

## A Black Box

### The Secret Profession of Architecture

The difference between Wren and Hawksmoor, I have finally decided, is that Hawksmoor was an architect and Wren was not. This judgment may seem foolhardy, but it is not deliberately perverse. It has been forced on me by some months of visiting the Lloyd's building *chantier*, which gave me a chance to revisit St Paul's and sundry City churches I had not seen since student days. And it struck me that even when Wren was being as clever as he was in widening the central bay in each arcade at St Mary-le-Bow, or as inventive as he was in the upper parts of St Stephen Walbrook, he still was not doing whatever it was that Hawksmoor had done to make great architecture out of as humdrum a concept as the interior of St Mary Woolnoth.

The distinction I am making is not between different temperaments or levels of creative genius, but between fundamental modes of designing. Nor are the consequences of the architectural mode necessarily beautiful. Some pretty ugly stuff happens in the lantern of the mausoleum of the Dulwich Art Gallery, for instance, yet the result leaves us in no doubt that Sir John Soane was an absolute architect.

Whatever this mode, attitude or presence may be, one can recognise it—in the bot-

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tom of Philip Johnson's AT&T building, for example, but not in its middle or its top, nor in most other works of programmatic postmodernism. Its absence from Charles Jenck's own house in London, in spite of all its erudition *about* architecture, seems to confirm what the recent work of Robert Stern (but not, I think, of Robert Venturi) had been strongly suggesting. That reliance on erudition alone leaves postmodernism in the same relation to architecture as female impersonation to femininity. It is not architecture, but building in drag.

I propose to treat the architectural mode or presence as a classic "black box", recognised by its output though unknown in its contents. It is not to be mistaken for "good design", since architecture is often conspicuously present—in the work of Lutyens for instance—in buildings that are pretty dumb designs from other points of view. To separate architecture from good design in this way may unsettle those who do not question the mythologies by which architecture has operated for some six centuries now, but it does not imply that the two are incompatible; simply that one can have either without the other.

The situation has been much muddled by the tendency of the modern movement, since the time of William Morris, to gather up all decent buildings into the rubric of "architecture". This was a warm, friendly and egalitarian thing to do, but it must now seem as historically crude and as perniciously confusing as Nikolaus Pevsner's proposition that Lincoln Cathedral is architecture and a bicycle shed is not. The distinction was made on the basis that Lincoln Cathedral had aesthetic pretensions and bike sheds don't.

This was not only a piece of academic snobbery that can only offend a committed cyclist like myself, but also involves a supposition about sheds that is so sweeping as to be almost racist. How can he know that any particular bicycle shed, or even the whole typology of "bicycle shed" in general, was conceived without aesthetic intention? What one can know by practised observation, however (and what Pevsner may even have meant), is that cathedrals (including ugly ones) are generally designed *modo architectorum*, and bicycle sheds (even handsome ones) are more commonly done in one of the numerous other modes of designing buildings available.

Such is the cultural prestige of the purely architectural mode, however, within the protected area of "western civilisation", that most of us get brainwashed into believing that it is synonymous with "good design" or even "the design of buildings". The modern movement has done itself little good in promoting this muddle, because it thereby undermines one of its own most useful polemical devices. For, in spite of this inclusivist approach, there has been a long tradition—from before Adolf Loos to after Cedric Price—of using comparisons with certifiably non-architectural objects, from peasant crafts to advanced electronics, to reveal how bad regular architectural designing had become. Quite a lot of these paragons were indeed buildings, and good ones at that, but once they, in their turn, had become incorporated into the architectural canon, they lost their critical power and left the body of architecture confused rather than reformed.

Let us then re-divorce what should never have been joined together in this opportunistic marriage-of-convenience. Throw out all the Zulu kraals, grain-elevators, hogans, lunar excursion modules, cruck-houses, Farman biplanes and so forth, and look again at "this thing called architecture" in its own right, as one of a number of thinkable modes of design which, for some reason, has come to occupy a position of cultural privilege in relation to the construction industry.

What then would distinguish the products of this black box from those of other thinkable modes? Functional or environmental performance? Beauty of form or deftness of space? Truth to materials or structural efficiency? These are all qualities for which the architectural profession habitually congratulates itself, but a Buckminster Fuller dome or an Eskimo igloo can usually beat architecture on all six counts, and so can a lot of other buildings, ships, air liners, inflatables and animal lairs. So why do we not admit that what distinguishes architecture is not *what* is done—since, on their good days, all the world and his wife can apparently do it better—but *how* it is done.

