

Building a Drawing and Drawing a Building

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This text works in two directions. First, looking outwards from the practice of architects, it recognizes that architecture is far more extensive than the work of architects. Second, looking inwards, it considers the connections between the architectural drawing and architectural design that underpin the status of the architect.

Looking Outwards

A number of mutually beneficial relations have formed between the architect and the state, one of the most cohesive being the Académie Royale d'Architecture founded in France in 1671, in which the architect performed the role of iconographer of the state's buildings and public spaces. The contemporary manifestation of the relationship between the architect and the state is the architectural profession. Professions acquired prominence in the nineteenth century due to the fluctuations of a rampant industrialized economy that was perceived to be veering close to catastrophe.

Capitalism requires the continual construction and destruction of objects, goods and ideas in the search for new markets. To the apparent benefit of practitioners, consumers and the state, organizations such as the professions are a response to the desire to contain and manage capitalism's excesses. The state offers legal protection, and a potential monopoly, to a profession in return for its safe management of an area of knowledge.

The industrial revolution created a vastly expanded market with many new practices and the subdivision of existing ones. In building production, design was increasingly separated from construction; by the 1830s the general contractor in the UK commonly assumed a number of roles previously undertaken by architects, such as the co-ordination of individual craftsmen. On one hand, the industrial revolution threatened existing architectural practice and, on the other, it offered architects the possibility of new status. Eliot Freidson writes: 'Gaining recognition as a "profession" was important to occupations not only because it was associated with traditional gentry status, but also because its

traditional connotations of disinterested dedication and learning legitimated the effort to gain protection from competition in the labour market.¹

To acquire the social status and financial security offered by the state, architects need a defined area of knowledge, with precise contents and limits, in which they can prove expertise. Consequently, architects are caught in a vicious circle. To further the idea that they alone make buildings and spaces that deserve the title architecture, they adopt practices, forms and materials already identified with the work of architects, and often learn little from other disciplines. Intellectual isolation and stagnation may be the unfortunate consequence of the desire to monopolize a practice. The practice of architects is yet to be influenced by ideas which have been so liberating in art, notably that an artwork can be made of anything and address any subject.

In the UK, and many other western industrialized countries, the term 'architect' is legally protected. Planning laws and building regulations monitor building production but, fortunately, the word 'architecture' has no legal protection.² There are now many architectures, all related to the varied experience of the user and interdependent with an understanding of the building and city. In addition to buildings, drawings and texts have for many years been considered important architectural objects. Onto these one can add films, landscapes, computer programmes and bodies at the very least. Architectural matter is not just traditional building fabric. It is whatever architecture is made of, whether words, bricks, blood cells, sounds or pixels.

In stating that architecture is far more than the work of architects, my intention is not to deny the importance of architects in the production of architecture but to see their role in more balanced terms and to acknowledge other architectural producers. Architecture can, for example, be found in the incisions of a surgeon, the instructions of a choreographer, or the movements of a user. Anyone wanting to produce architecture should discard the preconceived boundaries of the discipline and learn from architecture wherever it is found, whatever it is made of, whoever it is made by.

Architectural invention equal to that of architects can be found in the work of other architectural pro-

ducers. For example, in the late 1950s the artist Yves Klein, working with Werner Ruhnau, designed the Architecture of the Air. Locating all services underground, and transforming the climate above ground by means of air, fire and water, Klein proposed an ecologically conscious, but urban, architecture without physical boundaries that would enable its users to live comfortably in nature. Rather than the title architect being legal protected it should be given to any architectural producer who really deserves it.

Looking Inwards

In *The Production of Space* Henri Lefebvre argues that the practice of architects is but one component of the abstraction of space, which is fragmented into self-contained and narrow-minded specializations, each with its own specialist:

The dominant tendency fragments space and cuts it up into pieces. Specializations divide space among them and act upon its truncated parts, setting up mental barriers and practico-social frontiers. Thus architects are assigned architectural space as their (private) property, economists come into possession of economic space, geographers get their own 'place in the sun', and so on.³

Thus the space assigned to architects is 'the space of the dominant mode of production, and hence the space of capitalism'.⁴ Lefebvre argues that users are victims of the abstraction of space. Adrian Forty writes:

As far as Lefebvre was concerned, the category of the 'user' was a particular device by which modern societies, having deprived their members of the lived experience of space (by turning it into a mental abstraction) achieved the further irony of making the inhabitants of that space unable even to recognise themselves within it, by turning them into abstractions too.⁵

Referring to the abstraction of the user, Rob Imrie writes that architects commonly ignore bodily diversity because they conceive the body as a machine and, consequently, as passive. He notes that such a conception is not particular to architects. For example, it is equally evident in western science and medicine:

These conceptions of the body have their roots in the

post-Galilean view which conceives of the physical body as a machine and a subject of mechanical laws. The body, in this view, is little more than an object with fixed, measurable, parts; it is neutered and neutral, that is, without sex, gender, race, or physical difference. It is residual and subordinate to the mind, or that realm of existence that is characterised by what the body is not; such as, self, thought, and reason.⁶

