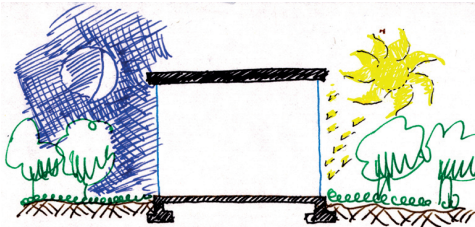


The Eleventh  
Lecture.

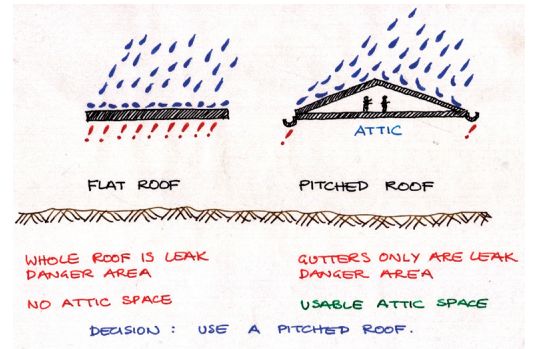
*Which Cargo?*





GLASS WALLS ARE HOT IN DAYTIME  
 " " " " COLD AT NIGHT-TIME  
 " " " " HOT IN THE SUMMER  
 " " " " COLD IN THE WINTER  
 DECISION : NO GLASS WALLS

I asked 'Which?', during the early briefings, "why they had come to JOA". The reply was one that we came to recognise as by no means unique. "Our work may be that of testing 'white goods'", They replied, "but this does not mean that we want to live in one".

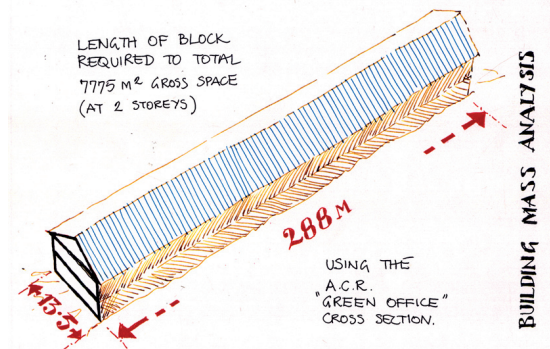
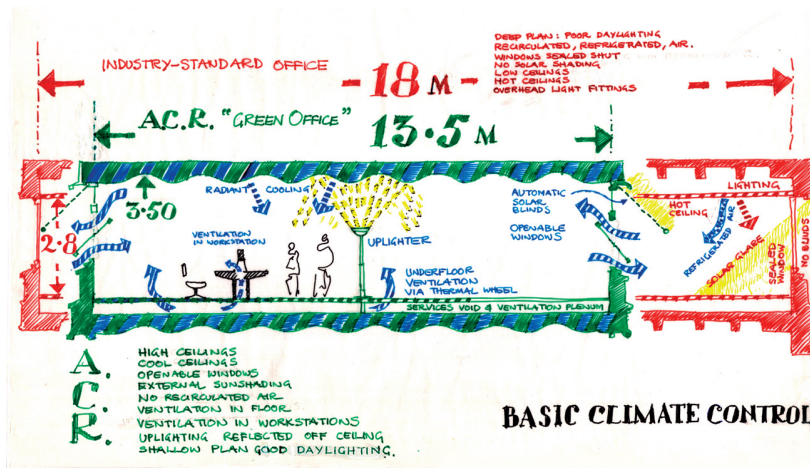


The Board of Which may have protested that they "did not wish to live in a Machine", but my instinct was to begin with a mechanical presentation of our response to their instructions.

The reply may go some way to explaining why JOA have often found it more congenial to work with Clients who are Engineers rather than those who are Humanists. It is easier to find a literate Engineer than a mechanically-

The avoidance of pitched roofs, and especially gutters, is a formal imperative pursued by those who treat Modernity as a mere 'style'. It is not only, as are glass walls, a passport to a happy and prosperous iconic illiteracy, but an invitation to leaks..

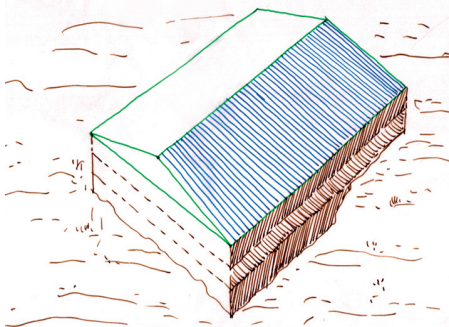
sophisticated Humanist. The control of the financing of building by mechanically-innocent lawyers and politicians goes some way towards explaining why Modern Architecture degenerated, over the 20C, into the rotation of 'styles' that were, as even



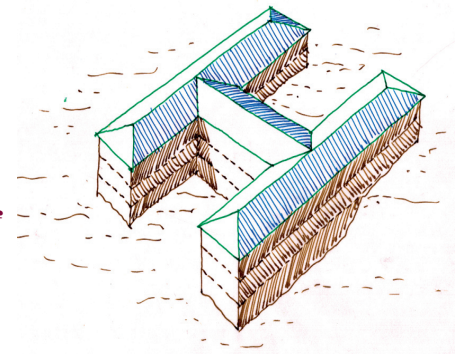
This block became 288 metres long if it was to accommodate all of the floorspace proposed for the new Which? headquarters.

The next decision was to shrink the width of the new building down from the 18 metres customary for commercial administrative blocks to the 13.5 metres needed for good daylighting in its centre.

My own ambition, at this time, in 1988, in opposition to the 'literate' trivialities of 'style', was to invent a steel-hard architecture whose rationality was founded on the scientific truth of what a human was. For only then, I believed, would it have the rock-like stability and strength to publish what we needed in order to be human - our thoughts.



So one may describe the early design of the Which? H.Q. as an exercise in rational somnambulism. I just wanted it to be everything that it ought to be. The time to add the limitless fancies of the imagination should come later, when its body had met the demands of reason.



The letter 'H' is the most rational shape for a narrow building that sought daylight and fresh air on a small building-plot.

My experience building warehouses for £11/sq.ft (£110/sq.M) had proved that the cheapest buildings were deep, pitched-roofed, sheds.

So we began with the purely physical decisions concerning its daylight, energy, constructive economy and then the circulation of its 'citizens'.



