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The history of the idea of research in architecture

Reflections on the value of research

Architects + Research

Leslie Martin

Leslie Martin (1908–2000) now merits a surprisingly modest mention in architectural histories of the postwar era, best known as a designer of London's much-loved Royal Festival Hall, completed in 1951. His substantial influence – recorded in his obituaries in arq (4.4 [2001], pp. 295–322) – is now frequently neglected.[1] Yet, having served as Deputy Chief Architect, then Chief Architect, of London County Council's Architects' Department from 1948–56, Martin went on to become one of the UK's most respected architects. By the mid-1960s he was running a busy practice alongside his appointment as Cambridge University's first Professor of Architecture.

Among the first architects in Britain to hold a PhD, Martin sought to ground architecture's professionalism in academic research. He is also known for his stewardship of the RIBA's Oxford Conference of 1958 – which established the pattern of architectural education in the UK that more-or-less persists today – and the record of that event documents Martin's enthusiasm for cultivating research, especially doctoral work, in British architecture schools.[2]

What follows is a transcription of Martin's handwritten lecture notes for a talk titled 'Architects + Research'. Previously unpublished, these notes constitute an important document in the history of architectural research, particularly in Britain. They recount and reflect on the emergence of the idea of research in architecture and its connections with education.

These notes were found in the as yet uncatalogued Leslie Martin archive held by the Royal Institute of British Architects.[3] The context of the lecture is unknown and the notes are undated. References to particular sources, to the 'Research Committee of the (RIBA) Board of Education' and to various research and development groups, point to their authorship in the 1950s, probably around the time of the Oxford Conference in 1958. The original note form is reproduced here without alteration:

I seem to recall that the word 'research' came into the language used by architects (+ that it was given a special emphasis) during the 'thirties'. Now it is important to know what we thought that it was. The word appeared in the language as a result of a growing belief that every architectural problem should be preceded by some kind of investigation: that there should be some attempt to clarify the 'programme', i.e. to be more sure about the 'users' requirements before these could be solved in terms of new 'techniques'.

'Programme' + 'techniques': the emphasis on these two things was in line with the principles and assumptions of the modern movement that each problem must be thought out afresh.

The clarification of the programme easily extended itself into liberal or left wing politics and a very naïve and amateur sociology. I recall that Richard Ll.[ewellyn] Davies and his year at the AA conducted a survey in Camden in which they asked people whether they wanted to live in 'homes' or in 'flats' – and they got some pretty short answers. The limitation within the question itself must seem extraordinary to us now: but it seemed vital then and it is an indication of how productive were some of the ideas that seemed to need clarification.

It was all of course splendidly well meaning: and there was a tacit assumption that somehow if the 'programme' could be organised with crystal clarity the architecture was bound to be all right. There is indeed an essay by John Summerson written later, which says precisely this.[4]

For the programme 'architects relied heavily on the belief that the sociologists would know the answers'.
The technique they saw demonstrated by the engineers Owen Williams, Ove Arup, [Felix] Samueli [sic] and the developing work of the BRS [Building Research Station] – both outside their own profession.
I should say that the attempt to introduce these two communications into architecture under the heading of 'research' was confined to progressive student groups, the members of MARS (the Modern Architectural Research Group) average age about 28 + never more than 300 in number. The BRS. work was steadily moving from its initial testing station phase into studies of 'sound transmission', day lighting, etc.

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With the exception of the BRS these people were all concerned with building. [T]hey used the word research extensively to identify the areas of lack of knowledge in the production of architecture.
The activity that they vaguely described as research was simply the assembly of information relating to knowledge that they needed. Still important but not what we would now call research.
The situation changed sharply after the war. The young generation that had made so much use of the word 'research' in the thirties found themselves (because of their beliefs) in public offices in the 40s and 50s.
Here they saw the possibility of studying the 'programme' + the 'technical' method on large-scale projects + the Research + Development section became a pattern in the Railways, Hertford (Johnson Marshall, Cox, etc) – later Oliver, Barr, Bruce Martin.
The movement of the Hertfordshire group into the Min[istry] of Ed[ucation] widened the study of the programme by involving chief inspectors + users + had the opportunity to test industrial production on a national scale: producing an emphasis on modular coordination, etc.
From that point on the pattern was established: each university established its own R+D division.
Now I would hardly have thought that history worth mentioning except for the fact that I believe that the attitudes developed then have now become the norm in attitudes to research within the profession.
These attitudes assume:

1. That it is the main task of architects to build
2. That research is acceptable as a method of providing tools for that practical activity
3. That it is possible to plan research in relation to these practical needs
4. That a major continuity will come from outside – BRS, physicists, sociologists
5. That architecture + town planning are separate subjects

As supplementary evidence for all this I want to quote from a document (at present in draft) by the Research Committee of the Board of Ed[ucation] of the RIBA.

After writing that research has now developed in schools of architecture on an impressive scale the report states:

that Lacking a research tradition of its own architecture has relied heavily for guidance on researches coming from other disciplines

that the disciplines that architecture has depended on have in the main to see their main historic objective as the establishment of disciplines in their own right without any specific committal to action or application.
Their concern has been inevitably the generation of knowledge on a particular front. They could perhaps be described as reflective disciplines of which action is one possible aspect/ They move from knowledge to further knowledge.
Architecture on the other hand is a discipline of which the end product is action + in order to accomplish this it must call upon the resources of many areas of knowledge.

that architecture could be described as an action discipline of which reflection is a necessary aspect.
In the present situation therefore research + design often tend to move in different directions with different objectives. The linking of the two does not happen naturally but requires specific attention.

and from all this the implication that research work is something necessarily foreign
two types of mind – two kinds of student
that it needs holding tight to architects needs + practical ends
that it can be planned + the RIBA research committee should do this

I identify their attitudes with the historic position
the failure to grasp what research is:
the failure to see that the development of contemplative attitudes within our own profession is a necessary corrective + stimulant to action
that these two things can be the product of the same kind of mind which for the sake of simplicity I will simply call the educated mind.

