

Knowledge and Research in UK Architecture Practice

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Ryerson University, Toronto
31st May 2019



Research at the RIBA - The President's Awards for Research



RIBA is a membership organisation, and as such works for and acts on behalf of its members.

Review and relaunch the President's Awards with the aim of appealing to practice

In 2015 only 4 of 34 submissions came from practice



Research at the RIBA - The President's Awards for Research

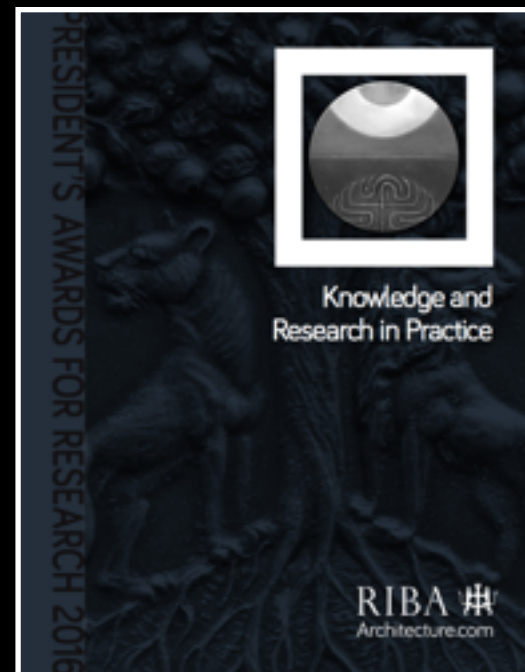
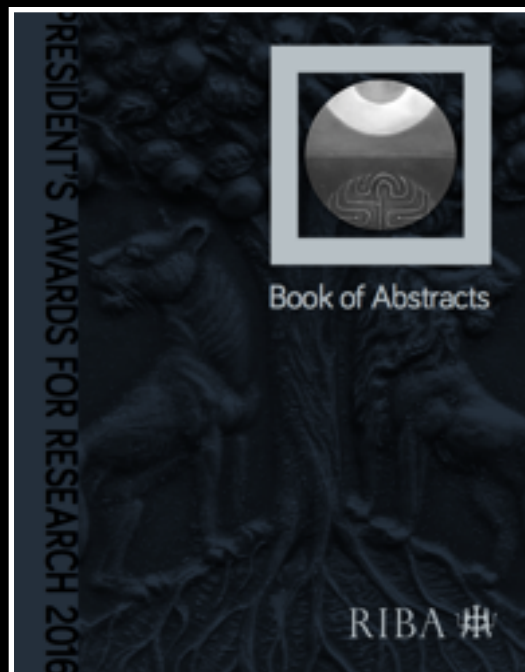


- 3 academic & 1 practice categories became 4 subject based for all
- new submissions process and requirements
- new judging panel & blind review process
- publications & marketing strategy included practice visits

...in five weeks



Research at the RIBA - The President's Awards for Research



Publications - disseminating research not promoting

Book of Abstracts (RIBA) *

Journal of Architecture (T&F) **

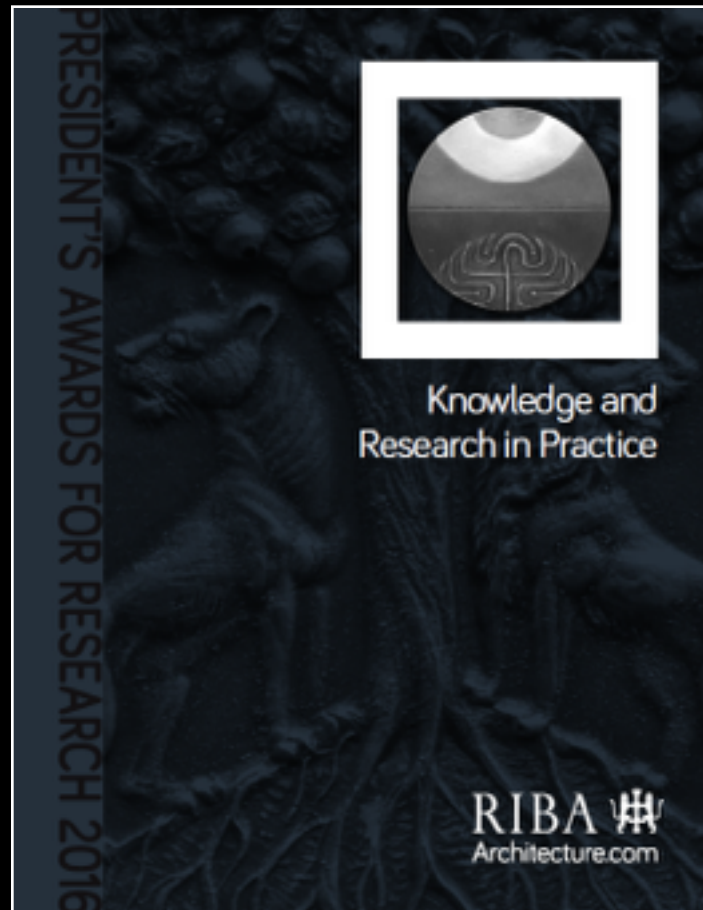
Shortlist (RIBA Publishing)