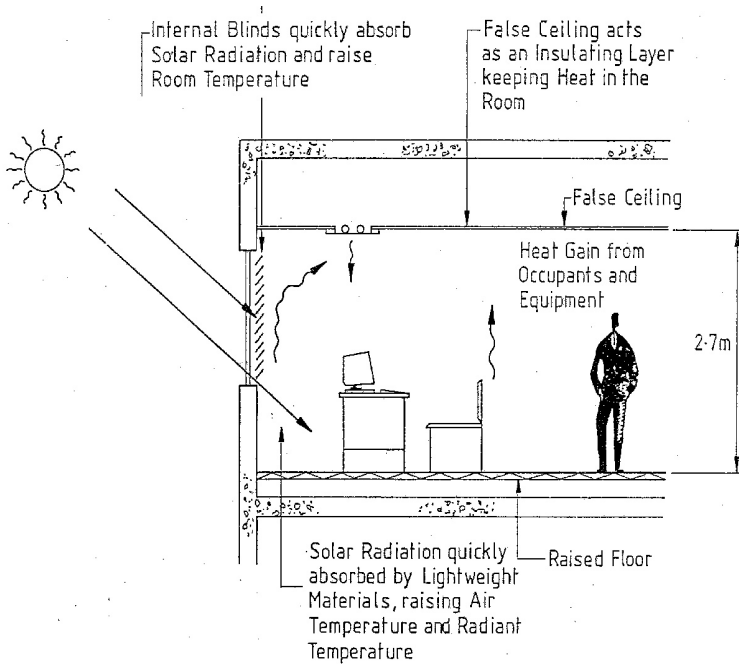


Fig.1. THE CONVENTIONAL OFFICE

Troup, Bywaters & Anders, our Mechanical Engineering Consultants called this 'bad old' office design the "Polystyrene Sandwich". The 'false'-ceiling which hid all the necessary pipes and wires brought the hot air down to head level. It also prevented this warmer layer of air from being cooled by touching the heaviest part of the building. The lightweight aluminium venetian blinds reduce sunlight and allow computer screens to be seen. But by being on the inside, they allow light to pass through the glass, whereupon the same glass traps heat inside the room.

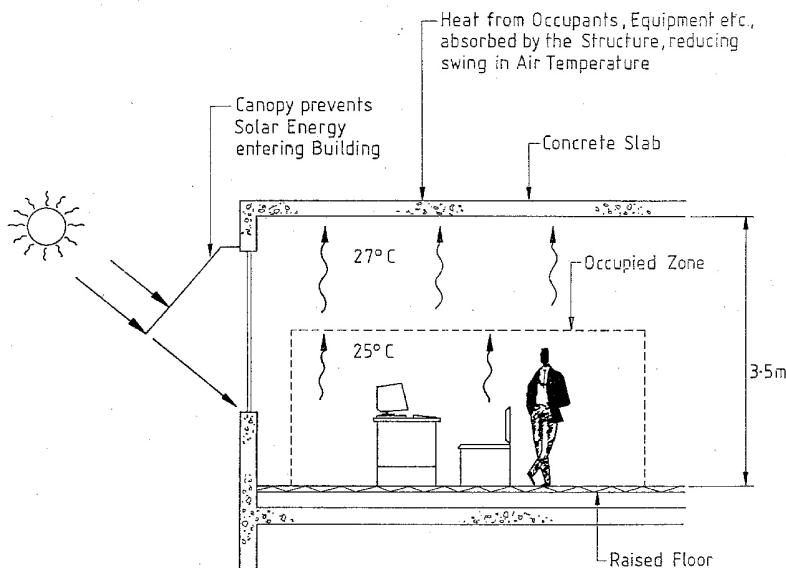
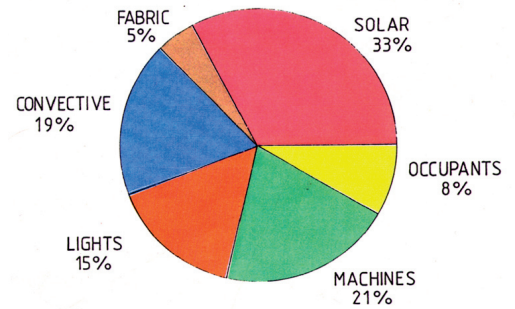


Fig. 2. THE 'WHICH' OFFICE

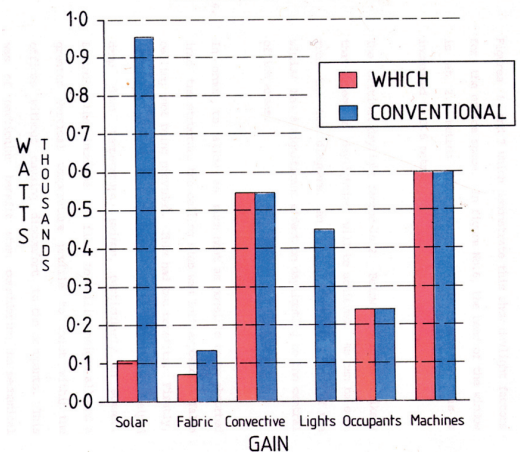
Raising the ceiling from 2.9M to 3.5M clear divided the air in the room into cool at the workplace and warm above the head. This warm air could then be cooled by touching the exposed underside of the concrete slab. Having external 'suntracker' Butcher's Blinds, as we had prototyped at Harp, gives a clear view while stopping the sun's energy before it gets into the building. Running pipes and wires under a raised floor allows fresh air to be pumped through it all night, when the outside air is cooler, in order to cool the floor below ready for the heat-load coming from the next working-day.

HEAT GAIN ANALYSIS  
THE CONVENTIONAL OFFICE



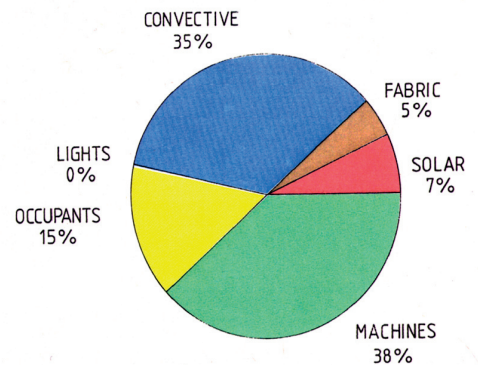
33% of the daily heating-up of an over-glazed, low floor-to-floor Post-WWII office slab-block came from the sun. Another 15% came from the 1000-lux overall light intensity expected from fluorescent-tubed dropped ceilings.

