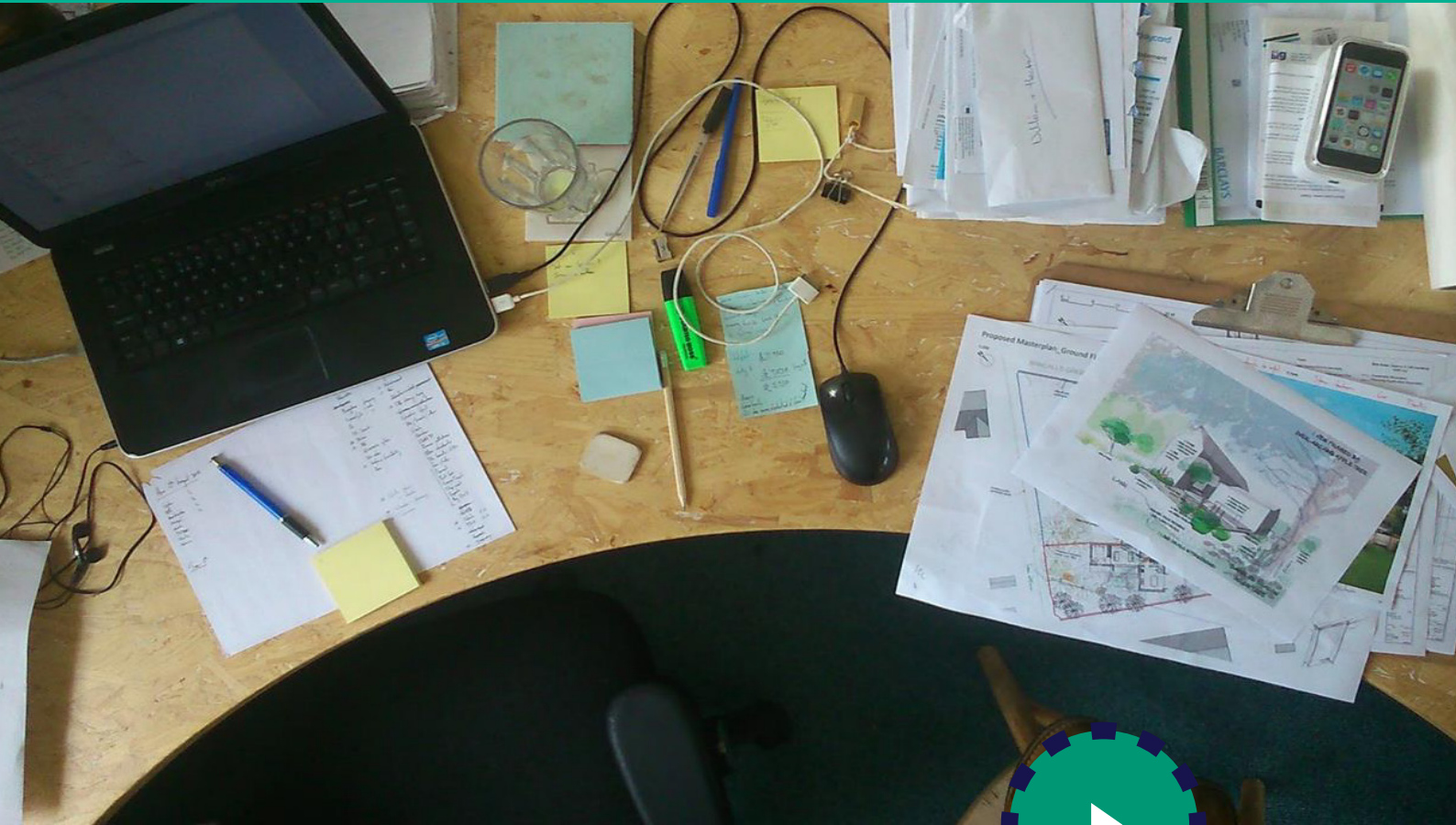
Creative bureaucracy

- Public institutions play a vital role in delivering the public's interests. Administrators can also be a creative force.
- Designers should engage with bureaucratic systems in order to leverage the potential of the system to drive positive change.
- They should also aim to build constructive relationships with local stakeholders.



The Architect's Superpower: an Anthropological Study

Dr Thomas Yarrow, Professor, Durham University



The gulf between architects' image and reality

- The general public has a polished, streamlined view of architects: clean design, neatly dressed people and tidy desks. The reality is messier and involves plenty of time spent on administrative activities.
- Be less apologetic about these unglamorous elements: creativity can be applied to any activity.

Uncertainty is your friend

- Conditions of uncertainty offer creative opportunities.
- While many people understandably desire certainty, architects recognise the value of the spaces between and the ideas that spring from them.

- The ability to feel comfortable with discomfort is the architect's 'superpower', whether in regard to project management, design or a technical specification.

Behind the Scenes of Granby Street

Xanthe Hamilton, Founding Director, Steinbeck Studio



The architect as 'enabler'

- Making a community project happen that brings about lasting social value requires more than being just a designer.
- You must be an urban activist: a producer, an initiator, a spokesperson, a storyteller and a facilitator.
- Do your research. It is vital to understand local politics and the key relationships between communities and local authorities.

Building trust

- Community Land Trusts and similar organisations may be wary of outsiders. They have often experienced false starts and aborted projects with other investors.

- Winning a community's trust is vital. Be transparent about your agenda, your ideas and your funding.
- Basing your project headquarters within the community demonstrates commitment and builds trust, enabling frequent meetings with residents.
- Meeting the investor can reassure a community that the project facilitators have good intentions.

Engaging with the community

- Understanding the community's ambitions for their area is imperative.
- Determining what the community really wants as opposed to engaging in box-ticking consultations, will lead to greater buy-in.

- There is a balance to be struck between community endorsement and pragmatism. Over-ambitious designs may be popular but too expensive to be realised. On the other hand, rejecting too many ideas can lead to community disillusionment.
- There may be conflicts of interest among those you must work with. For example, at Granby Street, the contractor who held the keys to the properties to be regenerated also had the demolition contract.
- Even with secure financial backing there is often a narrow window for a successful outcome. Local authorities require results delivered within their annual or 5-year plans.