Architects have a number of ways to consider space and users as abstractions, the principal one being the architectural drawing. Lefebvre writes:

Within the spatial practice of modern society, the architect ensconces himself in his own space. He has a representation of this space, one which is bound to graphic elements—to sheets of paper, plans, elevations, perspective views of façades, modules, and so on. This conceived space is thought by those who make use of it to be true, despite the fact—or perhaps because of the fact—that it is geometrical: because it is a medium of objects, an object in itself, and a locus of the objectification of plans. Its distant ancestor is the linear perspective developed as early as the Renaissance: a fixed observer, an immobile perceptual field, a stable visual world.⁷

The term design comes from the Italian *disegno*, meaning drawing. The history and status of the architect and architectural design are interwoven with those of the architectural drawing. The origins of the architectural drawing as an essential element of building production and the architect as a distinct figure, knowledgeable in the visual arts, independent of the building trades, and associated with intellectual rather than manual labour, lie in the Italian Renaissance. Forty writes:

In the new division of labour that took place in the fifteenth and sixteenth centuries, what above all set the new genus of architects apart from the building trades was their command of drawing; it both made possible the separation of their occupation from building, and because of drawing's connection with geometry in the newly discovered science of perspective, gave architecture a means to associate itself with abstract thought,

and thereby give it the status of intellectual, rather than manual labour.⁸

The Renaissance introduced the idea that architecture results not from the accumulated knowledge of a team of anonymous craftsman but the individual artistic creation of an architect. The architectural drawing established a new etiquette of communication between the various parties involved in architecture. To affirm their status as exponents of intellectual and artistic labour, architects began increasingly to theorize architecture in drawings and texts.

The architectural drawing depends upon two related but contradictory ideas. First, that it is a sign that architectural design is an intellectual, artistic process distinct from the grubby materialities of building and, second, that it is a truthful representation of a building, indicating the mastery of architects over building production. According to Robin Evans the architectural drawing's hegemony over the architectural object has never really been challenged, and is often unacknowledged.⁹ Architectural drawings offer a limited representation of use. Their primary purpose is to describe an object and, as they refer only to certain aspects of the physical world, they limit the types of object architects usually design.

Architects build drawings, models and texts. They do not build buildings. Architectural drawings are often discussed as if they are a truthful representation of a building. But all forms of representation omit as much as they include. The text, drawing, model and photograph are all partial, providing contradictory and elusive information. Transitional object is a term used in psychoanalysis. For a child this may, for example, be a teddy bear. Its role is positive and 'a defence against separation from the mother', to be discarded when no longer needed. If a child is unable to make this transition, the result can be, according to Elizabeth Wright: 'the fixed delusion which may turn the transitional object into that permanent security prop, the fetish, both in the Freudian sense (it disguises the actuality of lack) and in the Marxian sense (it functions as a commodity that supplies human want)'.¹⁰ Like a child who cannot discard a teddy bear, the architect who chooses not to recognize the differences between the spaces of

architects and users, and between the building and the representations of the building, fails to notice how they are similar and is unable to reach a level of mature self-awareness. To contradict Lefebvre, the architectural drawing does have a positive role, but only if these differences and similarities are acknowledged. The drawing can describe known conditions, highlight conditions to be found and transformed, and be a space in which to dream. It offers creative opportunities independent of the restrictions and compromises of building. A four-fold investigation of the architectural drawing is necessary. First, to consider how the drawing and building are similar and different. Second, to develop new ways to visualise the qualities of architecture excluded from the drawing. Third, if these cannot be drawn, to find other ways to describe and discuss them. Fourth, to focus on the architectural qualities of the drawing itself.

Traditionally an architectural drawing is a representation of a building, but a drawing can also be analogous to a building, sharing its characteristics. Some of the most innovative architectural developments have arisen not from speculation in building but through the translation of particular qualities of the drawing to the building. One important characteristic of the drawing is that it is less material than the building. The drawing's lack of material has influenced architects to attempt to build with an equal lack of material, to make architecture immaterial.¹¹ Architects are adept in the principal contemporary manifestation of the virtual—the computer—because they have been engaged with the virtual throughout their history. In the practice of architects there are two architectures—one associated with the drawing, the other with the building—each a reality. It is too simple, however, to align the building solely with the real and the drawing solely with the virtual. For architects, the drawing is as real as the building. First, because the architect makes the drawing but not the building, second, the architect has greater control over the drawing than the building, and, third, the architect makes the drawing before the building: it is often closer to his or her creative thought process. Again, I only consider this to be a problem if it is unrecognized. All practices need an articulate language

through which they can develop complex ideas.

