

Home Improvements

Flora SAMUEL, Laura COUCILL

University of Sheffield

Keywords (3 max): housing, knowledge exchange, architecture

The Home Improvements project, begun in October 2012) is one of a suite of Knowledge Exchange in the Creative Economy projects funded by the Arts and Humanities Research Council. Its aim fundamentally is to improve the quality of the volume house builder (VHB) developments that increasingly dominate the British landscape. Multiple and diverse reports underline the need for urgent action in this area.

Knowledge Exchange between architectural practice, architectural academia and the housing industry is the chosen methodology for effecting this change. Our first target is SME architectural practice, currently under threat due to its inability to compete with large interdisciplinary global conglomerate practices (Building Futures, 2011). We suggest that the best way to develop the research capacity of architectural practice is through fruitful knowledge exchange with academia. The RIBA Research Information Network has shown that the information least likely to be used by practitioners is that produced by academia, despite the rigorous nature of its production. Architectural academia has much to gain from the application of its research in real world situations, not least in terms of impact. The last vital ingredient in this triangle of exchange is industry, represented here by Taylor Wimpey. The profit margins of Volume House Builders have suffered greatly since the credit crunch, which leads to speculation over increasing tensions between quality and market demand (Foley, 2011; Kelly, 2013). There is a need to improve the outputs of the VHB process whilst at the same time minimising risk. Whilst we aim to put the creative capabilities of architectural practice at the service of the VHBs, SME practices clearly have much to gain in terms of business efficiency and industry know how. This then was our thesis when we began the project in October 2012. The date of completion is October 2013.

The project has been led by Flora Samuel Head at the University of Sheffield School of Architecture supported by Co-Is Fiona McLachlan from the University of Edinburgh and Steven Spier from Kingston University. It receives support from Anne Dye Director of research at the Royal Institute of British Architects. Vital industry input has been provided by Nick Rogers, design director of Taylor Wimpey, David Birkbeck, Chair of Design for Homes and Jonathan Rickard of Radian a registered social landlord. Jonathan Dovey, PI on the Bristol based AHRC funded REACT KE hub provided a vital source of knowledge on how to work within University guidelines without stifling the creativity so vital to the whole process.

In it there are two work packages, both ongoing, the first the Embedded Projects and the second the Review of Research in Architectural Practice. The Embedded Projects are, in essence, a form of Participatory Action Research – we work with architectural practices to develop research while at the same time learning about the potential and limitations of practice based research. This knowledge has then been fed into the development of the Review of Research in Architectural Practice.

Work packages

The Embedded Projects

One of the remarkable things about the AHRC KE CE route is that it allowed us to develop mechanism fund practitioner research through a series of three projects within the overall project and to persuade all parties of the benefits of Knowledge Exchange and of research.

Discussion with our Industry Advisory Group revealed that VHBs are open to making improvements to public realm as this involves little extra risk and cost. Further there were three areas in which research would be welcomed: public realm, car parking and removing the barriers to self build. A Call for Interest was placed in the *Architect's Journal* seeking architects with a developing research profile who were interested in doing a research project in these areas. The result was a series of productive conversations with practitioners interested in the project and 38 Expressions of Interest from practices across the UK, though mostly London. We were looking for practices who seemed to be open to Knowledge Exchange and had a developing research track record.

Two members from nine of these practices were invited to an Ideas Lab sandpit event for the development of research proposals in early December 2012 in the School of Architecture at Sheffield. The venue here was important, being a creative and messy space, the atmosphere influenced the outcome of the event itself. A light touch agreement on the sharing of intellectual property, based on that of the Bristol Sandbox, was sent out to all parties in advance of the event. One limitation was the need to limit the amount of fees paid directly to the practice to £8K as there is understandably a nervousness about paying commercial practices for work through research funding streams.

Three practices were allocated to each of the project themes. Each theme was led by one of the senior academics in charge of the overall project. Each practice was allocated an academic member of staff to work with on the development of their proposal. Industry partners were available throughout the event working constantly with the groups on their evolving projects. This extremely intense two day event was broken up into periods of project work followed by feedback to the wider group. This was interspersed with talks from members of the University's Research and Innovation team on how to develop a bid. The event received resoundingly positive feedback from all concerned and the consensus was that the event was "enjoyable and extremely productive". In particular, practitioners complimented the benefits of industry and academic perspectives, with one participant stating; "I wasn't sure what to expect but have found the two days thought provoking, creative and well disciplined". Another practitioner noted that the event supported "very sharp, engaged conversations". For practitioners, however, one of the key benefits of the event was that it developed their understanding of research in a number of ways. Firstly, that there was a realisation that there is a "greater overlap between practitioners and academics than [...] anticipated" and secondly, that the event helped practitioners better understand the skills of developing a research proposal.