Navigating the financial challenges

- Funding and investment are the biggest challenge for community projects.
- A sympathetic investor eases the process, as conventional lenders will require detailed costings from Quantity Surveyors and stringent business plans before considering a project; all of which incur additional expenses.



Building the Vision and Connecting the People

Melissa Mean, Project Lead, We Can Make, Bristol



Check your motives

- When intervening in a community to bring about change, you need to ensure you are aware of the enormous challenges ahead.
- Question your motives: why have you chosen this particular project, in this location and involving this community?

Start small and scale up

- Start with small interventions. These provide a good training opportunity in getting permission, funding and assembling a team.
- Pop-up projects and meanwhile spaces can be delivered quickly if there is community goodwill.
- For more profound community regeneration, you must be committed to the long haul. It can take years to win over local authorities and their

planning and development departments to commit to re-thinking a whole area.

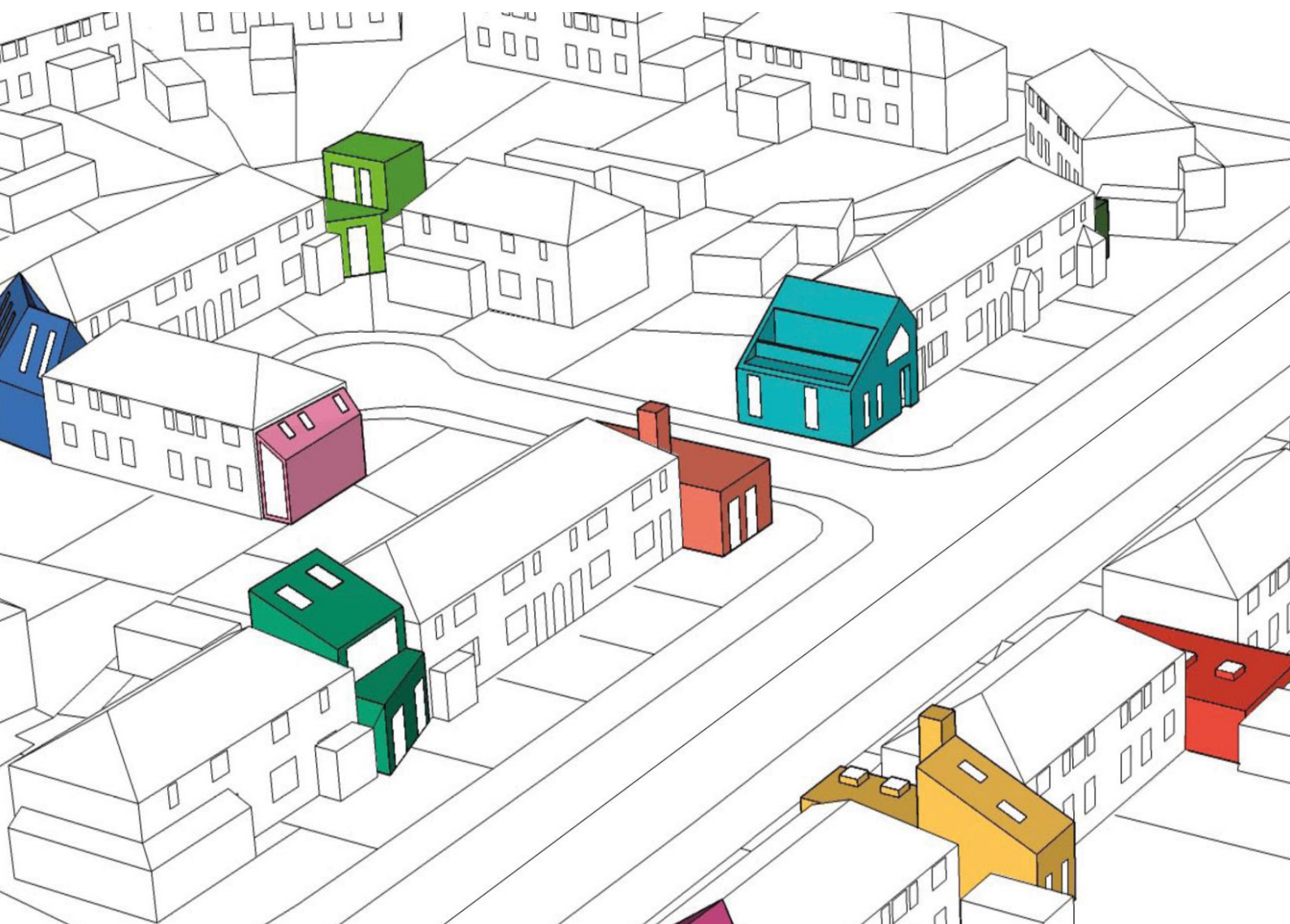
Convincing investors and stakeholders

- Leading on the profound regeneration of an area will mean working with many different consultants and community stakeholders.
- Provide tangible visualisations that show how an area could be re-imagined in terms of massing and density. These details will pique the interest of developers and local authorities.

Empower the community

- Do not fall into the trap of seeing the project as a 'rescue mission'. Discover and leverage the existing assets and human capital within the community, including tradespeople and land.

- Draw up a design code with the community. Assess the costs of maintaining homes and provide guidance on what materials to use. Assert a style that strengthens the character of the local area.
- Avoid bringing in large developers to ensure housing creates wealth in the local community.
- Explore processes such as digital fabrication and self-assembly kits to enable non-specialists to participate.
- Deliver housing at the point of need. There may be opportunities to balance complementary demands, such as elderly residents who wish to downsize in an area where younger people want to move out of the family home.



The Power of a BIG Idea

Jeremy Alain Siegel, Associate, BIG



Local knowledge

- Having your ear to the ground and being aware of local politics can unlock opportunities.

Crowdsource the vision

- Architects can collaborate within, and creatively disrupt, municipal processes to bring about big transformations locally.
- Do not be scared to initiate a large-scale, ambitious project. But recognise that you cannot do this alone.
- Reach out to fellow local practices, landscape architects and engineers. Do not think of this as 'your' project, share ownership.
- Map out who the stakeholders are: the resident organisations, community groups, authorities who have jurisdiction, and influential stakeholders.