HEAT GAIN COMPARISON  
TYPICAL OFFICE MODULE

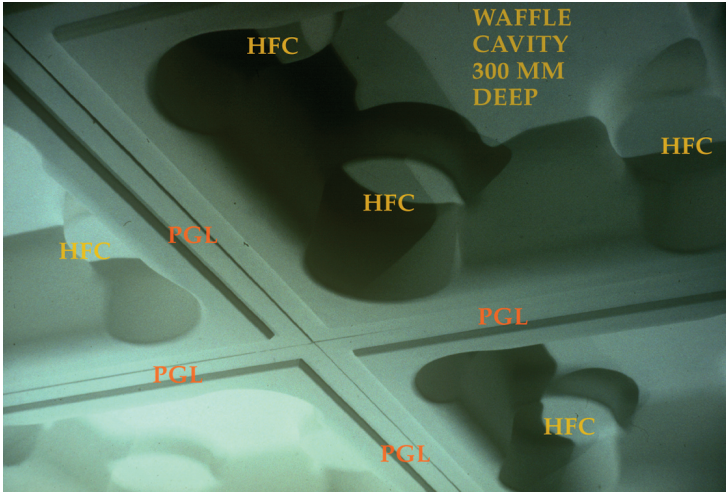


This simple chart from TBA confirms the reduction in heat coming into the space from the sun and the lights.

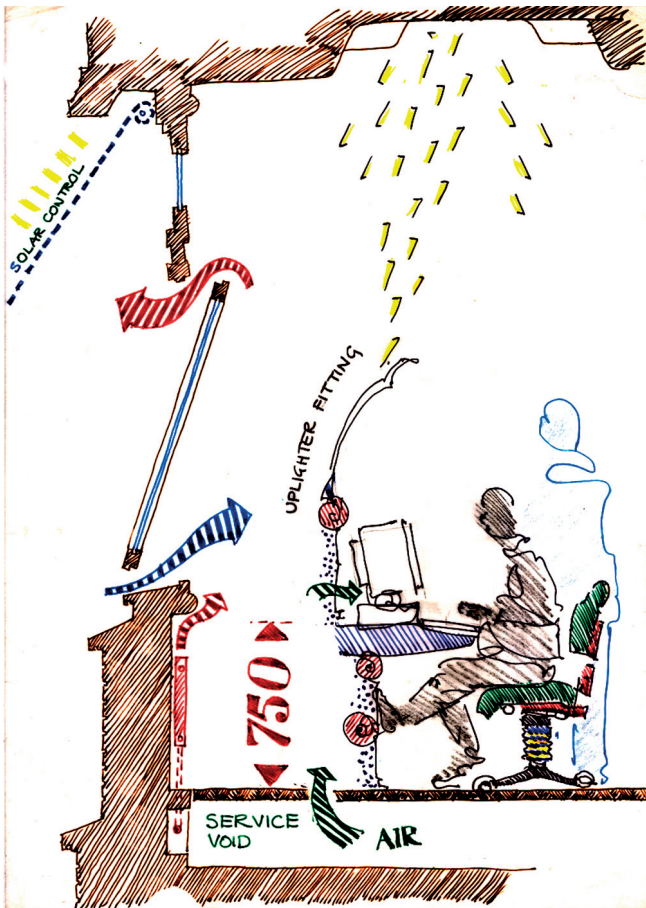
HEAT GAIN ANALYSIS  
THE WHICH OFFICE



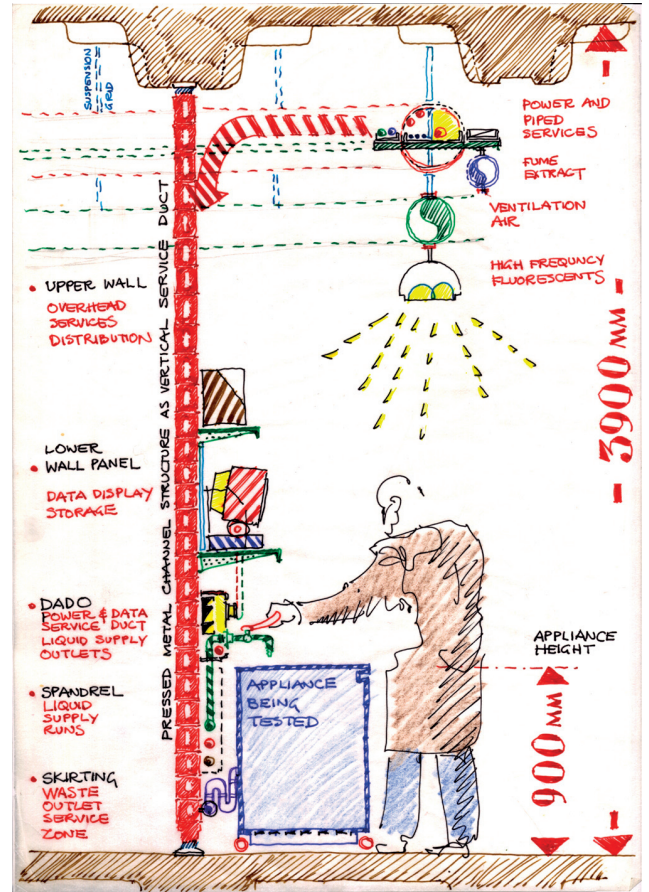
The heat-energy from our design reduced the inputs from lighting to essentially zero, and by 4/5's from the sun. Most of the heat was now going to come off the electronic machinery that replaced the neat armies of typists and filing-clerks.



The full-size mock-up of the 'waffle-slab floor shows it to be rather more clever than the standard sort. Firstly it is bigger, being on the 1.5M module of the facade-'Order'. This allowed the tidy placing of partitions that fitted-up into the recessed centre-groove. Secondly, the four corners were made thicker. This was to take the bolts, drilled into the concrete, that were needed to hang-up testing equipment. Thirdly, the more complex shape gave some increased sound absorption - always the bane of whatever open-plan rooms were wanted by the 'Editorials' at Which.



The Determining Drawing for the Editorial Rooms. All work-lighting would be 500 Lux 'task' desk-lights. The 'uplighters would be low-power, and only for 'effect'. The windows would be openable and the heating by water-filled under-window radiators. This 'domestic level of heating allowed individual occupants to vary their climate - which they all desired.



The Determining Drawing of the Laboratories. There is neither false floor or false ceiling. Everything must be securely fixed to concrete. The floors must be capable of being flooded and drained, via side-inlet flat-roof outlets, into the peripheral 6th Order Working-Columns. Note how walls are fixed on the beam centre-lines, and machinery suspended from the thicker corners of the waffle-recesses.