I want now to put the argument in a completely different form.
Suppose now that we regard the five years in a school of architecture as an educational process not a training in professional habits.
Then the central task of teaching is to develop an educational process around the subject architecture.

The central point about architecture is the need to bring things into relationship with each other – to see and understand its cohesive nature.
There is no subject which lends itself more readily to an educational process.

Start with real needs – the needs of people + every student can identify himself with a problem.

> In solving the problem there can be no vertical barriers between subjects (structure, building science, acoustic)
> In developing a progression of studies, there are no horizontal barriers between the building + its internal relationships, the group + its external relationships; the urban system or the regional system.

This is a simple outline of an educational process. Research is an extension of that educational process.
Now you will see that I have moved both education + research right away from any direct influence of the profession.
And that I have seen them as parts of a simple process.
If either of these parts attempt to mirror the profession they will simply reflect its present image.
Education as a process is quite independent of the state of health of the profession.

If it is bad it will fail
If it is good the quality of thought amongst students (quite apart from technical know how) will be way ahead of that which is current in the profession itself – and that is how you change the profession.
Having placed research firmly within the educational process, I want to try to say one or two more things about it.

First That the areas of research are not something 'foreign': they are

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discovered within our own field – within our own interests + our own skills

Second That the typical research subject in architecture is (like architecture itself) concerned with the same single idea of cohesiveness – relationships of things

These things are the products of the same kind of mind that builds buildings.

I do not see why the right kind of mind should not move into research + out into practice + back again into research + be refreshed by the process.

And in passing I suspect that the satisfaction creating the relationships which make a building is not a distraction to the satisfaction involved in creating the pattern of related ideas in research.

I won't develop that but the links between research + art have not passed unnoticed by workers in other fields – notably by G. H. Handy the mathematician.

Third The value of research of course lies in the power to conceptualise. To fit a complex arrangement of rooms into a tight interlocking fit is an architectural problem. It has relevance in a given situation.

But to discover the nature of the problem of fitting rooms together is a concept – that is the objective of research.

Fourth The value of a concept is its relevance in a whole series of different situations. The wider its relevance + the deeper the concept is + the longer it will last.

The value of a concept is that it demonstrates the relevance of things: many aspects of the study of lighting for instance become evident when they are seen within a more total view of the concept of environment.

+ Finally it is only when studies are lifted to this general level of the concept that we can begin to communicate effectively with other disciplines – the pattern of the built form + its interconnectedness in the urban area begins to fit in with the patterns set up by the sociologist or the geographer.

I conclude
that if you want research of that order it will come only as a result of developing educational tradition
that if you want good research you choose good people who respect + understand that tradition (whether they are from inside or outside educational establishments) that you won't get good research by trying to plan it – because of its conceptual nature it plans itself – it reveals the relation + the gaps

If research is good its value will be recognised + it will find its outlet. If it is bad it will disappear – as it ought to.

And it will find its outlet + relevance to the profession at many new levels.

1. Since it may be capable of taking its place with the work of economists and geographers [which are incidentally research extensions of their own educational policies [marginal note]] the architectural thought can be effective at a new level of policy making – [choice of development site, etc consequences of choice etc [marginal note]].
2. The research workers themselves will have developed an expertise which will produce a new standard of applied research (so far rarely exists here)
3. The work may be of value to groups like the one here today. If it is they will recognise it. Important for development groups.
4. Research builds back into teaching + the standards of the future profession are iteratively raised.

Influences of this range + variety are of minimal importance to the profession. But they would never have been discussed by asking the profession what it needs.

Transcribed by Adam Sharr

Notes

1. See also: Leslie Martin, *Buildings and Ideas* 1933–83*: From the Studio of Leslie Martin and his Associates* (Cambridge: Cambridge University Press, 1983); Barnabus Calder, *Raw Concrete: The Beauty of Brutalism* (London: William Heinemann, 2016), pp. 161–202; Adam Sharr and Stephen Thornton, *Demolishing Whitehall: Leslie Martin, Harold Wilson and the Architecture of White Heat* (Aldershot: Ashgate, 2013), pp. 147–214.
2. Leslie Martin, 'Conference on Architectural Education', *RIBA Journal*, June (1958), 279–82.
3. Uncatalogued Leslie Martin archive, RIBA Drawings Collection, London. Title: 'Architects + Research' in file 'Handwritten Lectures', Box 0041/3.
4. It is likely that Martin is referring to: John Summerson, *Heavenly Mansions and Other Essays on Architecture* (London: The Cresset Press, 1949), pp. 195–218. Thanks to Peter Carolin for this suggestion.

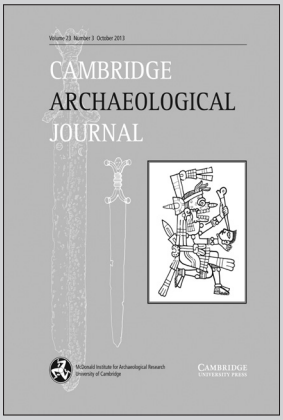
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