

# *Intentions, practices and aspirations: Understanding learning in design*

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*This paper is about learning in design and how can we measure this learning. The work reported here is based on a study of the actual practice of procurement, design and construction of a number of clients who repeatedly commission work of a similar nature. The paper sets out the background of a project entitled LEAF (Learning from Experience—Applying Feedback) which developed a generic model to assist organisations in understanding their situation. The discussion develops the LEAF evaluation model and explains its use describing all its parameters.*

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To what extent do organisations involved in design learn from their experiences and how does this learning take place? There are several reasons for asking this question. Design can be seen as an attempt simply to solve a local problem or to improve a particular situation. However the design world would argue that design is itself also a process of discovery, of learning and even a form of research. In fact previous designs form one of the most important sources of knowledge for designers who depend heavily on the re-use of ideas as part of their process<sup>1,2</sup>. Clients who repeatedly commission design expect learning to take place and designs to improve on previous attempts. But do clients and their designers learn as much as they might from design experience and what might be the obstacles to such learning? In recent years in the United Kingdom the Research Assessment Exercise conducted by the Higher Education Funding Council has had to come to terms with design as a form of research<sup>3</sup>. This has not been an easy process with some involved even arguing against the idea that design could or should be seen as a form of research<sup>4</sup>. However this is now generally accepted with the word ‘design’ appearing twice in

**1 Lawson, B R** ‘The context of mind’ in **P Lloyd and H Christiaans** (eds) *Designing in Context*, DUP Science, Delft (2001) pp 133–147

**2 Goldschmidt, G** ‘Creative architectural design: reference versus precedence’ *Journal of Architectural and Planning Research* Vol 15 (1998) 258–270

**3 Lawson, B** ‘Design as research’ *Architectural Research Quarterly* Vol 6 (2002) 109–114

**4 Yeomans, D** ‘Can design be called research?’ *Architectural Research Quarterly* Vol 1 (1995) 12–15



the HEFC extended definition of research as used in the most recent exercise in 2001.

So just how do we learn from design? This is a complex question and a disturbingly common answer seems to be that we often learn far less than we should. The work reported here is based on research into design processes in architecture carried out for clients who are frequent commissioners and procurers of relatively similar projects. It is by looking at such work that we might perhaps expect to discover most about learning from design experience.

## *I Design as Procedure*

There are many ways of viewing design. One view that has been popular in phases over the years is to see it as a sequence of activities. Many such maps of the design process were developed during a period of particular enthusiasm for such ideas some 30 years ago. Examples included industrial design<sup>5</sup>, engineering<sup>6</sup> and architecture<sup>7,8</sup>. At that time it was also common to talk of design *methods* and to publish recipe books of techniques that it was assumed could be fitted into this prescribed sequence of activities<sup>9,10</sup>. It was also about that time that in Britain the Royal Institute of British Architects (RIBA) started to publish its now famous map of design in stages, still in common use today.

Very little of this work was based on actual evidence. It was largely assumed that design would, or indeed must, proceed in more or less discrete phases moving from briefing, through analytical phases and synthetic phases to evaluation and presentation. It all seemed so sensible and logical! Indeed in the spirit of the times design was seen as a process that could and should be laid bare in the manner of the scientific method. Thus it could be open to inspection and argument with what we now call 'stakeholders' able to question and contribute.

Since then the literature in the Design Studies field has become noticeably more evidence based. Experimentation and investigation gradually began to take place<sup>11</sup>. Today we talk less of design *methods* and more of design *processes* and of design *thinking*. The problem-solving paradigm of design has been challenged by the paradigm of reflective practice championed by Schön.<sup>12</sup> One of the Delft Symposia demonstrated just how far this evidence based approach has developed with every contribution constituting a different analysis based on the same set of video design protocols<sup>13</sup>.

And yet we find a contemporary revival of the idea of design proceeding through identifiable and more or less discrete phases<sup>14,15</sup>. We now find

**5 Archer, L B** 'The structure of the design process' in **G Broadbent and A Ward** (eds) *Design Methods in Architecture*, Lund Humphries, London (1969) pp 76–102

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