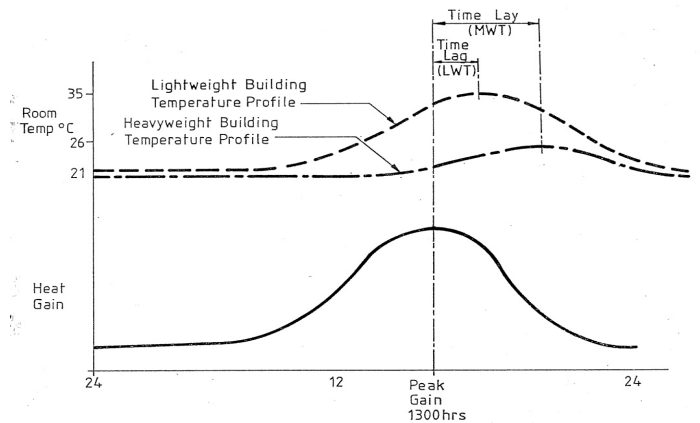
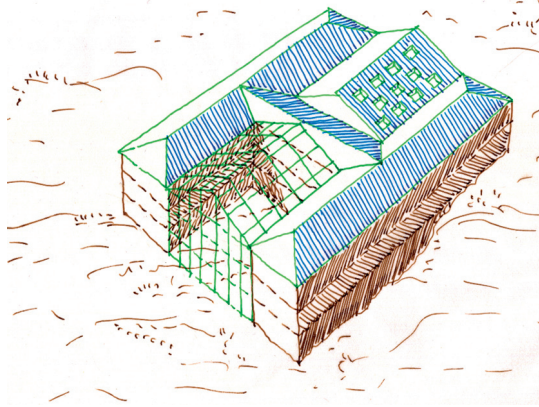


Fig.3. SUMMERTIME HEAT GAIN / TEMPERATURE PROFILE

The lowest line describes the build-up of heat outside the building. The middle line describes how the design-improvements in the Which? Model flatten this build-up until it is no longer a problem. The highest line explains how so many Post WWII office environments become uncomfortably hot in the afternoon. All of these lightly-built, over-glazed and internally-shaded slab-blocks had to be air-conditioned. Which did not.

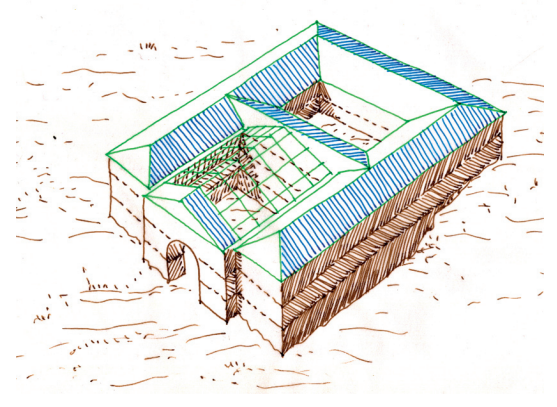




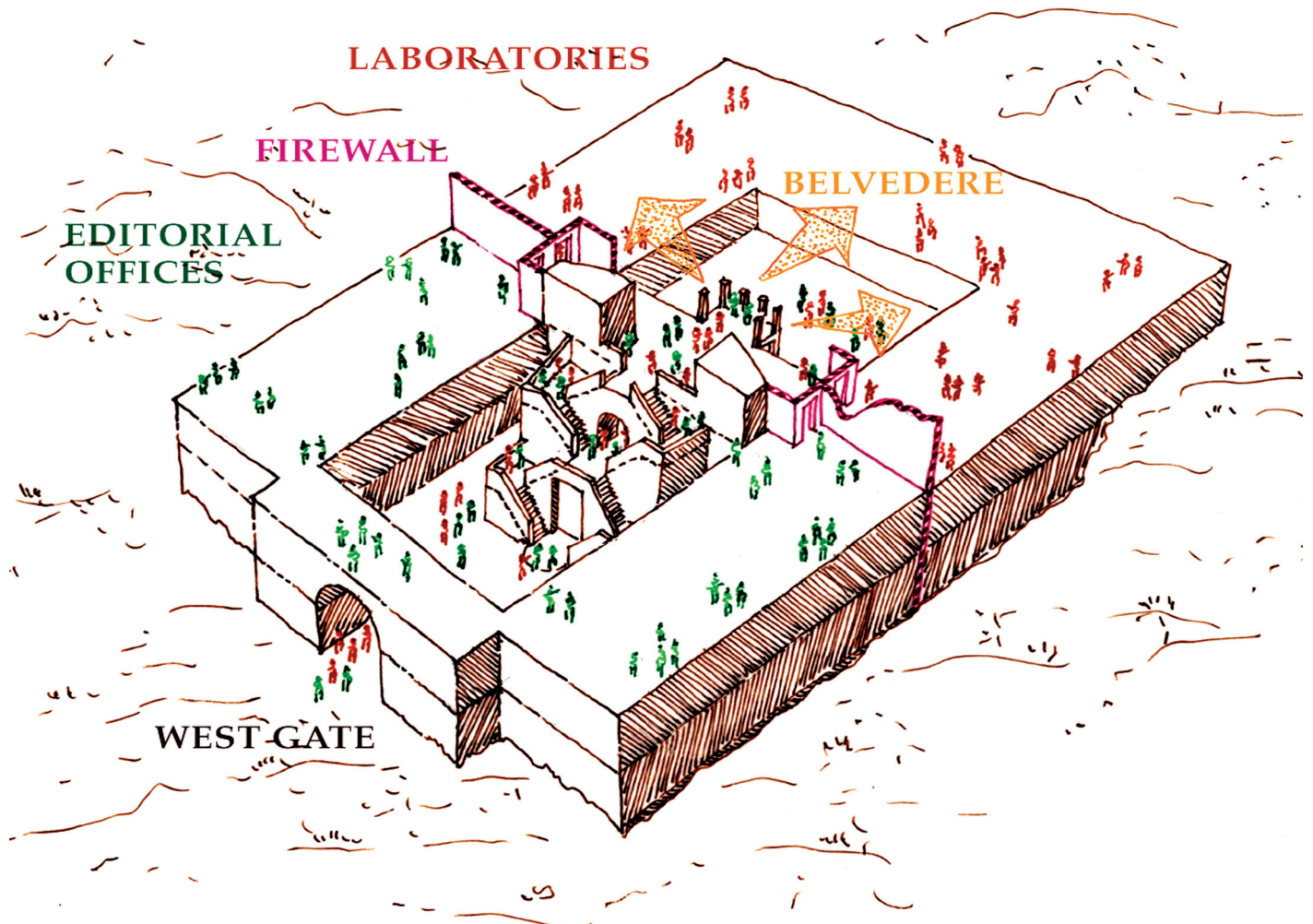
The 'Citizens' of this 'Republic of the Valley' were of two basic sorts - **Communicators** who wrote the **Which? Journal**, and **Engineers** who tested and analysed the consumer durables.

This original ambition extended, in later years, to a far wider spectrum of consumer's concerns embracing, amongst others, **finance, the law, nutrition, computers, and so on.** the list continues to extend.