Stakeholder workshops

- Most urban communities today will share concerns about gentrification and uneven distribution of benefits. Trust must be accrued via discussions that identify common goals and ensure neighbourhoods are protected from unchecked gentrification.
- Make your design visions tangible. Provide not one solution but a range of viable options. Transparency is key.
- Communicate in down to earth fashion and avoid 'archispeak'. An appealing narrative is one that everyone can understand.

Connecting With your Social Purpose as an Employee Benefit Trust

Catherine Ramsden, Deputy Chair of the Board, The Useful Simple Trust



The Useful Simple Trust (UST)

- The UST is a family of professional design practices which jointly set up an Employee Benefit Trust, committed to shared ethical and sustainability goals as well as a profit sharing arrangement.
- This arrangement helps to mitigate the ups and downs of commercial cycles: when one sector might be underperforming, another might be unusually profitable.
- The UST also offers complementary expertise comprising engineering, graphic design, architecture and sustainability consultancy.

The Employee Benefit Trust model

- Employee Owned Trusts (EOTs) and Employee Benefit Trusts (EBTs) have recently been gaining traction.

- EBT is a trust established to hold assets to provide benefits for the employees of a company or group of companies.
- An EBT acts as a holder for assets held by employees and or directors in private companies. The trustees of the EBT are only responsible for the assets placed under their trust via the EBT but not responsible for the management of the employer company.
- This is in contrast to an EOT which takes over management of the entire business which becomes employee controlled upon the sale by the founders.
- 50% of profits are put back in the business, while the other 50% are allocated to the EBT.

- The trust operates on a 'naked in, naked out' principle: staff become stakeholders without having to buy in and anyone can be on the Board of Trustees. Financial details and positions are shared with staff.
- In turn, staff have responsibilities. They must commit to the stated purpose, treat each other fairly and do their best to generate wider social value.
- An EBT has the agility to take people-friendly political decisions, such as closing the office on an election polling day.

The business benefits of being a social enterprise

- A social enterprise can be considered for more public sector bids, due to stipulations of the Public Services Social Value Act of 2013.
- Meeting the metrics of public sector bids has focused the Trust's own internal monitoring.



Pioneering the Co-Operative Practice Model

Katie Reilly, Architect, Transition by Design



The increasing appeal of the co-operative model

- Businesses are increasingly recognising the value of being a co-operative in addressing society's ethical challenges.
- Transition by Design (TbD), Cullinan Studio and Collective Architecture are all examples of practices that have become co-operatives.

How the co-operative model works

- TbD is based on a workers' co-operative governance model: a flat hierarchy with all employees receiving equal pay. Each is entitled to 1 vote on collective decisions at weekly meetings.
- No individual has a financial stake in TbD and all profits are considered a 'surplus' which is reinvested.

- Any staff member may become a co-operative member after a year of employment. Each member is given responsibility for an area of the business such as HR, finance or strategic direction; and provided with the necessary training.
- The egalitarian business model informs the approach to practice, which emphasises participatory design and social purpose.

Accountability model

- TbD operate a 'peer checking-in' system, wherein once per month a 'peer manager', or sometimes external coach, offers support and feedback to a fellow worker.
- Most team members work part-time and/or remotely. The practice had been trying and testing remote working long before the coronavirus pandemic.

Embedding research in practice

- A researcher that is part of a practice has their academic research challenged and tested in a real-world context. Will other architects accept or reject your findings?
- Being a researcher within a practice requires consideration of the practice's needs and the time constraints of your colleagues.