Knowledge & Research in Practice (RIBA)*

* RIBA website ** 12 months open access

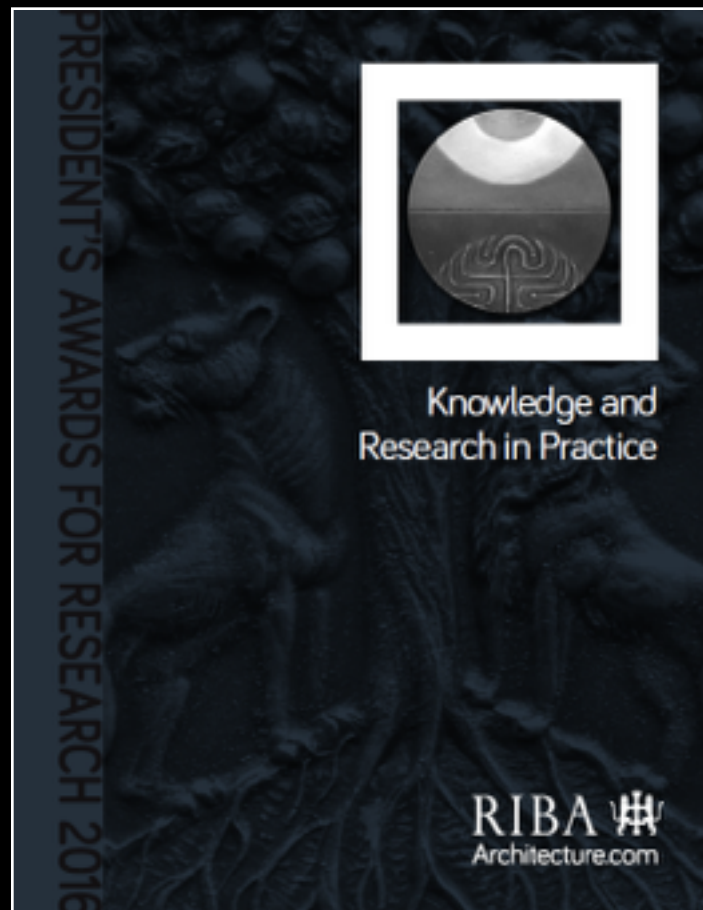


Knowledge and Research in Practice - The Book



- Key research contacts & leads
- Practice size and office locations
- Collaborations
- Funding sources
- Key themes
- Dissemination
- Benefits to practice

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Knowledge and Research in Practice - Practice size

Is research in practice the preserve of large practice?



Knowledge and Research in Practice - Practice size

Is research in practice the preserve of large practice?

In 2016

75 submissions from 14 countries with
25 from practice



Knowledge and Research in Practice - Practice size

Is research in practice the preserve of large practice?

Of the 25 practices who submitted to the 2016 Awards....