Conscious of our cold, damp and windy climate, I proposed enclosing the two open-end courtyard. The covered court would serve to unload trucks and provide for the testing of large or dangerous assemblies.

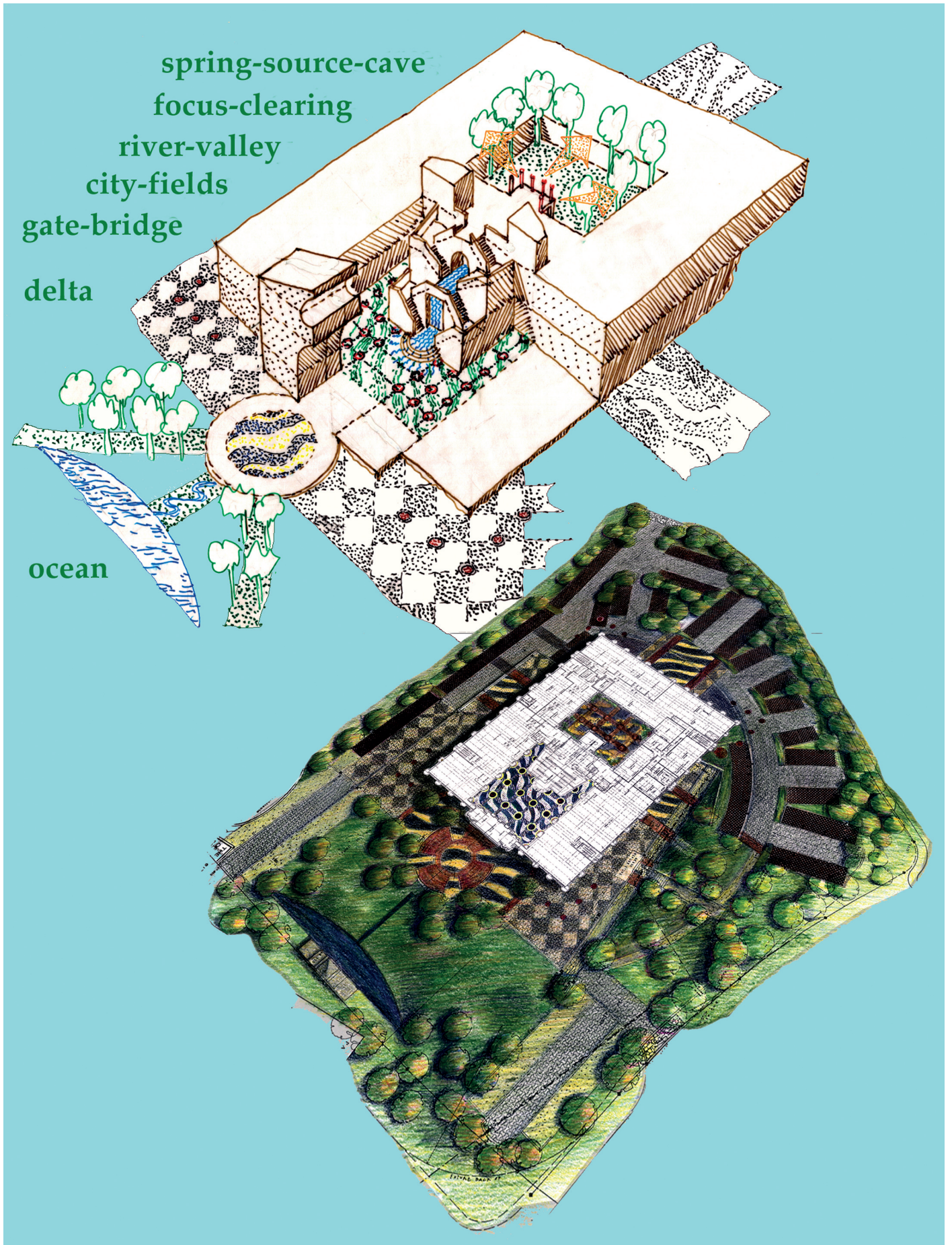


The final decision was to entirely surround the Eastern courtyard but leave it open to the sky. The Western Court would remain glazed but be given a solid entrance so as to shield it from the low Evening sun - as well as make a 'gateway' seen from speeding autos.



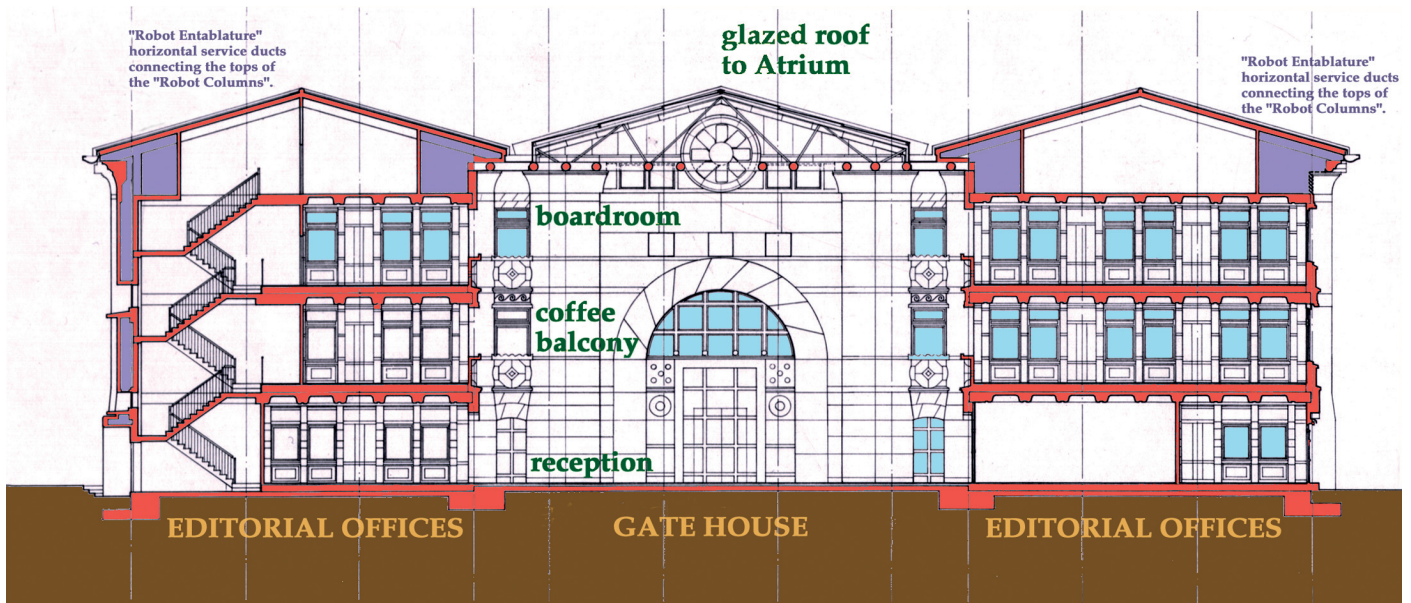
The most important aspect of the design of any building, though this may not come immediately to mind, is its 'Parti', its disposition of its rooms. One should never call them by the denaturated name of 'spaces'. This design was unconstrained by any of the features of the building-plot except one - its slope from East to West. This was used to inscribe the idea that the 'river' of Somatic Time fell from its 'source' up outside the building, to the East, down through the structure to the 'Ocean' that was some water, again outside the structure to the West. The entrance court to the West is a small fraction of the floorspace with a very big effect, as will be later evident. The dramatic 'Social Stair' houses bathrooms for each storey. But its main ambition was to provide a 'stage' on which to meet and be seen to meet, so as to make of the Institution a 'real', 'embodied' entity. The many Visitors were guided through the building without interfering with its workings. They climbed up the Stair to the 'Belvedere' from which the laboratories could be seen and explained without having to enter them.