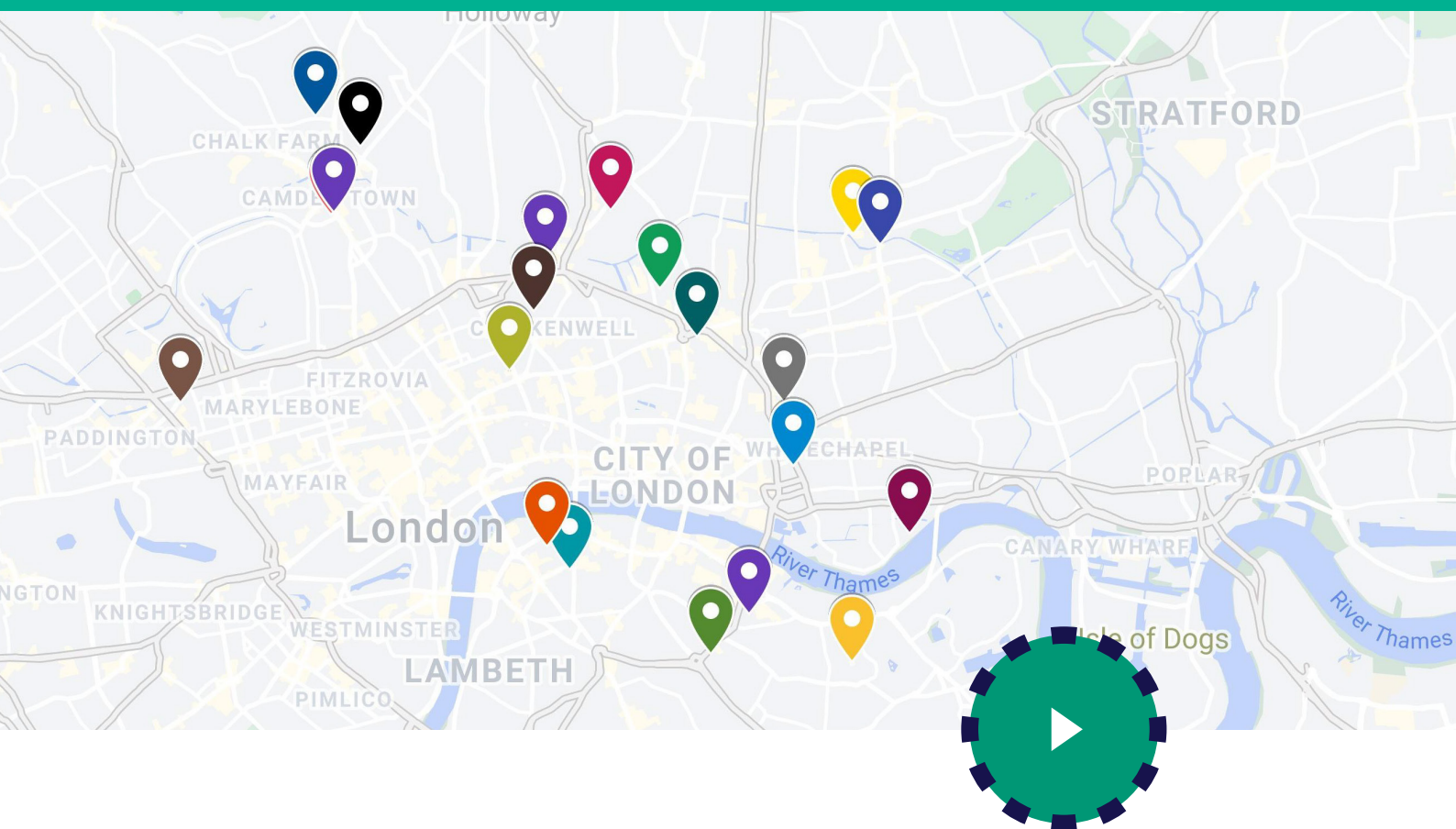
Benefits to the practice

- Practice based research can help in defining and interrogating the practice' unique design approach and value proposition. Resulting publications can help to raise the practice profile.
- Research findings arising from past projects can inform future projects and improve practice.



Sharing Resources and Collaborating Between Practices

Russell Curtis, Director, RCKa



The London Practice Forum (LPF)

- The LPF developed from informal discussions between London-based practice Directors about the practical issues of running an architectural business.
- Members collaborate extensively, which is made possible by limiting the number of member practices and associated bureaucracy.

An ethical charter

- A series of member workshops led to a charter of membership principles. These sought to address: ethical criteria for project selection; addressing a culture of long hours and low pay; equality and diversity in practice; and the climate crisis.
- While member practices are not expected to be exemplary on all points, they are expected to demonstrate they are making an effort.

Sharing staff between practices

- Practices' workload can vary, creating ebbs and flows in fee

income. The LPF has developed a secondment scheme to allow practices to 'loan out' staff to fellow LPF practices with the goal of preventing staff losses and support cashflow management.

- A detailed agreement ensures the lending practice, the hosting practice and the seconded architect all fully understand the process and mutual obligations.
- The programme is entirely voluntary for staff members. Staff on such secondments benefit from learning new skills and different ways of working.

Further collaborative potential

- The LPF is investigating the scope for collective purchasing of office equipment and eventually even insurance.
- Practices within the LPF have collaborated on tenders for large masterplans; many successful recent bids have been won by LPF members teaming up.
- Practices have been pooling their CPD training, delivered online to all member practices.

Rural Innovation

Niall Maxell, Rural Office for Architecture



Rural perspectives and values

- Practicing in a rural area provides a wholly different context to an architect's work. They need to understand that context and the different perspective they can provide.
- Residents may have different priorities. The functional quality of architecture may be a primary concern.
- An economy of means and an inventiveness in the use of simple materials are two hallmarks of the local vernacular in the part of Wales where the Rural Office for Architecture is based.
- Understanding what works locally is crucial. Learn that the site itself can work for you: that there are situations when you do not need to provide too much.

Myths concerning the rural condition

- Many urban residents associate the rural with the wealthy, a place of second homes and the landed gentry.

- The reality is more complex, with communities born of the toil and struggle of working the land.
- Moving to the countryside might be seen as an escape. But transposing practice to the countryside brings its own challenges of large distances and fewer clients.

Establishing a new practice

- Selling up in London to set up Rural Office for Architecture allowed the practice to start building its own projects.
- Small projects for friends and local creatives built up momentum and a client base, leading to work with existing farmsteads and, eventually, international projects.

Housing System for a Highland Vernacular

Alan Dickson, Director, Rural Design



The 'R House' system: an unanticipated local success

- The R House system is a modular design solution that Rural Design developed to meet a local need that has since become the most profitable part of the business.
- The kit of parts system is panel-based and can be easily custom-configured to suit different clients' needs.
- R House came about by pursuing an idea without worrying about the end goal.

How environment determines design

- Environmental factors shape rural design practice and work ethos. Ocean-facing sites, for instance, share remarkably similar concerns and appropriate design solutions.

- Many designers meet their match in the unexpected rigours of remote climates. Experiencing a fierce weather event can be a defining learning experience for the rural architect.
- Traditional vernacular architecture has come about in response to local conditions: we can learn from its enduring examples.
- There is beauty in the economy of simple, rudimentary structures. Even large agricultural sheds, which do not require planning permission, can be beautiful in context.

Leveraging Paragraph 79 for Affordable Rural Homes

Sarah Broadstock, Studio Bark



Leveraging Paragraph 79*

- For Studio Bark, rural innovation and Paragraph 79 have been inextricably linked.
- Paragraph 79 allows construction of single new homes in the open countryside on the grounds of 'exceptional quality' which will 'significantly enhance the immediate setting' and is 'sensitive to defining characteristics of local areas'.
- It provides a rare opportunity for rural development within a planning system strongly weighted against it.
- The wording is interpreted differently by different local authorities. To leverage Paragraph 79 It is important to establish a strong narrative.
- Studio Bark compiled a map of Paragraph 79 permissions and refusals on its website. Sharing tips and expertise proved profitable, with tangible benefits in reputation and client conversion.

Rural development and social purpose

- Studio Bark is approaching local authorities to pitch joint ventures in innovative rural housing developments.
- Having established the 'U-Build' self-assembly modular housing system, Studio Bark are seeking opportunities to provide affordable self-build housing in rural areas.
- Studio Bark bought a site in Worcestershire to provide hands-on building experience for students. Use of Permitted Development rights and the Caravan Act provide opportunities for building experiments.