- only 10 appear in the AJ100 (40%)
- and six have ten staff or fewer (25%)

This was replicated in following years



Knowledge and Research

in Large Practice

in Mid-Sized Practice

in Small Practice



Knowledge and Research in Large Practice

Foster and Partners

“In the short term it is gaining knowledge and expertise and developing interesting partnerships in other fields of expertise.” Irene Gallou, Head Specialist Modelling Group



Cathedral Cities in Peril

Terence O'Rourke and English Heritage

Large scale 3D concrete printing

Loughborough University, Skanska and ABB

Metal printing

Cranfield University, BAE Systems, Vestas and Autodesk



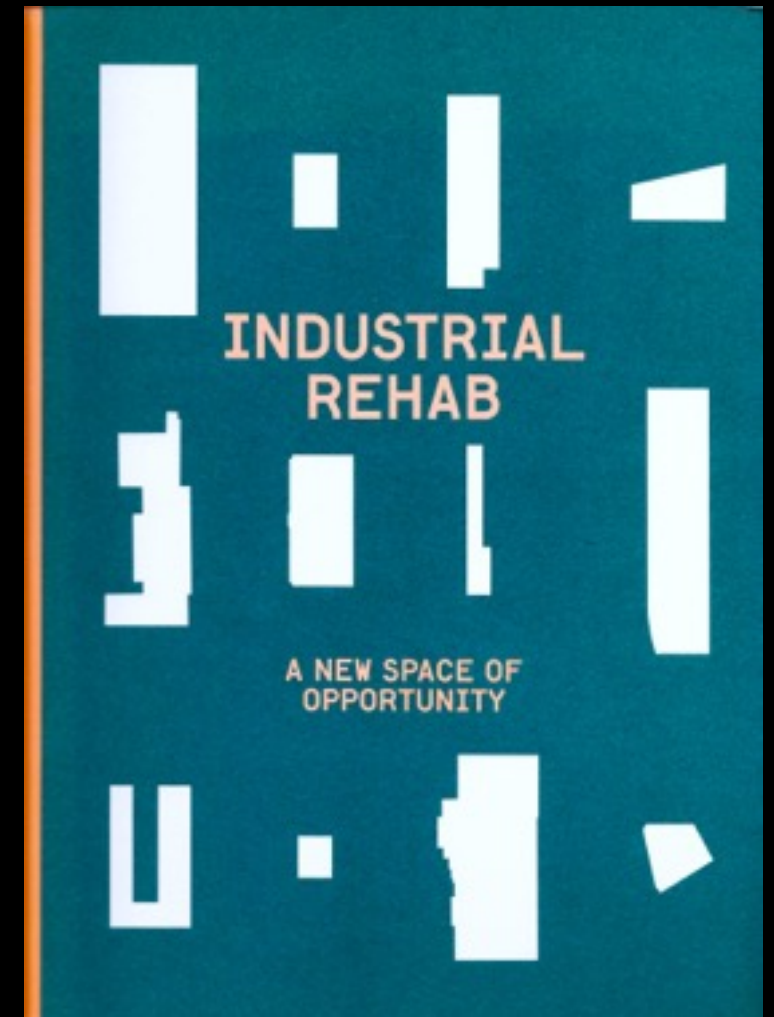
Knowledge and Research in Large Practice

Hawkins\Brown

Established think tank within the practice in 2013 to take advantage of funding opportunities and focus HB's research work

Industrial Rehab - latest publication, collaboration with JLL, looking at adaptive reuse of warehouse structures for different types of offices

&\also Thinktank \



Knowledge and Research in Large Practice

Scott Brownrigg - Design Research Unit

Biannual publication 'Intelligent Architecture' since 2013

- Sustainability appraisal for land use development
- Post Occupancy Evaluation
- In-between spaces & use
- Design for Life
- Optimum Schools
- Legacy of Hydraulic Fracturing (fracking) in Blackpool
- Creating an Intelligent City
- Architecture, Phenomenology & ocular centrism
- Cultural Influence on Airport Design