We can distinguish that "how" in two crucial ways in the actual behaviour of architects as they perform their allotted tasks as building designers. The first is that architects—almost uniquely among modern design professionals—propose to assume responsibility for all of those six aspects of good building set out above, and to be legally answerable to the client for their proper delivery. Other professions (such as electrical and mechanical engineering) notoriously avoid such overall responsibilities, preferring to remain at one remove from the wrath of clients as "consultants"; hired guns who, like minor war criminals, "were only carrying out orders". Or, to be less offensive to engineers, a body of men who are too prone to say, for instance, "You design your concert hall any old shape you like, and I'll try and sort out the acoustics," rather than "That's a stupid shape for a concert hall, this will work a lot better."

However, this willingness to assume responsibility is only what makes architects a noble profession. It is not what makes them architects, as Lethaby seems to have perceived in his arguments against professionalisation at the beginning of the century. What makes them architects, and recognisable as such, is usually easiest to demonstrate anecdotally, beginning with that oft-repeated story of the architect who, when asked for a pencil that could be used to tighten the tourniquet on the limb of a person bleeding to death in the street, carefully enquired "Will a 2B do?"

The point of such stories is that they unconsciously reveal not only the fundamental value-system on which architects operate, but the narrowness of that system, and the unspoken—or unspeakable—assumptions on which it rests. The more revealing of these stories tend to originate from that crucial attitude-forming situation, the design crit in the architectural school studio.

In a telling example from my own experience, I once found myself defending point by point a student design for a penthouse apartment that had been failed by my academic colleagues. I secured their agreement that it fulfilled all the requirements of the programme, was convenient in its spatial dispositions, well lit, buildable on the roof-

structure in question and that all this could be seen in the drawing pinned up for judgment. But the drawing was scratchily done in ball-point on one sheet of what appeared to be institutional toilet paper; an "insult to architecture", the year master announced, thus making it clear that, for him, the effective design of buildings was apparently something other than "architecture".

One could easily multiply such instances where, it seems, some secret value system applies, often at variance with the verbal expressions used in explanation. Everyone around architecture schools knows students who are convinced (rightly, in about one case in five) that they have been failed "because I don't draw in the right style", in spite of faculty assurances to the contrary. And most of us can remember crits that finished with the pronouncement, "Sorry. . . . It's very clever/beautiful/sensitive, but it isn't architecture, you know!"

These instances are no less weighty for being "only about school". That is where architects are socialised into the profession (as the great Jane Abercrombie used to phrase it) and they acquire attitudes, work-habits and values that will stay with them for life. Their persistence is neatly shown in the current modes of "engineering" high-tech buildings: the types of visible structures preferred by architects and the ways in which they detail them, neither of which would ever occur to engineers left to their own devices as "problem solvers". Admittedly, there are structural engineers like Peter Rice and Tony Hunt, who seem to glory in their complicity in architects' scheming; and the doyen of the profession in Britain at the moment, Frank Newby, did say to me recently that if architects want to "indulge in this kind of structural exhibitionism, then I can help them!"

The key phrase there is *this kind*. Engineers also enjoy structural exhibitionism, but architects have their own version, both in the choice and organisation of the larger forms and—even more intensely—in the marshalling and profiling of the smaller ones. The Lloyd's building, to pick an obvious instance—but Norman Foster's Renault Centre or Hopkins's Schlumberger labs at Cambridge would serve equally well—exhibits preferences and scruples, not to say obsessions, that one does not commonly find in regular engineering design. Compare forms and details of the structure of the Pompidou Centre with what it is so often jokingly compared with—an oil refinery—and you will see that there is *no* comparison, except at the level of a joke. There is, above all, a kind of pickiness over details that shows up in regular engineering only when a total stranger wanders in from another field, as did Henry Royce or Ettore Bugatti in the early days of the automobile.

For the sources of these differences of professional behaviour, one need look no further than the place where architects are socialised into their profession, the studio. Anthropologists have been known to compare the teaching studio to a tribal long-house; the place and the rituals pursued there are almost unique in the annals of western education. One of the things that sustains this uniqueness is the frequency with which students are discouraged from pursuing modes of design that come from



outside the studio. Usually, the discouragement need be no more than veiled or oblique, but when schools were under radical pressure in the early seventies, many students will have heard something which I personally heard at that time, the blunt directive: "Don't bother with all that environmental stuff, just get on with the architecture!"