*now paragraph 80

The Rural as a Place of Production

Fergus Feilden, Director, Feilden Fowles



One foot in the city, one in the countryside

- Feilden Fowles have completed several projects in the rural southwest and north of England.
- Their London base is a studio at Waterloo City Farm. Designed by themselves, it brings rural elements into the city, using a barn typology at one end of the building for events and large-group interactive working.

Rural locations as a testing ground

- For an emerging practice, a rural location can be an invaluable opportunity to instigate a first project.
- 'Ty Pren' was Feilden Fowles' first project, a private house inspired by the rural long house typology. The larch for the building's wall cladding came from the client's land and was milled on site.

- Eight larch trees were planted locally to provide the timber for renewing the cladding in 25 years, while the removed cladding can be burned to heat the house. The roof used recycled Welsh slates.

The challenges of a rural industrial building

- For the design of a large food production centre, Feilden Fowles faced the challenge of creating a sense of community in a 'big shed' factory typology.
- Referencing the campus model rather than a standard industrial estate enabled a community focus.
- Bringing in as much natural light and air as possible and optimising views, with emphasis on how workers could benefit from the surrounding quarry, created a sympathetic rural-industrial environment.

Crafting Digital Tools

Dan Sutch, Director, CAST



Digital technology and innovation

- Digital technologies can increase efficiency, minimise risk and deliver better value to clients and communities.
- Digital transformation is not just a matter of which tools are used, it is about adopting the culture, practices, processes and technologies of the internet era to respond to people's raised expectations.
- The Centre for Acceleration of Social Technology (CAST) helps organisations develop the technological practices of innovators and early adopters.

Responsiveness and responsibility

- Resilient organisations are the ones that minimise the lag between recognising change happening and responding to it.

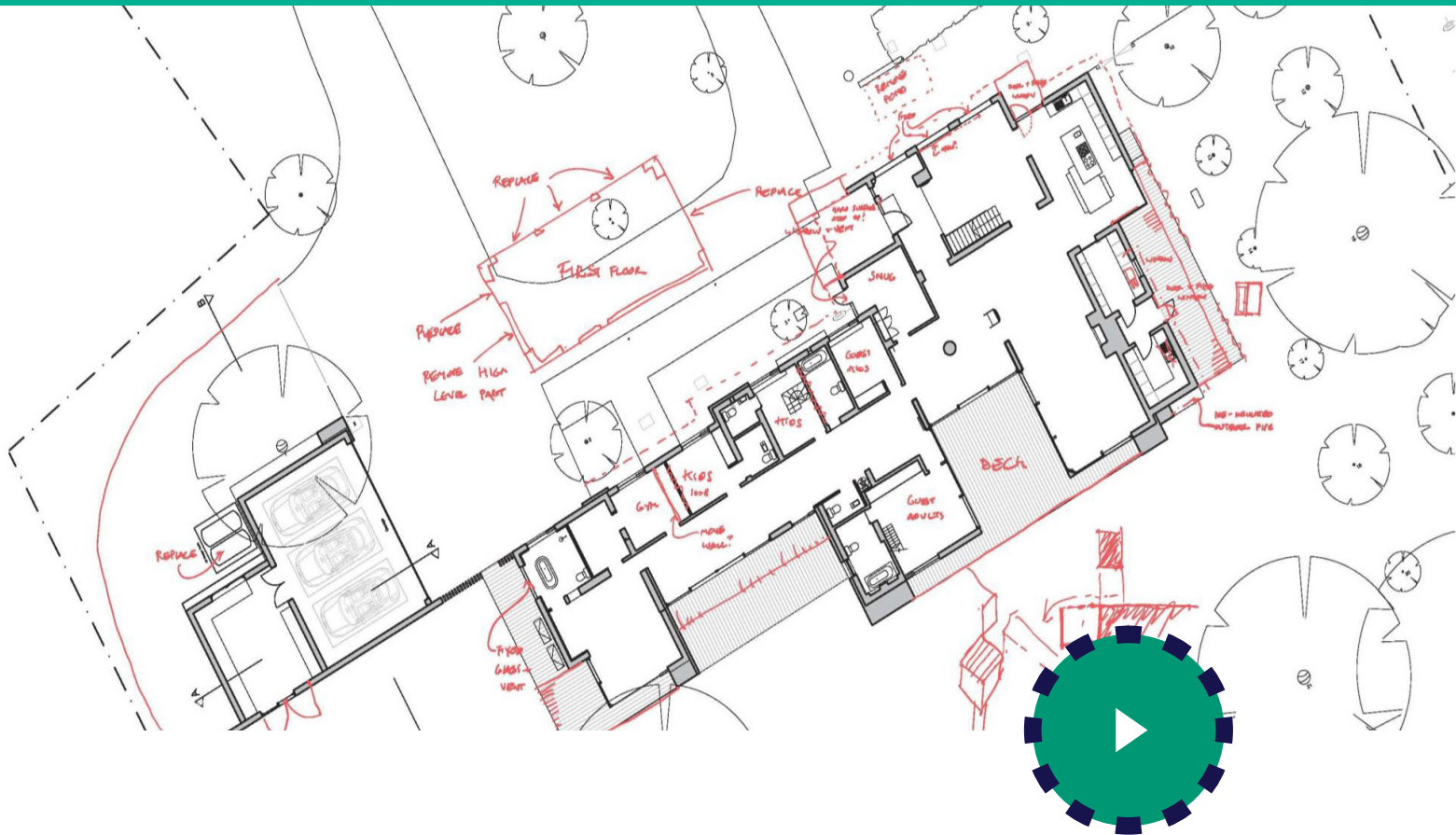
- Digital innovation can play a part in creating a thriving, resilient, responsible civil society equipped to understand, serve and empower communities.
- Many socially minded organisations acknowledge the digital potential in creating a fairer society, such as the UK's Catalyst, which provides services like its Digital Candle to give free expert advice.

Crafting digital tools

- Address the problem that needs to be solved in the most economical way possible. Consider the smallest tool that can be created to solve a problem.
- Respond to people's behaviour, not what they themselves tell you. Customers then become innovation partners and, whether consciously or unconsciously, take on part-ownership of a product.