Knowledge and Research in Mid-Sized Practice

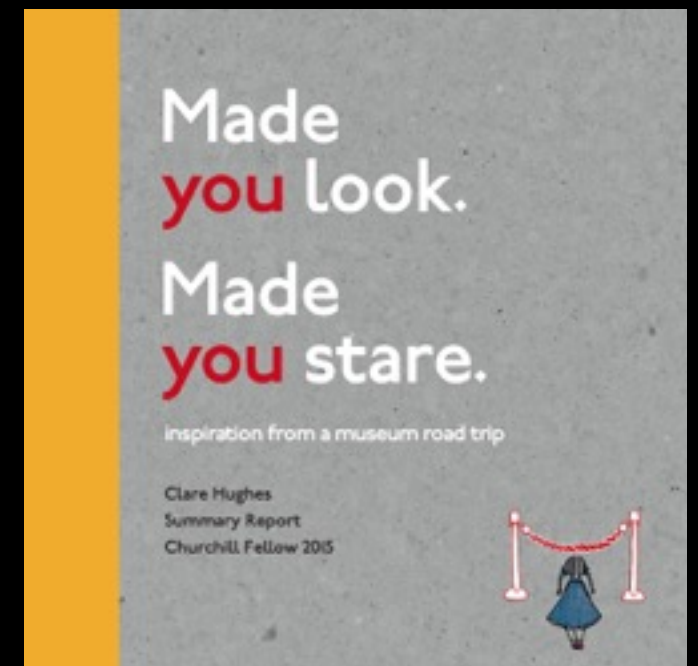
Feilden Clegg Bradley Studios

Five studios across UK with staff collaborating with local universities on research projects, teaching and collaborative PhDs - student works in the practice on project relevant to practice. Their first has continued to work at FCB London.

Exhibition space at FCB London.

Hayward Gallery, South Bank
Centre refurbishment

Made you look. Made you stare.
Supported by grant from WCMT,
looks at what makes a good
museum & gallery space



Knowledge and Research in a Mid-Sized Practice

Architype

Experts in Post Occupancy Evaluation and Passivhaus, with the aim of providing guarantees for their buildings.

At one school, they have delivered savings in energy use of £40,000 p/a. The equivalent to the salary of a senior teacher.

They've become the default architects to Wolverhampton Council for all school developments.