For us it revealed the very great difficulties practices had in articulating their work as research. We wanted projects that drew benefit from the particular design and representational skills that architects could bring to the table. Our original plan had been to partner practices with Early Career Researchers to develop their bids. It quickly became apparent that the practitioners needed to work with fairly experienced academics with extensive knowledge of good research practice and the ability to assert its importance.

The practice/academic teams had two weeks to evolve their proposals into funding bids which were then judged by the academic Operations Group and the Industry Advisory team. There were differences of opinion in what constituted a good project despite our carefully crafted Criteria. The industry partners were less interested in what traditionally constitutes good academic research and were more interested in what they saw as potential impact.

Three practice/academic teams were given roughly £50K of funding each to develop three embedded projects. These were Ash Sakula, working with Sheffield University on Motivating Collective Custom Build (<http://mccb.h18.co.uk/>), Urbed working with the University of Edinburgh on Parking Space and Satellite Architects working with the University of Kingston on a public realm toolkit for Volume House Builders. The projects began in February 2013 and are developing well benefitting from the

continuous generous input of our industry partners. The knowledge gained in setting up and evolving these projects is being used in the development of our second Work Package.

Review of Research in Architectural Practice

Currently very little is known about the research that takes place in architectural practice. The RIBA is wise to the importance of architecture developing the ability to evidence its own value hence the emphasis it has given to research in its latest strategy document *Leading Architecture* (RIBA, 2012). It is our thesis that practices are well placed to do research and that funding streams such as EU Horizon 2020 offer real opportunities to architecture. Research also offers practice the ability to develop a brand identity around excellence in a particular area. We suggest that architectural practice is prevented from doing research by: cultural barriers within its organisation (Imrie & Allen, 2010); a reduction in support of the value of architectural design from organisations such as the Commission for Architecture and the Built Environment (see for example; (for example CABA, 2006); a misconception of what research is, not helped by weaknesses in architectural education; an inability to express the value of design research and a lack of benchmarks for current research making it difficult to evidence originality or innovation. The aim of the review of research in architectural practice is to begin the process of addressing these debilitating problems. Two specific published outputs are planned: the RIBA *Housing Research Practice Report*, in many ways a pilot project designed to act as a benchmark for future Housing practice based research, aimed at architects, clients and policymakers; the RIBA *Practice Research Guide*, a more user friendly output aimed at architects, disseminated via CPD routes and a spur to action. Data for these two documents is being gathered from the Embedded projects, an RIBA survey of research in practice and a series of interviews with practices known for the excellence of their housing research.

The RIBA survey of research in practice was sent out to all RIBA members. It received 83 responses in total, which is comparable with similar surveys. The main findings of the survey are as follows: There was a clear conflict between practitioners suggesting on the one hand, that research is “part of the job”, and on the other hand, that research is “limited and non-existent in practice”. Responses from the former perspective indicated that research is embedded in day-to-day design activities, specifically, keeping up to date with policy, materials and improvements to building performance. Responses from the latter stance however, referred to a formal, academic definition of research; that is the pursuit of new knowledge through a specific research project.

All practitioners said that research was either quite important, important, or very important for developing a business. No responses suggested that research was not at all important for architectural business. In addition, responses suggested that the benefits of practice-based research were that it would help improve the built environment, but also demonstrate the value of architecture and identify practices as specific experts.

These responses, which will be supported by a series of semi-structured interviews, at this stage, suggest that confusion lingers over what research is, but that architectural practice may be well placed to conduct certain types of research, particularly research that advances design and design practice. The value of design research has yet to reach the acceptance that it has in other design fields (Frayling, 1993/4). One important finding is that practitioners rarely publish this type of research, and instead designs are often reviewed through the professional press and award ceremonies, without practitioners clearly expressing how research contributed to the final design or how it has advanced design knowledge.

Conclusion

Early findings seem to suggest that practices that have a strong research profile do seem to be maintaining their competitiveness in difficult economic times. Some practices even see their research work as being more lucrative than their more traditional building based operation. Our programme of interviews is in its early stages, the overall project limited by a very tight timescale but it does not take long to understand the importance of Knowledge Exchange.

References

BUILDING FUTURES (2011) *The Future for Architects*. London: RIBA.

CABE. (2006a) *Buildings and Spaces: Why Design Matters*.

<http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabe.org.uk/files/buildings-and-spaces.pdf>

FRAYLING, C. 1993/4 Research Papers, Research in Art and Design', Royal College of Art, Vol. 1 no. 1, pp. 1-5.

RIBA. (2012) *Leading Architecture: The RIBA's Strategy 2012-2016*. Retrieved February 25, 2013, <http://www.architecture.com/Files/Strategy/LeadingarchitectureTheRIBAsstrategy2012-2016.pdf>