Office Systems for Small Practices: Finding the Goldilocks Zone

Jake Edgley, Director, Edgley Design



Time is money

- Architects are selling their time: that is their most valuable commodity. One strong metric of success is being adequately reimbursed for your time.
- Software is invaluable in helping architects manage their time and projects. If you are not monitoring properly, you cannot take the necessary action at project or practice level.

Choosing the right software

- In selecting an office system, practices should weigh up ease of use with scope for customisation.
- Software can show how a practice is functioning. A dashboard-based system can reveal at a glance what activities are falling behind and what clients owe you.
- Synergy is a simple, cloud-based system which is tailored to a project's life-cycle. While it has numerous modules, it essentially covers three

functions: Tracking your time, turning that time into invoices and extrapolating detailed data to inform the practice's productivity, such as project workflows and predicted cashflow.

Project-based systems

- Software focused on project stages is especially helpful for running complex architectural projects.
- At each stage, users must input whether a rate is fixed or hourly. Practices can run reports across multiple projects to identify how much of their time falls into which category.
- Being able to track hourly work allows practices to make decisions on how to charge for a project from the outset; and how to charge for design changes.
- It should be as easy as possible for staff to fill in timesheets. Many systems contain a leader board to show who has and has not filled in a timesheet.

Office Systems for Small Practices: Finding the Goldilocks Zone

George Legg, Architectural Associate, Millar + Howard Workshop



Tracking time and forecasting

- Millar + Howard Workshop use Harvest software to collect employee's time data and produce the practice's timesheets. It can interact with Xero accountancy software to produce invoices.
- Such software can also be useful for forecasting, assessing each employee's time to ensure nobody is overloaded and determine if anyone has any spare time to help colleagues.
- It will also analyse this data, to inform a practice if sticking to the forecasted time will be within budget.

Linking software systems

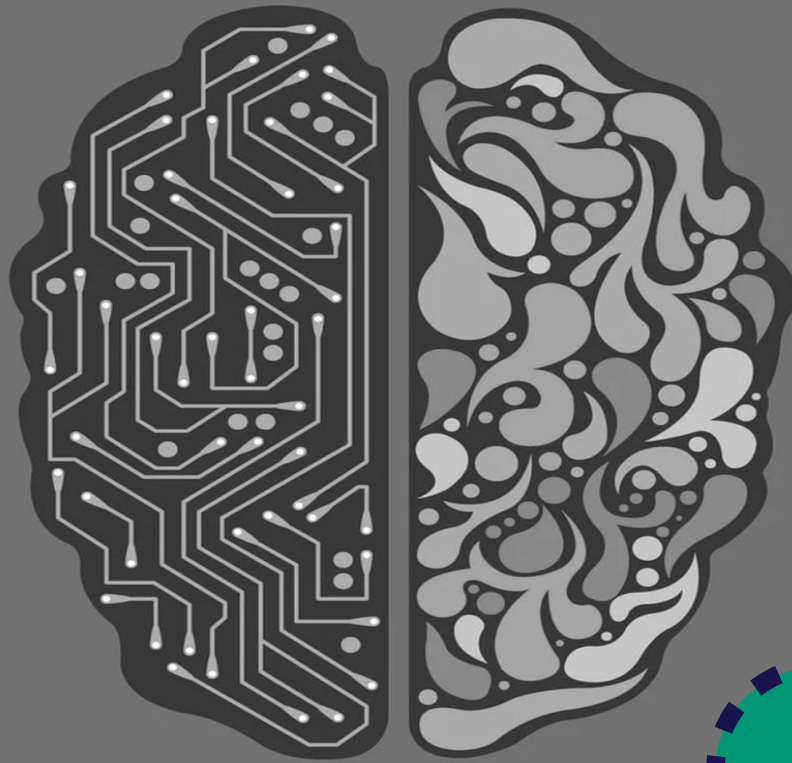
- MS Power BI is a useful 'bridging' system that links software packages to provide data analysis.
- A project dashboard compiles time-management data from Harvest and office QMS data from Google Sheets.

Visualising data

- MS Power BI is particularly appealing in its graphic representations of data. A practice's portfolio of projects and budgets can be visualised in many ways, for example with warning-light colour coding.
- Graphics can show the scale of projects by size of bubble and who they have been allocated to by colour. The number of live projects and what stage they are at can be seen at a glance.
- A 'time doughnut' can illustrate where non-project work time is going. Users can easily drill down and reconfigure data in quick 'drag and drop' fashion.

Office Systems for Small Practices: Finding the Goldilocks Zone

Claire Fear, Founding Director, Thread Architects



Focussing on basic principles

- Thread Architects devised its custom software with a software developer friend at the time it set up as a practice, opting for simplicity.
- The practice's prime concern was fundamental maths: meeting the bottom line of paying 8 employees at the end of every month plus bills, while saving a small surplus for equipment costs.
- Most practice management comes down to monitoring time spent accurately. The software's dashboard reveals how much work remains to be invoiced for across all timesheets.

Trusting staff

- Employees are expected to enter their times for a project and a task. Reviews of weeks relative to work per person can be generated by filters.

- Thread Architects take staff accounts of their time on a trust basis and do not track holidays. Staff are treated as adults with co-responsibility for meeting the bottom line each month.
- The unavoidable downside of this transparency is potential staff alarm if the system highlights a red flag figure, such as the practice going over budget, or a large number of unpaid invoices.

Why We Make

Piers Taylor, Founder, Invisible Studio



Reconnecting with 'making'

- Architects usually depend on clients to find work. Reconnecting to making is one way for architects to initiate their own work.
- The annual Studio in the Woods programme, initiated by Taylor, sought to provide a hands-on making experience absent from the architect's conventional day-to-day working life.
- Studio in the Woods focuses on collaborative making to create a tangible, habitable structure.

Designing through making

- Studio in the Woods sought to create less predetermined buildings: architecture determined only by the people participating and the local materials available.
- Designs were worked out collaboratively, in real time, during the construction process.

- Freed from contractual documents and client obligations, the nature of amateur, collaborative construction can become a feature of the finished building.