How does one "get on with the architecture", forsaking all other modes? What is it, in other words, that architects uniquely do? The answer, alas, is that they do "architecture", and we are thus back at the black box with which we began. But we have recently been vouchsafed an accidental view of what the contents of that black box might be, because of an interesting story that has emerged from recent writing by, and about, Christopher Alexander and his "timeless way of building". Looking back on the early days of his "pattern language", he revealed one of its apparent failures to his biographer, Stephen Grabow:

Bootleg copies of the pattern language were floating up and down the west coast, and people would come and show me the projects they had done, and I began to be more and more amazed that, although it worked, all these projects looked like any other buildings of our time . . . still belonged perfectly within the canons of mid-century architecture.

Now, if one hoped that the pattern language would be a revolutionary way of designing buildings, a new paradigm in architecture comparable with the Copernican revolution in cosmology, then clearly the project had failed and further research was indeed needed. But, in another light, the failure of the pattern language to change the nature of architectural design could be seen as something of a triumph: an unwitting first-approximation description of what architects actually do when they do architecture. It certainly does not tally with what architects normally claim that they do (explicit and implicit procedures are at variance in many professions), but it may still provide at least an analogy with the mental sets that students subliminally acquire in the studio long-house.

The heart of Alexander's matter is the concept of a "pattern", which is a sort of package of ideas and forms which can be subsumed under a label as commonplace as "comfortable window-seat" or "threshold" or "light on two sides of a room", or as abstract as "intimacy gradient". Such a labelled pattern contains not only the knowledge of the form and how to make it, but "there is an imperative aspect to the pattern . . . it is desirable pattern . . . [the architect] must create this pattern in order to maintain a stable and healthy world."

In other words, each such pattern will have moral force, will be the only right way of doing that particular piece of designing—at least in the eyes of those who have been correctly socialised into the profession. I seem to hear an echo here of Ernesto Rogers claiming long ago: "There is no such thing as bad architecture; only good architecture and non-architecture." And in general, as an outsider who was never socialised in the tribal long-house, it seems to me that Alexander's patterns are very like the kind of

packages in which architects can often be seen to be doing their thinking, particularly at the sort of second sketch stage when they are re-using some of what was sketched out in the first version.

Such patterns—perhaps even a finite set of patterns—and their imperatives seem to be shared by all architects, and are, in some sense, what we recognise in Hawksmoor and do not find in Wren. This is not to say that Alexander's accidental revelation exhausts the topic. Far from it; for a start, it is still much too crude to explain anything really subtle. Being cast in a prescriptive, rather than descriptive, format, it avoids such questions as how such patterns are formed, and where, and cannot support the kind of anthropological investigation that has revealed the workings of other secret cultures to us in the past. It cannot yet open the black box, but it can give hints about the contents.

While we await their eventual revelation, what are we to make of architecture? No longer seen as the mother of the arts, or the dominant mode of rational design, it appears as the exercise of an arcane and privileged aesthetic code. We could, perhaps, treat it as one of the humanities, trivial or quadrivial, since its traditions are of the same antiquity and classicist derivation as the others (it even has a part share in a muse, Melpomene). We could stop pretending that it is "a blend of art and science", but is a discipline in its own right that happens to overlap some of the territory of painting, sculpture, statics, acoustics and so on. And we could halt the vulgar cultural imperialism that leads the writers of general histories of architecture to co-opt absolutely everything built upon the earth's crust into their subject matter.

To do so is to try to cram the world's wonderful variety of building arts into the procrustean mould of a set of rules of thumb derived from, and entirely proper to, the building arts of the Mediterranean basin alone, and whose master-discipline, design, is simply *disegno*, a style of draughtsmanship once practised only in central Italy. I am increasingly doubtful that the timber buildings of northern Europe, for instance, or the triumphs of Gothic construction, really belong under the rubric of architecture at all. Le Corbusier felt that Gothic cathedrals were "not very beautiful", not architecture even, because they were not made of the pure geometrical forms that he found in the buildings of classical Greece and imperial Rome. Current misgivings about high-tech, with its exposed structures and services, seem to derive from a similar classicist sentiment: that architecture is from masonry, held together by gravity, and its volumes effectively closed.

Recognising the very straitened boundaries of architecture as an academically teachable subject, we might deceive and confuse ourselves less if we stopped trying to cram the whole globe into its intellectual portfolio. We could recognise that the history of architecture is no more, but emphatically no less, than what we used to believe it was: the progression of those styles and monuments of the European mainstream, from Stonehenge to the Staatsgalerie, that define the modest building art that is ours alone.