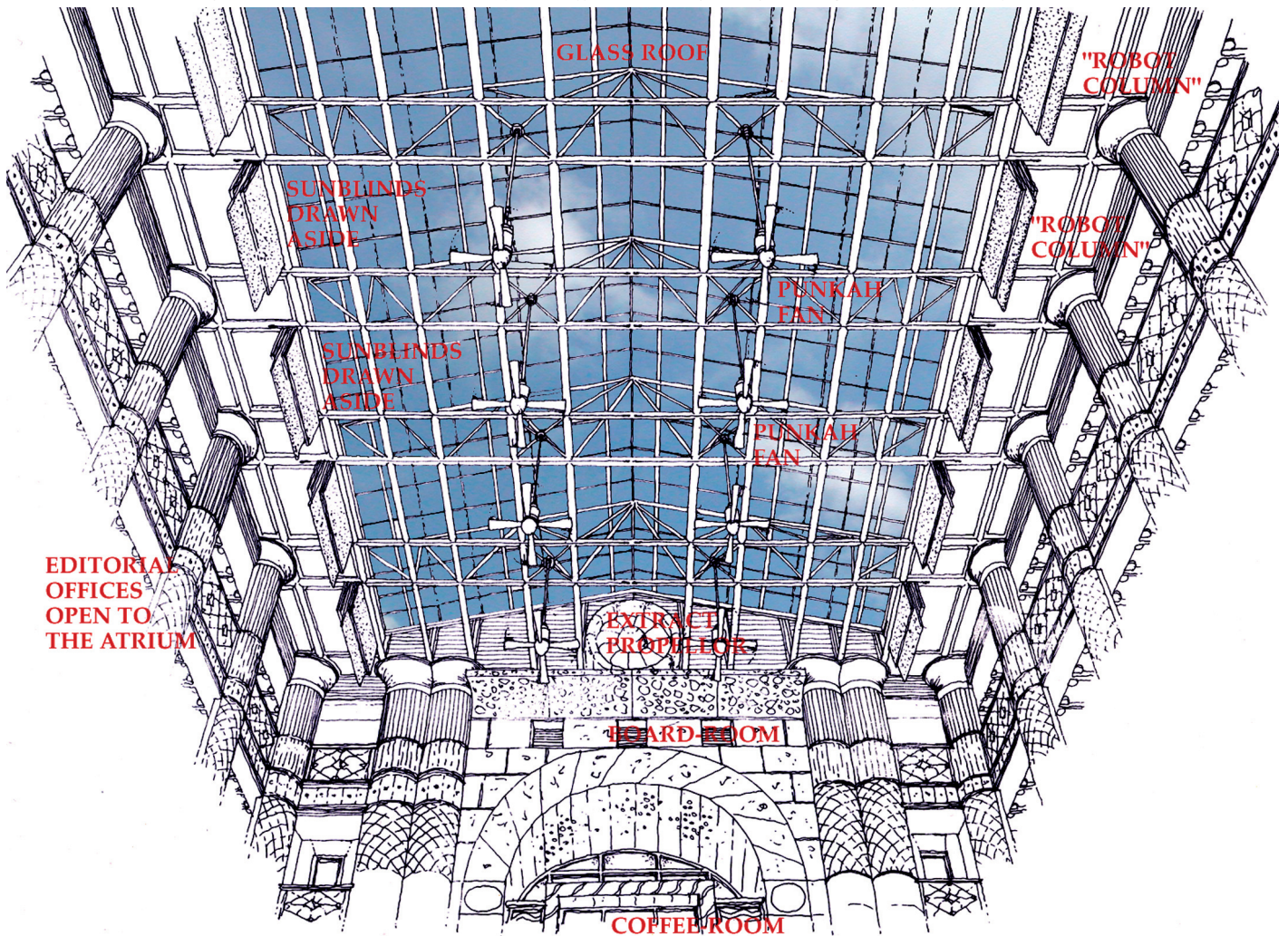


*The building was an almost-perfect Architectural reification of the Republic of the Valley as an analogue of the phenomenology of 'sociation'. It took its place within a sequence of such narratives stretching back over thousands of years innumerable examples, and many cultures. To me it seemed an ideal 'house' for the scientific as well as cultural institution of the Consumer's Association.*