Knowledge and Research in a Small Practice

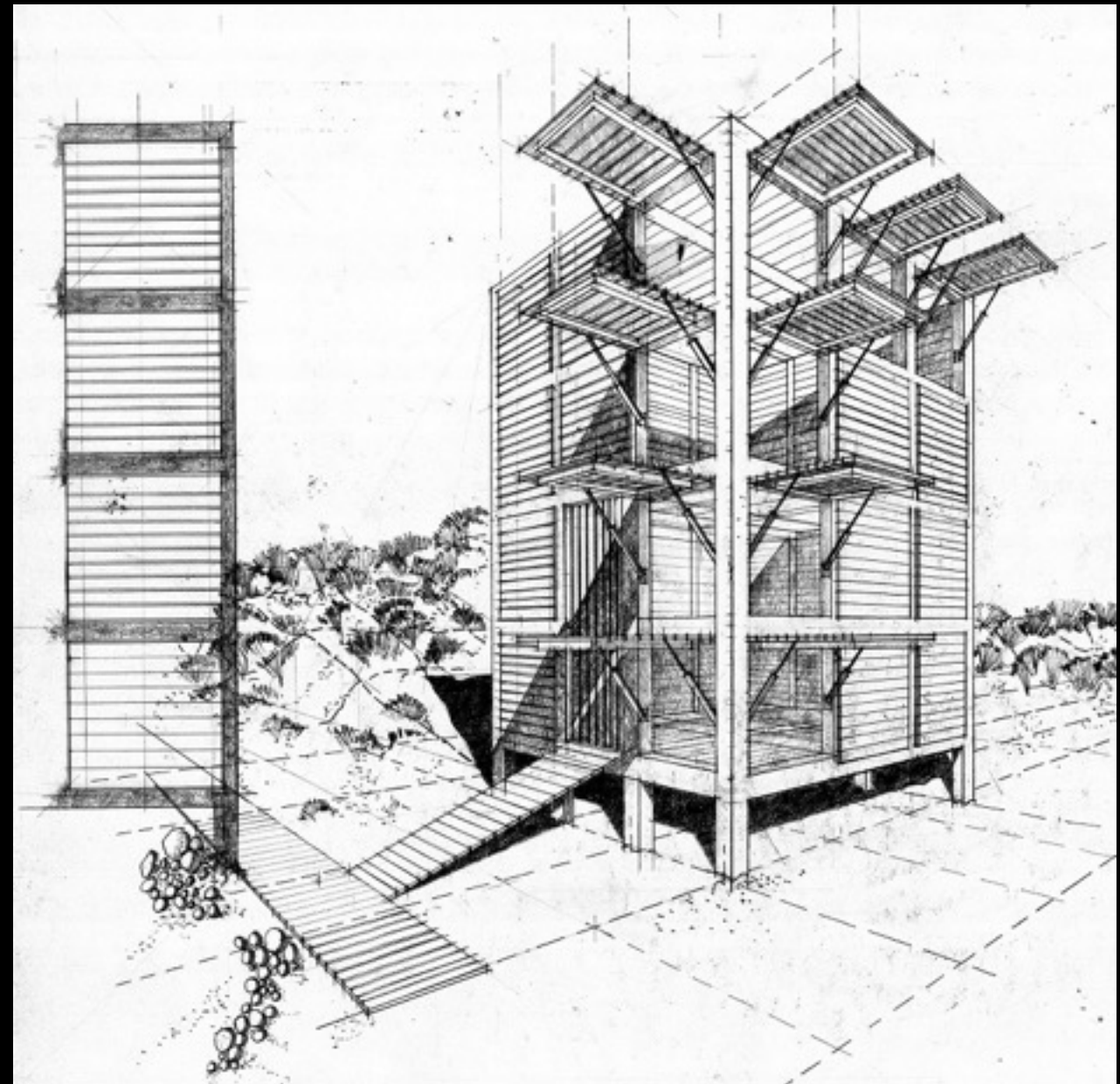
Coombes and Jones

Two architects, both practiced while working on their PhDs. Both continue to teach and research half time and the remainder in practice, all linked

The Development of the Building Envelope Using Welsh-Grown Timber: A study Through Prototyping

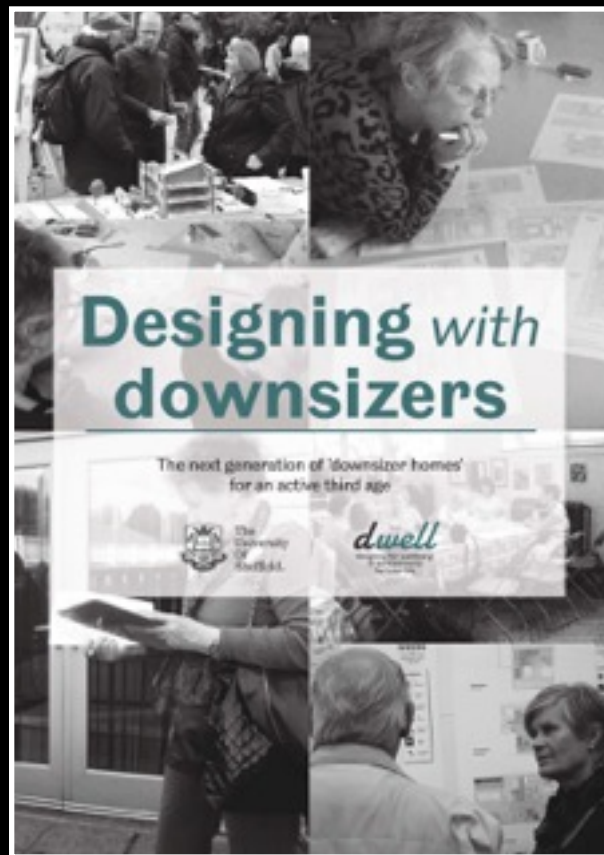
Dr Steven Coombs

D&T Technical category winner, 2017



Knowledge and Research in a Small Practice

Sarah Wigglesworth Architects



Long term project with University of Sheffield

UK has an issue with 'bungalows', poor 70/80s designs & high land values.

This presents different design options based on extensive evidence base and created through collaborative design process with older residents