Minimising the material palette

- Minimising the amount of materials ensures the smallest environmental footprint.
- Self-initiated making allows innovative reuse of materials. Local wood, for example, can be used as both scaffolding, building material and furniture for inside.
- Designing with a view to only using simple materials that can easily be sourced from local builders' merchants means the benefit is more likely to remain within the community.

Cultures of Making

Naeem Biviji and Bethan Rayner, Founders, Studio Propolis



The gap between design and construction

- Studio Propolis is a two-person practice working across product design, furniture making and architecture. Founded in Nairobi, Kenya, the local production conditions have deeply informed Naeem and Bethan's design approach and way of working.
- Limited resources and an unreliable supply chain meant that they had to abandon the linear way of working typical for architects in western contexts – design, draw, procure. Instead, they had to get deeply involved in the process of making.
- Now, design and making has become an integrated activity and iterative process, with a strong physical dimension.
- Learning new practical skills, for example welding, helps designers think differently.

Integrating with the local culture of making

- Nairobi has a rich culture of improvisation and ingenuity. Studio Propolis learned to tap into the grassroots craftsmanship and design with the materials available to them.
- This meant shifting from a mindset of scarcity and problems to a mindset of opportunity.
- It changed their terms of engagement and propelled them to learn to make. They fit their design approach around the local culture of making rather than attempt to introduce a standardised way of working.
- Now that they are back in the UK, they are looking to do the same here, identifying local makers, crafts people and production resources, working with restored old machines.

- The internet can also facilitate engagement with other makers and for sharing resources. Cloud-based software also allows collaboration on fabrication projects.

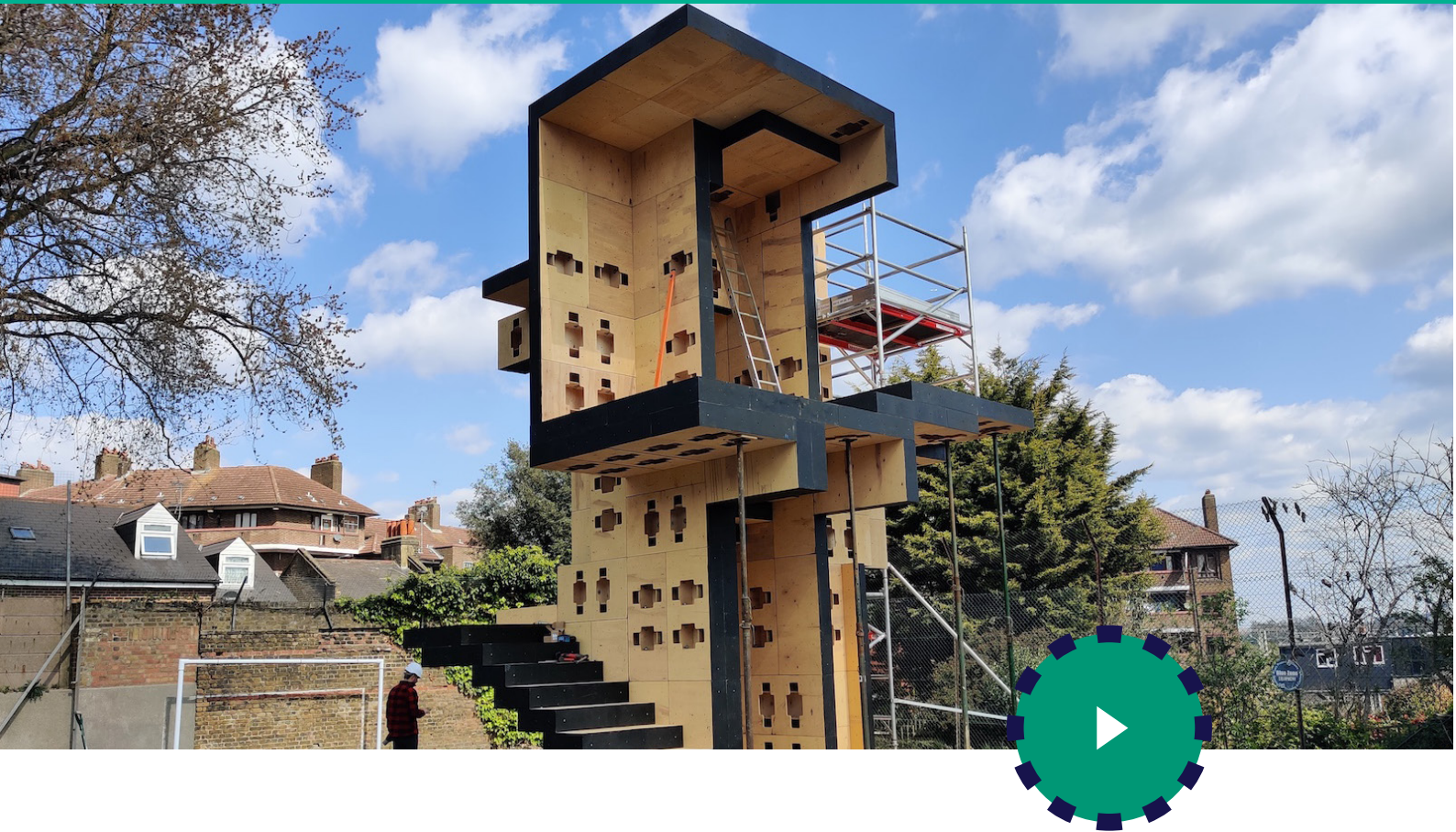
Crafting Exchange

- 'Crafting Exchange' – tailoring the project to its collaborators and the available resources – creates a positive feedback loop.
- Having your own workshop facilitates experimentation and allows you to understand local materials and their characteristics.
- Traditional fabrication methods such as jigs and templates allow the integration of local collaborators' expertise and ideas with the architect's own.



Crafting Automation

Mollie Claypool, Director, Automated Architecture



Housing, automation and 'discrete' components

- Harnessing the power of automation can provide opportunities for innovation in housing.
- Applying the principles of digital materials to buildings means thinking of them as clusters of 'discrete' elements that make up a building.
- Use of automation means houses can be constructed of parts that can be easily varied and reversed in designs.