We might then have a better view of the true value and splendours of the building arts and design methods of other cultures, avoiding the kind of sentimentality with which Charles Eames, for instance, sugar-coated the design arts of the Orient. We might also be more securely placed to study the mysteries of our own building art, beginning with the persistence of drawing—*disegno*—as a kind of meta-pattern that subsumes all other patterns and shelters them from rational scrutiny. Even before architectural drawings achieved the kind of commercial value they can claim nowadays, they had such crucial value for architects that being unable to think without drawing became the true mark of one fully socialised into the profession of architecture.

Recall the alarm, disguised as contempt, that greeted Michael Keyte's claim in the early sixties that, with the CLASP system, one could design buildings without making drawings at all, just a typewritten schedule of components and procedures. If that sounds suspiciously like a computer programme, let us acknowledge that Keyte was only anticipating the probably fatal blow that computer-aided design may have dealt the mystique of drawing, and thus to architecture too. Not by mechanising the act of drawing itself, but by rendering it unnecessary. Computers can indeed make drawings, copy them, and turn them in and out of perspective or isometric, and—most crucially—they can remember drawings. But they do not remember them in imagery that the eye can read.

Rather, they remember them in the usual bytes of bits of binary information that is the common content of all computer memories. And that kind of information can be punched in and out of the memory by means of an ordinary alphanumeric keyboard, without any draughtsmanship at all. And if draughtsmanship thus becomes unnecessary even for the making of drawings, then to persist in the act of drawing and in setting store by that act, becomes either an act of cultural defiance—"resistance" in the self-righteous cant of New York academe represented by Kenneth Frampton—or a conscious submission to the unspoken codes of a secret society.

To a certain kind of old-timer, this could be good news: confirmation that they were right all along and that we should have stuck to the orders and the theory of composition and ignored all that technology and modern stuff. To other interests, however, such as those of the rest of a world increasingly desperate for better buildings and a more habitable environment, architecture's proud but unadmitted acceptance of this parochial rule book can only seem a crippling limitation on building's power to serve humanity.

If architecture could "to its own self be true", accepting that it is not the whole art of building everywhere, but just the making of drawings for buildings in the manner practised in Europe since the Renaissance, it could be recognised as something that belongs as valuably at the heart of western culture as do the Latin language, Christian liturgy, Magna Carta or—precisely—the Masonic mysteries of *Die Zauberflöte*. And it could then get out of some of its more egregious perceptual and intellectual muddles, like those over Christopher Wren and Mies van der Rohe.

Wren could be seen as a master-builder of talent bordering on genius who tried to teach himself architecture out of books, like a postmodernist, but never gained entry to the inner *sancta* of its art or mystery. The west front of St Paul's remains the finest piece of urban scenography that a rational mind could have placed at the top of narrow old Ludgate Hill, but please don't call it architecture.

Mies, on the other hand, could be recognised as a true insider of the *arcana* of architecture, whose achievement has been largely obscured by the rhetoric of pure rationality that has come from his followers and explainers. Indeed, he is a very good case in counterpoint to Wren, an absolute architect whose building was so open to rational explanation that few noticed that these explanations had almost nothing to say about his architecture—until various good grey men had to try to explain his architecture in public at the planning inquiry into the proposed Mansion House Square development.

The egg left on the face of the modernist establishment by that enquiry does not mean that it is necessarily impossible to find language to discuss what is currently ineffable, but valuable, in the work of Mies and in the subculture of architecture in general. Not only have Christopher Alexander's confused gropings suggested one possible conceptual basis for deeper enquiry, but the bafflement of the general public in the face of the behaviour of architects might provoke some psychologist or anthropologist to try to break through the glass wall of inscrutability that surrounds the topic. Anthropologists have already gone a long way in penetrating the inner workings of societies far more remote than the tribe of architecture.

But the tribe would almost certainly have to resist the intrusion on its privacy if it were to preserve its integrity as a social grouping. It might well decide to defend the contents of the black box at whatever cost, as if it were the ark of its covenant. What else could architects do? The threat of ultimate revelation, of demystification or even deconstruction, would surely deliver architecture to yet another of the seemingly endless series of crossroads of decision that have confronted it since the first quarrel of the Ancients and the Moderns.

It could permit itself to be opened up to the understandings of the profane and the vulgar, at the risk of destroying itself as an art in the process. Or it could close ranks and continue as a conspiracy of secrecy, immune from scrutiny, but perpetually open to the suspicion, among the general public, that there may be nothing at all inside the black box except a mystery for its own sake.