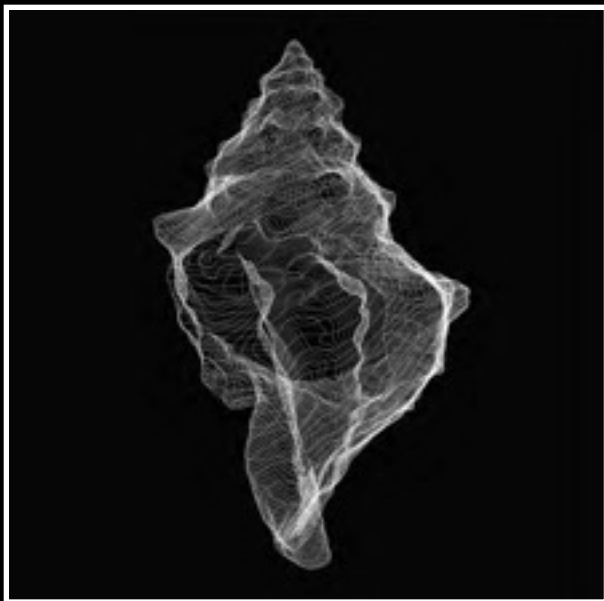


Knowledge and Research in a Small Practice

Tonkin Lui

Recipient of 2013 RIBA Trust Grant for Shell Lace Structure

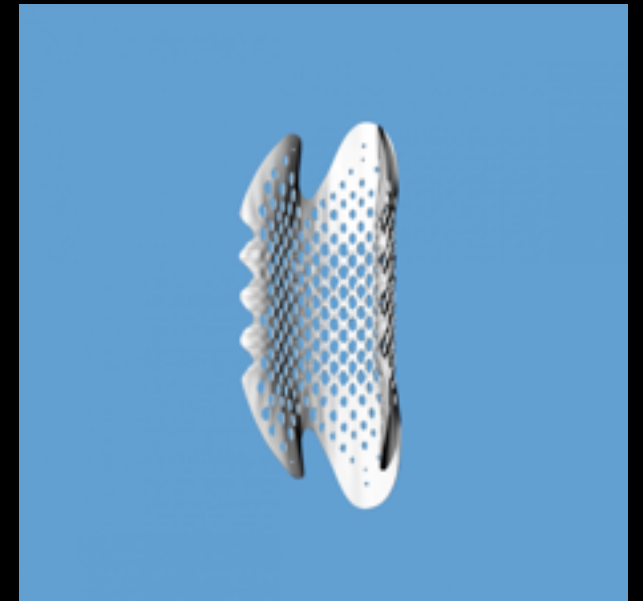
Analysis of shell
structure



Rain Bow Gate, open pavilion
Burnley



Ongoing development
led to tracheal stent



The Purpose of Research in Practice - Benefits to Practice

By conducting research, we diversify the type of work we do and actively seek out the projects that interest us. This gives us control over the work the studio is doing.

Dr. Helena Rivera, A Small Studio

We are able to advise clients on best practice and building performance and in this way can offer a different service with the added benefits of our research.

Richard Partington, Studio Partington

Investment in evidence based design means we offer a significant body of international best practice knowledge, which directly informs our design thinking and delivers design outcomes.

Brett Pollard, HASSELL



The Purpose of Research in Practice

1. To innovate

PLP/Architecture

Super Tall Timber: Design Research for the next generation of natural structure

Smith & Wallwork
University of Cambridge

Existing partnership but uneven financial model

Oakwood Tower / Supertall Timber



The Purpose of Research in Practice

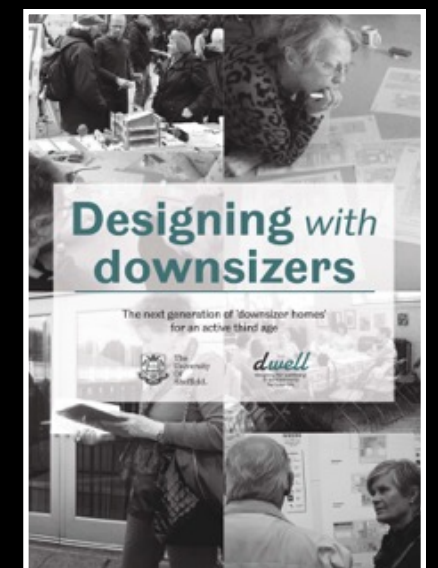
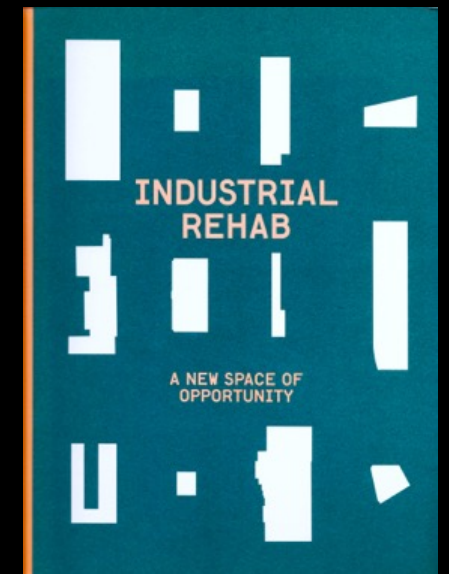
2. To develop a new field