Concerns over automation in construction

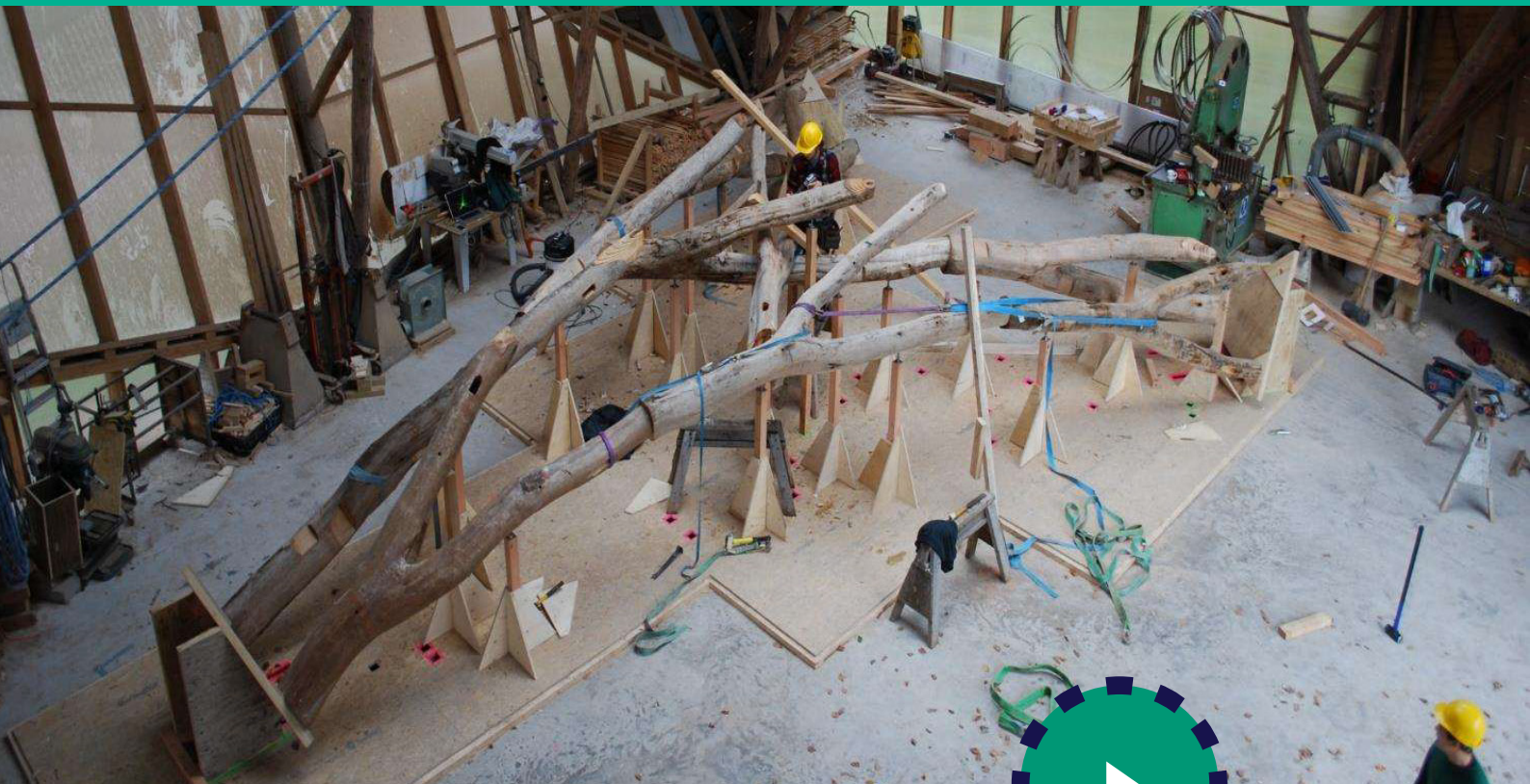
- While use of robotics can improve construction workers' health, there is understandable and justifiable concern over potential job losses.
- Offsite manufacturing often uses workers that are being imported from other locations for the duration of the build, displacing local jobs.

Opportunities for empowering communities

- The positive opportunity is for 'community tech', whereby automation and decentralised building systems are diffused into communities to serve them.
- The 'discrete block' is the fundamental unit of automation. This core simplicity should allow communities to take control of the process.
- There are inspiring, cross-pollinating ideas that leverage assets as diverse as WikiHouse, Universal Basic Income, cross-laminated timber and FabLabs. However, this syncretic thinking is not yet in mainstream policymaking.
- If a robot can construct an office using 55 robot-fabricated timber blocks, there are clearly opportunities for architects to work with communities on using this new construction method for social good.

Innovations in Timber Construction

Charley Brentnall, Co-founder, Xylotek



Using technology to optimise natural materials

- Xylotek provides specialist consultancy, fabrication and installation services. It marries a profound understanding of materials (timber being a speciality) with state-of-the-art digital design and fabrication.
- The optimisation of materials is explored through extensive prototyping, which provides information on material properties and helps de-risk a project.

Involving volunteers

- When working with unskilled or non-specialist labour, trust is a key component.
- Adhering to processes and guidelines from the Health and Safety Executive (HSE), with standard risk assessments and supervision is essential.
- There are established ways and means: children are allowed on building sites for educational purposes; there is a British Standard for using tools in educational contexts.

- Mapping any such initiatives against the RIBA Plan of Work stages helps convince clients of their viability. It is important to have buy-in from the whole team.

How traditional craft can drive re-use and recycle

- Traditional boat-builders exploited the natural bends of trees, creating structures that followed the flowing grain of stems and branches.
- Technology can provide ways to make use of natural materials that otherwise did not meet performance requirements. This allows more use of local natural materials.
- Xylotek have used Rhino software and photogrammetry to use the irregular, fork-shaped beech trees unwanted by local manufacturers for innovative design applications.

GUERRILLA TACTICS



To learn more about Guerrilla Tactics past and present, please visit architecture.com

RIBA 
Architecture.com