The two principal alternatives of architectural drawing are drawing a building or building a drawing but great pleasure, and creative tension that has enormously stimulated architectural design, exists where they overlap, one feeding the other. A dialogue can exist between what is designed and how it is designed, between design intention and working medium. The selected 'drawing' medium is not just a means to represent, but a means to design, informing what is designed, and vice versa. If a building is to be made of artificial light, it can first be modelled in artificial light and drawn in photograms, so that the material of the building is also the material of the drawing. Similarly, a line drawing would make line architecture, not one of mass.

Lefebvre describes the user in two ways, as a negative abstraction, and as an appropriator attacking the functionalist domination and fragmentation of spatial practice.¹² He writes that 'The user's space is lived—not represented (or conceived). When compared with the abstract space of the experts (architects, urbanists, planners), the space of the everyday activities of users is a concrete one, which is to say subjective'.¹³ He states that, as architects' space is conceived, not lived, and just one space among many, architects have no authority over lived space and no means to engage issues of use, which appropriates buildings and spaces. However, the architect's experience of space, like the user's, can combine the objective and the subjective, the concrete and the conceptual. Conceiving the drawing as an analogue, instead of a representation, is a means to make the experience of the drawing a little more like that of the building and thus to consider the creative appropriations of the user.

As an activity knowingly distinct from, but related to, architectural practice and building production, architectural design is especially compatible with academic research. Forty states that in the sixteenth century design was attractive to architects because it allied them to intellectual labour rather than manual labour. He adds that the need to emphasize this connection became even greater because 'In the early part of the twentieth century, training was transferred almost

everywhere to the academy, to universities and to schools of architecture—a change that corresponds to that taking place in the majority of other occupations.¹⁴ Consequently, as evidence of the architect's status—artistic, intellectual and academic—the architectural drawing acquired a role even more important than before.

Although the education of architects now regularly occurs in universities, very few architecture schools offer an architectural design doctorate. Architectural design is either considered inappropriate to academic research because it is subjective or it is made to conform to one of the two principal research models accepted in universities: history and science. The authority of academic research is based on the assumption, or myth, that its methods are rigorous, consistent, transparent and objective.

In 'Building an Architect', Mark Cousins describes architecture as a 'weak' discipline because its contents and boundaries are confused. In contrast, he writes that a 'strong' discipline has a clearly defined interior and a precise boundary.¹⁵ Cousins distinguishes a strong discipline, such as one of the natural sciences, which is purely concerned with objects, from a weak discipline, such as architecture, in which the effect of an object on a subject is of fundamental importance. In a weak discipline, the design and experience of an object are subjective and irreducible to rational analysis alone.



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concentrate on the application of scientific research methods to architectural design but an important question is what can design bring to architectural research? The most positive characteristic of architectural design is its ability to combine intuitive and rational thought, and ideas from a number of disciplines, in a manner comparable to the most innovative and experimental research in universities.

Characteristic of architectural discourse is the profusion of monographs on individual architects but paucity of books that consider the underlying issues of architectural discourse and practice. Academic research offers architects a space to speculate as designers and to develop a deeper and more thoughtful understanding of their practice and discourse. Many of the most noted architectural developments of the last hundred years began in university architecture departments, mirroring the disengagement from everyday building processes that is, at certain times, a creative and necessary characteristic of architectural practice.

Conclusion

Learning from architecture made by non-architects, architects can expand the ways in which they think, design and work. Reassessing the crucial influence of the architectural drawing on their practice, architects can recognize that drawing a building and building a drawing are compatible activities that may occur in sequence or together. Similarly, to acquire a more knowing and inventive practice, architects must look outwards and inwards.

Notes

11. Eliot Freidson, 'The Theory of Professions: State of the Art', in Robert Dingwall and Philip Lewis (eds.), *The Sociology of the Professions: Lawyers, Doctors and Others*, London: Macmillan Press, 1983, p. 24.
2. The practice of architecture is not protected in the UK, unlike in some countries.
3. Henri Lefebvre, *The Production of Space*, trans. Donald Nicholson-Smith, Oxford: Blackwell, 1991, p. 89.
4. Lefebvre, p. 360.
5. Adrian Forty, 'User', 1998, p. 2, referring to Lefebvre, p. 93. 'User' is a draft chapter for Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, London: Thames and Hudson, 2000.
6. Rob Imrie, 'Architects' Conceptions of the Human Body', p. 3. Draft for *Society and Space*, forthcoming.
7. Lefebvre, p. 361.
8. Forty, *Words and Buildings*, p. 30.
9. Robin Evans, *Translations from Drawing to Building and Other Essays*, London: Architectural Association, 1997, p.156.
10. Elizabeth Wright, *Psychoanalytic Criticism: Theory in Practice*, London: Routledge, 1984, p. 93.
11. The traditional hierarchy in western discourse of idea over matter is another reason.
12. Lefebvre, p. 369.
13. Lefebvre, p. 362.
14. Forty, *Words and Building*, pp. 137–138.
15. Mark Cousins, 'Building an Architect', in Jonathan Hill (ed.), *Occupying Architecture: Between the Architect and the User*, London and New York: Routledge, 1998, pp. 13–22.