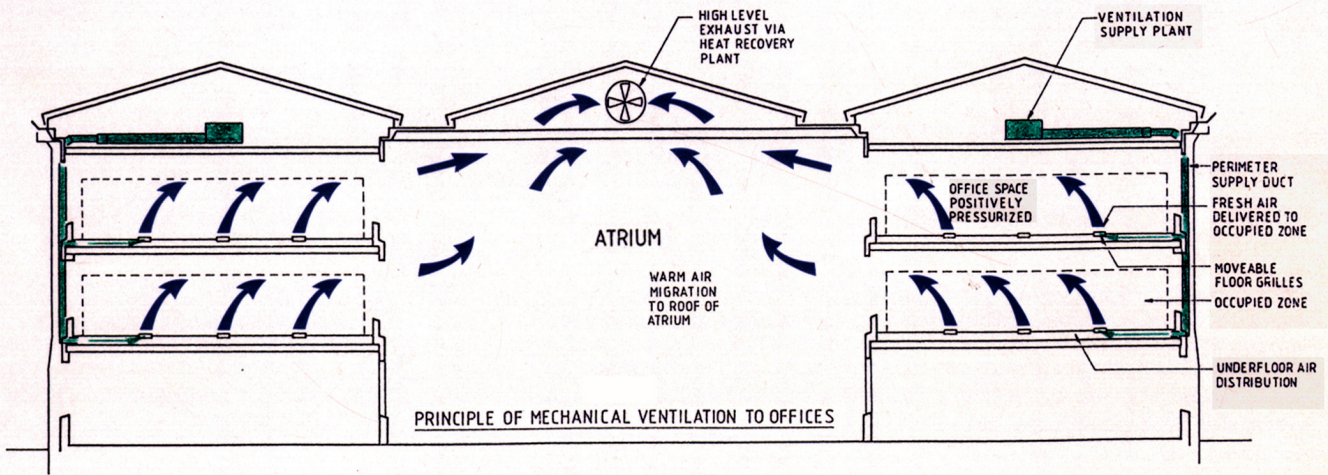


The cross-cut through the Entrance Atrium and Editorial floors shows a fire-escape stair to the left and the Visitor's Reception and Meeting-Rooms on the Ground Floor to the right. The three small windows to the Board-Room can be seen above the Entry Arch. Below them is the open Coffee-balcony. A rifle-range was planned for the Attic.



A perspective view up into the roof of the Entrance Atrium gives an effect like a roofless ruin. Whereas once people liked to shelter under the beneficent gaze of the Pantokrator, or some other reminder of their Gods, today they prefer to feel no weight at all above them. Architecture is superfluous to such a culture - which is why it is no longer used. My proposal, however, was always to re-invent Architecture so that, instead of living under a transcendent authority, we - that is to say Man - manifest and witness that we conceive of ourselves (as signed by columns) bearing up the culture that we, ourselves, have created. I do not see this as hubris, but simply the need to create ambitions defined by the Arts of Peace, now that the Arts of War, which were the ultimate foundation of the post-Quattrocento 'Rational' Western States have 'progressed' beyond their old utility. Glass is a cop-out.





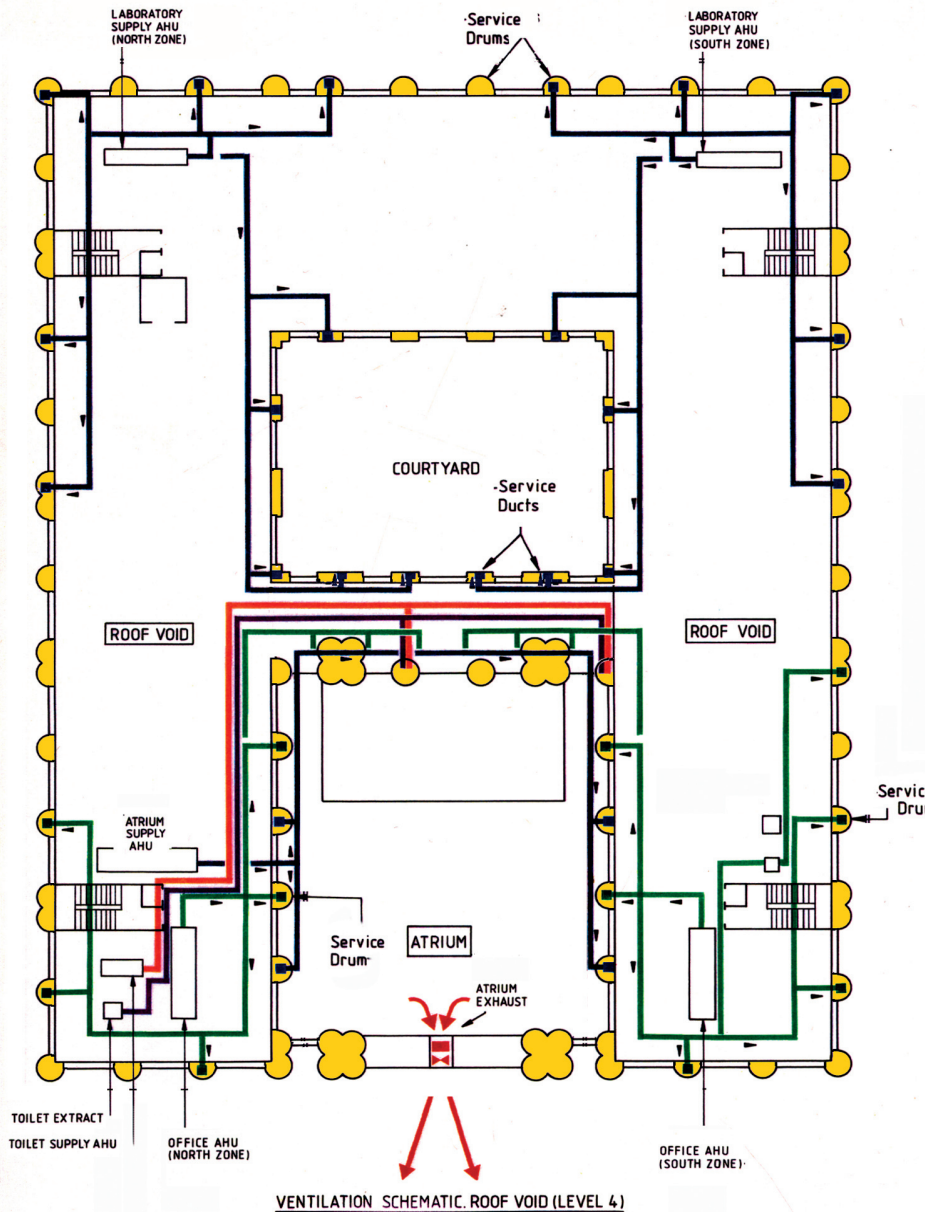
Air is blown up through the floor of the open-plan Editorial floors to exit via the Heat-Exchange Fan which recycles the saved energy into the hot water convectors under the windows in the offices and laboratories. Studies showed that the only space needing refrigeration was, ironically, the Entrance Atrium. This was due to the sun beating down through the glass roof. The fabric ceiling blinds of the interior gave shade but they did not prevent overheating.

The decision to roof the Atrium in Glass was taken, at the beginning of the design process, in 1989, as if there was no alternative. Yet when the figures were calculated the Atrium was the only part of the building (except the computer room and certain testing rooms that had to be sealed airtight), which needed refrigeration. A building with adequate natural ventilation, an exposed, heavy, structure and efficient sunshading does not need refrigerated air conditioning in Milton Keynes.

Writing this, 20 years later, JOA has just finished using a coated triple-layer glass in a modern roof to a 19C Orangery that renders its interior a consistent 10°K colder than its external stonework. It is no longer a 'hothouse', but rather a coolhouse. Even so, the temperature can vary excessively under a glass roof.

