Teaching, research and practice ...

... establishing a productive balance

Raising the game

Gordon Murray

The current debates on teaching standards, on research assessment and on the condition of the profession tend to be carried on in isolation from each other. In this article Gordon Murray, a practitioner and teacher, draws a connection between all three topics and underlines the importance and potential of research for both teaching and the profession. His brief review of teaching and professional formation in Japan provides a thought-provoking comparison with architectural education in the UK and the US.

Seven years ago, in the very first issue of arq (1/1, p6), Frank Duffy wrote about the lack of architectural research publishing. He argued that, although much excellent research has been carried out in allied disciplines such as history, sociology and engineering, the special nature of architectural discourse fits so badly into the conventions of academic research that it fails to be noticed. Referring to the UK, he claimed that, despite our 38 schools of architecture, the discipline had failed so far to produce the critical mass of research that justifies funding - let alone publication.

What, in the ensuing seven years, the minimum time required to produce a registered architect, has changed? Discussion of the subject in subsequent issues of arq has acknowledged the need to establish a balance between teaching, research and practice. However, as a practitioner, I continually see the potential benefits of this equilibrium distorted by the profession's failure to engage with the realities of academia.

Colin Stansfield-Smith – rightly, in my view – reaffirmed that architecture has now become an academic subject in its own right (arq 6/2, p104). However, I wonder what proportion of the 60% of entry level students he quotes as not becoming architects, are in control of their own destiny – either as a consequence of final assessment for entry into the profession, or the general conditions of practice that he describes so well.

In response to the demands of the Architects Registration Board (ARB), all schools of architecture. certainly the six in Scotland known to me through the Association of Scottish Schools of Architecture. wish to retain validation and quality assurance compatibility with ARB. All are structuring their undergraduate courses around this and subsequent student entry to the profession. It is thus vocational. If ARB, not mentioned in any correspondence or papers [but see arg 6/3, p195. and p293 of this issue. Ed.], is felt to be irrelevant in this regard we ignore the near hysteria in the architectural press regarding course accreditation and the issues faced, real or imagined, by several schools.

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Again responding to Stansfield-Smith, no school of 'pure' architecture exists in this country as far as I can see, except perhaps at the Architectural Association or the Bartlett which could be considered graduate schools. Nor is such a course offered except where it becomes part of a related faculty agenda. Certainly not in Scotland. It is, instead, applied architecture that is offered and it is this dichotomy which has continually presented problems.

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Real issues and rich diversity

The current structures serve no one well. On one side we are endeavouring to create post Part 1 (ie, undergraduate degree) and 2 (Diploma or Masters degree) interns who, despite five years in full-time education, still have a long way to go in order to satisfy Part-3/ARB requirements for professional qualification as architects. On the other side, the preoccupation with creating 'architects' through an enforced curriculum is diluting the potential for schools to embark on more exploratory agendas. This is not to argue for isolation from the profession - rather the opposite. However, any curriculum must enable academia and the profession to exchange ideas, data and research - and to document and disseminate this coherently.

Free from the shackles of a narrow-minded ARB agenda, the schools could pursue history, conservation (surely an area where the profession leads), sustainable cities and construction technologies. This would be

architecture at the cutting edge – connected to real issues and recognizing the rich diversity of ways in which an architectural education can eventually contribute to the built environment.

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The ARB, our consumerist society's concession for the maintenance (or the illusion) of professional exclusivity, claims that it is safeguarding the reputation of the profession as well as protecting the consumer. This 'consumer' (I prefer 'building-user' in the broadest sense) should surely be the ultimate focus of any progressive architectural research. And the user's satisfaction (whether as student, teacher, patient, worker or facilities manager) with building performance and the spaces created by buildings must be at the heart of such research. From the early '60s, Martin, Matthew. Markus, Maver, and many others developed tools and analytical techniques for assessing performance-in-use. However, we have, as academics and practitioners, lost the art (or is it science?) of evaluating, documenting and - paradoxically in an electronic age disseminating such research.

As a former examiner and assessor, particularly at Masters level, I am continually reinvigorated by the enthusiasm, depth and quality of documentation of student research. Recent examples at the University of Strathclyde have ranged from the impact of gambling on built form to the analysis and development of prefabricated housing. Yet, on completion, this research is at best put on the shelves of the students' library or, at worst, literally thrown away. Surely, such work should instead set the student architect on the path of rigorous research as a part of everyday practice rather than being swiftly discarded in the face of a largely indifferent profession. As Bryan Lawson eloquently states (arq 6/2, pp109-114):

If research led teaching is taking

place through design then those ideas should be given a wider audience than just the university studio or the design practice.'

The Commission for Architecture and the Built Environment (CABE) is right - design quality as distinct from style can be measured. One new tool developed recently by the Construction Industry Council is the Design Quality Indicator (www.dqi.org.uk). This brings together both the tangible and intangible qualities that one finds in successful built environments. This is a useful way of ensuring that qualitative dimensions do not get lost. And, as Colin Stansfield-Smith observes, the impact of such a powerful voice as CABE promoting design quality assessment extends beyond a single profession to the industry as a whole.