FCB Studios - museum work

Hawkins\Brown - Industrial Rehab

Sarah Wigglesworth - Dwell Housing

Non-built form method of proving
knowledge/experience, usually
self-published



The Purpose of Research in Practice

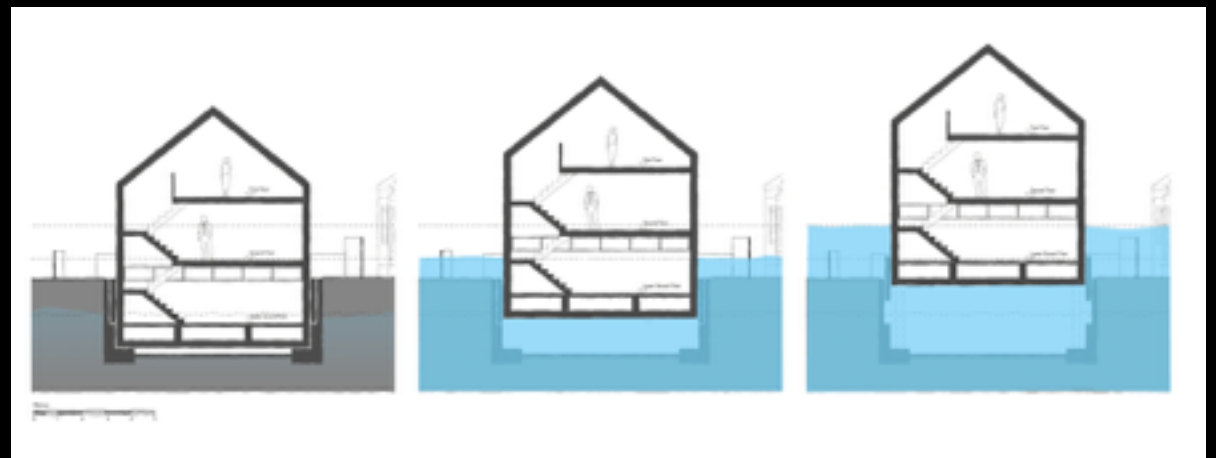
3. To demonstrate expertise

baca architects

Industry leaders in flood related building and resilience,
consultants to UK & international governments



Amphibious
House



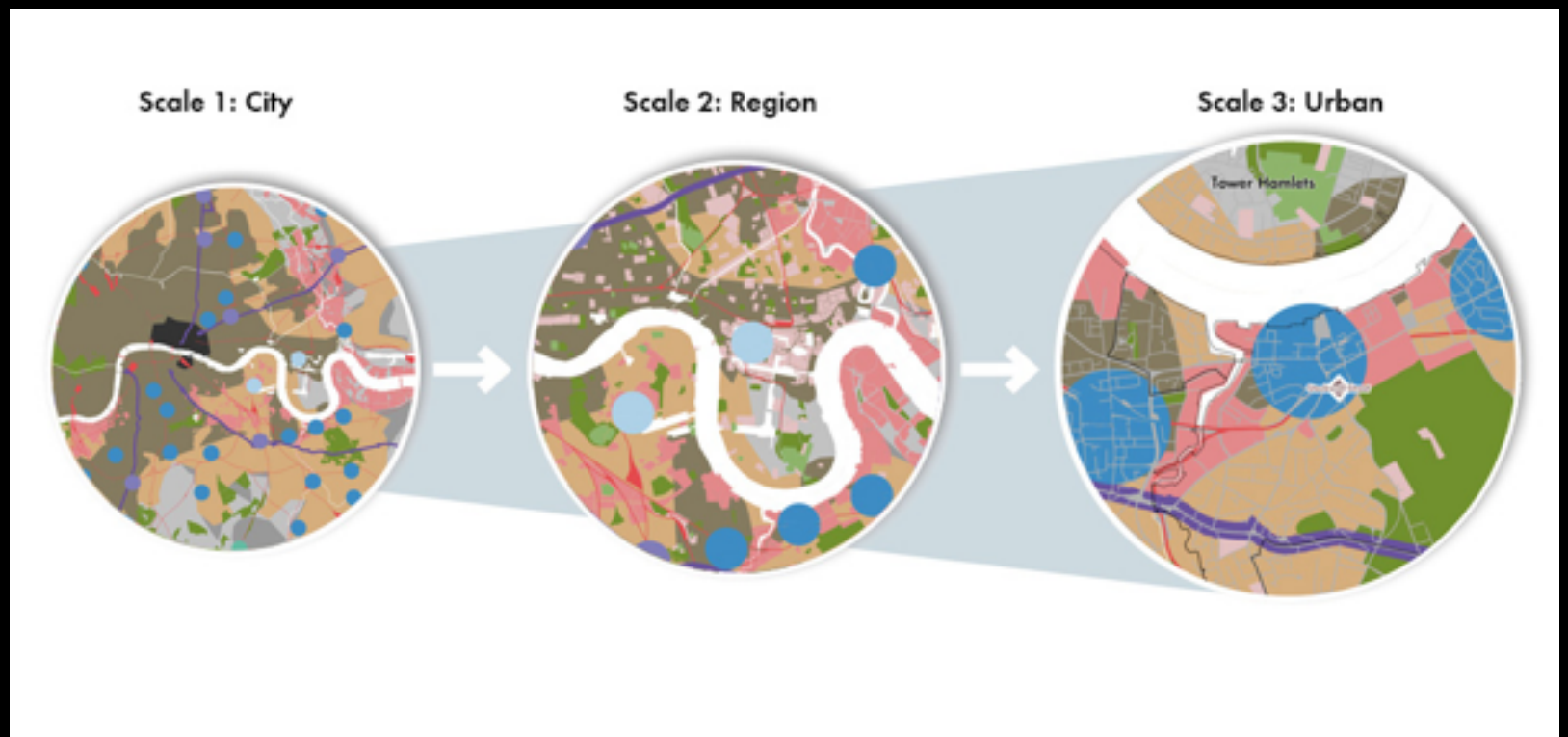
The Purpose of Research in Practice

4. Commissioned research

Allies & Morrison - Locating London's Local Character and Density

London-wide analysis of the character of London's and it's development over 1,000 years using GIS as the primary tool

For Historic England to inform their response to the London Plan Review



The Purpose of Research in Practice

5. To develop passion projects



AL_A

Pitch/Pitch stackable container

Max Arrocet- work on Madrid stadium need for sports facilities in urban areas with limited land

Research included scope, management systems & materials development (structure)



Barriers to Research in Practice

1. Funding - seed funding, larger grants, tax breaks & commissioned work



Knowledge and Research in Practice - Funding Sources

- Arts Council England
- Arts and Humanities Research Council (AHRC)
- Australian Department of Industry (Innovation and Science)
- British Council: Newton Fund Institutional Links Grant
- Centre for London
- Cooperative Research Centre (CRC) for Low Carbon Living
- Department for Communities and Local Government (DCLG)
- Engineering and Physical Sciences Research Council (EPSRC)
- Global Challenges Research Fund (GCRF): Resilience Foundation Award
- Heritage Lottery
- Higher Education Design Quality Forum (HEDQF)
- Historic England
- Homes & Communities Agency (HCA): Empty Homes Programme
- Horizon2020
- Innovate UK
- National Endowment for Science, Technology and the Arts (NESTA)
- National House Building Council (NHBC) Foundation
- RIBA Research Trust
- Stanhope
- UNHabitat
- Winston Churchill Memorial Trust
- The World Bank

R&D Tax Relief



Barriers to Research in Practice

1. Funding - seed funding, larger grants, tax breaks & commissioned work
2. Finding an academia to work with and affording their rates
3. Two speed research with academia
4. Lack of research training and CPD
5. Knowledge capture and management
6. Lack of support at senior level
7. Publishing - NDA's, loss of competitive advantage or client focused
8. POE - fear of being sued



Contacts

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Research Awards close midnight

(GMT) 3rd June



Slide Image Credits

2-6 Royal Institute of British
Architects
7-9 Kat Martindale
11 Foster and Partners
12 Hawkins\Brown
13 Scott Brownrigg
14 Feilden Clegg Bradley Studios
15 Architype
16 Steven Coombs
17 Sarah Wigglesworth Architects
18 Tonkin Lui

20 PLP/Architecture
21 Top: Hawkins\Brown
21 Lower Left: Feilden Clegg
Bradley Studios
21 Lower Right: Sarah
Wigglesworth Architects
22 baca Architects
23 Allies and Morrison
24 Amanda Levete Architects