Professional involvement and indifference

But what of the profession's involvement with university education and research? Christine Hawley, in arq 6/1 (p5), quoted Sir John Fairclough's assertion that architects should be leading innovation on the ground, ie, *in practice* [my italics] with help from universities. Indeed, as M. J. Long and Peter Carolin remarked in an arq leader (2/1, pp4-5) six years ago:

'Professionally experienced teachers are essential not so much because specific constructional or technical information needs to be taught but because judgement about the relative importance of different aspects of design must be present. This can only be taught as a result of recent experience of the ever changing ways in which buildings get built in our society.'

'our indifferent profession is avoiding any direct responsibility for educating its next generation'

This is an argument supported as recently as last December by Professor Peter Cook of the Bartlett School. He pleaded:

Before it's too late, let's get creative architects into schools, otherwise there will be a two-tier society – the teacher architects and the maker architects.'

Our indifferent profession is avoiding any direct responsibility for educating its next generation. There are obvious exceptions but, 'perhaps the time has come for universities to teach architecture and for the profession to train architects'

in general, the responsibility is being left to universities who in the face of restrictions on funding are shortening courses rather than expanding them. If we accept architecture as a pure art or science then producing architects for an industry already oversubscribed is no way to provide a socially beneficial education. Perhaps the time has come for universities to teach architecture and for the profession to train architects. As Ove Arup noted in his seminal 1970 paper (arq 2/1, pp38–43):

'... he [the architect] is a designer, and artist. His research is of a different kind. Let us by all means make this extended architectural course available to all but don't call anybody an architect unless he knows something about building ...'

Independent investigation

Having just returned from a brief visit to the Berlage Institute in Rotterdam, I am reminded of the benefits of such a suggestion, in developing research in conjunction with the universities. This 'two way street' is embedded in the Dutch experience - in which the science of architecture has always been a local preoccupation. Rem Koolhaas' Harvard Projects on Lagos and the Pearl River Delta, Francine Houben at the Technical University in Delft and Winny Maas/Caroline Bos at the Berlage, all benefit from this stimulus and in turn engender it. The TU Delft has a long tradition of teaching being carried out by the profession itself.

It is interesting that Koolhaas observes that the Harvard Design School project on the City began as a response to the 'pervasive' condition of architectural practice in which the architect is asked to intervene in but never to understand a given situation:

'an architect's interests are ultimately determined by a series of random encounters with projects and clients that do not allow an independent investigation of issues or conditions outside their field of vision. Thus architects operate with ulterior motives. The capacity for analysis, research or investigation is simply not within their repertoire. It is, therefore, becoming increasingly important for

architects to operate on a level independent of any architecture in order to understand the phenomena affecting the development of architecture and the city.'

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This belies the immense amount of data collected and analyzed by a significant number of practices. While an 'in practice model' of research is recognized in Bryan Lawson's paper (**arq** 6/2, pp109-114) and design fits this model of clientoriented problem solving, there is in my view little systematic documentation and evaluation of such research to everyone's benefit (any such benefit being limited to those in related fields of research). Further, we have no similar twostream system in this country. No consolidated Graduate School of Design where specific students, including registered architects and those developing research within PhD or applied programmes, can cross-pollinate and effectively coordinate the results of this research.

Such a focus could become the domain of an existing school of architecture or a separately funded venture. However, as with the Berlage Institute, at its heart must be the professional link with the built environment. To do this effectively we not only need to bring together the teaching, research and practice of

architecture but also to realize that these are distinct entities. Perhaps the Japanese, Swiss or Dutch models of professional practice are more appropriate in this regard.

Separation, integration and tradition In Japan, registration is achieved by passing national exams set by the Ministry of Construction. The Japan Institute of Architects, the 'rebel' association set up many years ago by Isozaki and others, which allows only architects to be members, is, like the Architecture Institute of Japan, purely a 'learned society'. Neither organization has any relationship with the schools of architecture or the examination

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Almost all architects teaching at Japanese universities are in practice. Many professors run their graduate 'masters' classes as offices in which the students work on their projects. Students learn a lot from this 'arbaito' (part-time work in offices) or from live projects within the university as there are no 'years out' in practice. They must know how to make a building. This stems from their historical notion of the architect as craftsman. Ando is famous for insisting that his younger staff all buy their own drawing equipment (believing that they will learn to

value it as a craftsman values his tools) and draw everything by hand, developing a 'feel' for the way the building is made.

There is always debate about the way architecture should be taught and how the balance between conceptual 'design' and technical competence should be achieved. Some feel that the balance in British schools weighs towards the conceptual on the assumption that the conceptual knowledge will be developed in practice. It is equally valid to say that Japanese education weighs towards the technical on the assumption that the conceptual and other wider issues of architecture will be picked up by working with, and observing, experienced architects.

Everyone, from users of buildings to students and teachers of architecture as well as professionals, has the right to expect not only consistency in a basic level of sustainable quality but also measurement and feedback. Only in this way shall we ensure a 'raising of the game' – for, as Peter Zumthor suggests (A+U, 02/1998):

'in a society which celebrates the inessential, architecture can put up a resistance'.

Biography

Gordon Murray is Visiting Professor in Architecture at University of Strathclyde and a partner in gordon murray + alan dunlop architects

Author's address

Gordon Murray gordon murray + alan dunlop architects Drummond House One Hill Street Glasgow G3 6RN, UK gordonm@m-d-a.demon.co.uk