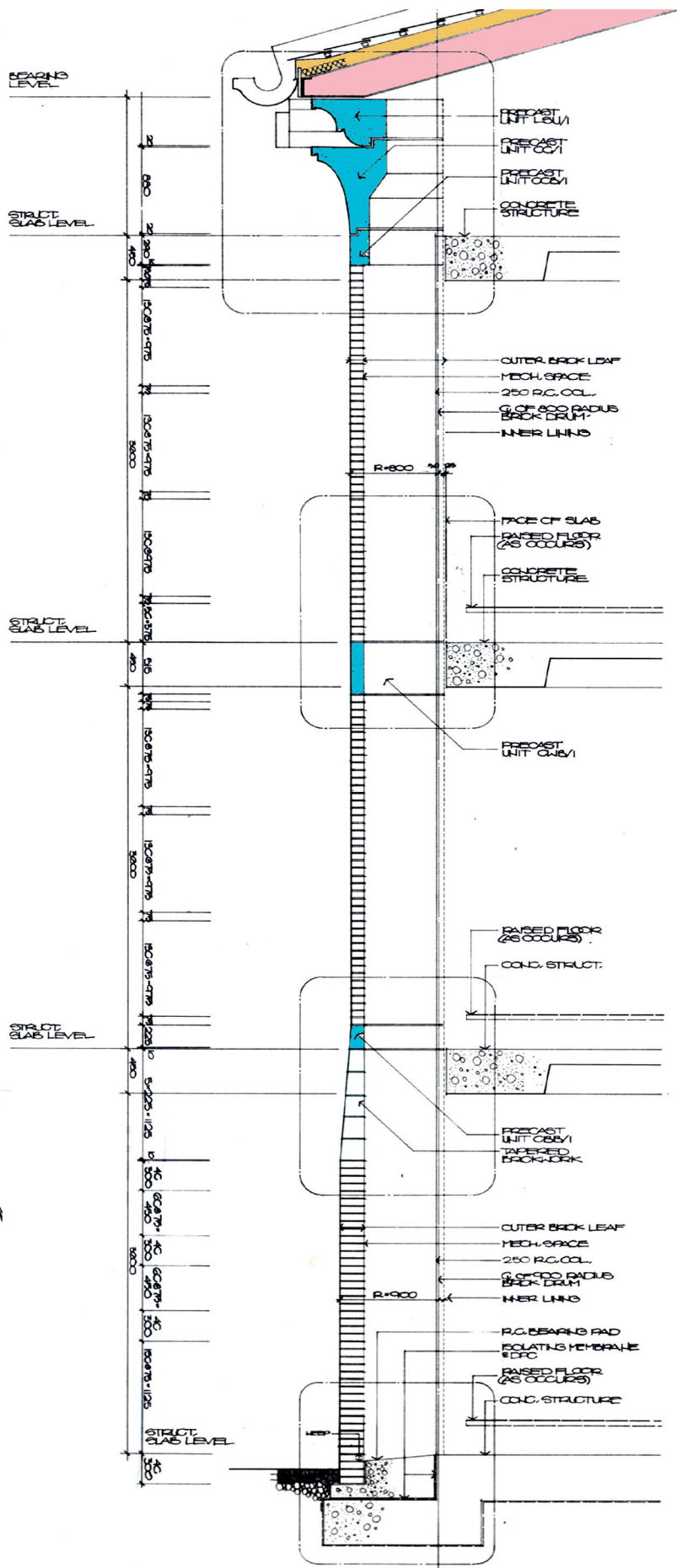
The chief argument in the favour of glass is never stated. It creates some interest for the eye while avoiding the conceptual 'burden' of making a design of the ceiling that could carry a 'meaning'. The 20C's second half preferred, on the whole, to live under the illusion that there are no longer any public superstructures, whether imposed by others or imposed by oneself, that anyone would want to openly 'support'.

The other fact worth stating is that glass roofs are usually (and can be extraordinarily) more expensive than solid ones or solid ones with some small glazing. This excess for the glass roof (as JOA subsequently proved), is true even when one buys a painted ceiling using a modern, mechanised way of 'inscribing' images.

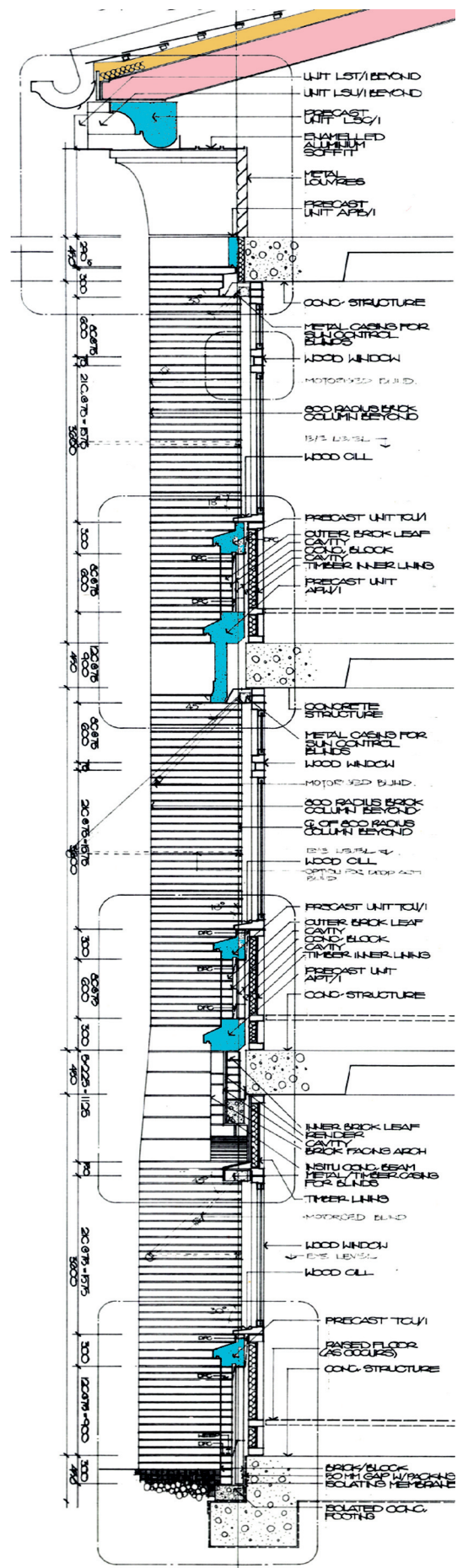


As we saw with Harp Heating, the iconic effect of the Working Order Columns is disproportionate to the amount of material they constitute. This diagram, by TBA, shows them used for moving air.



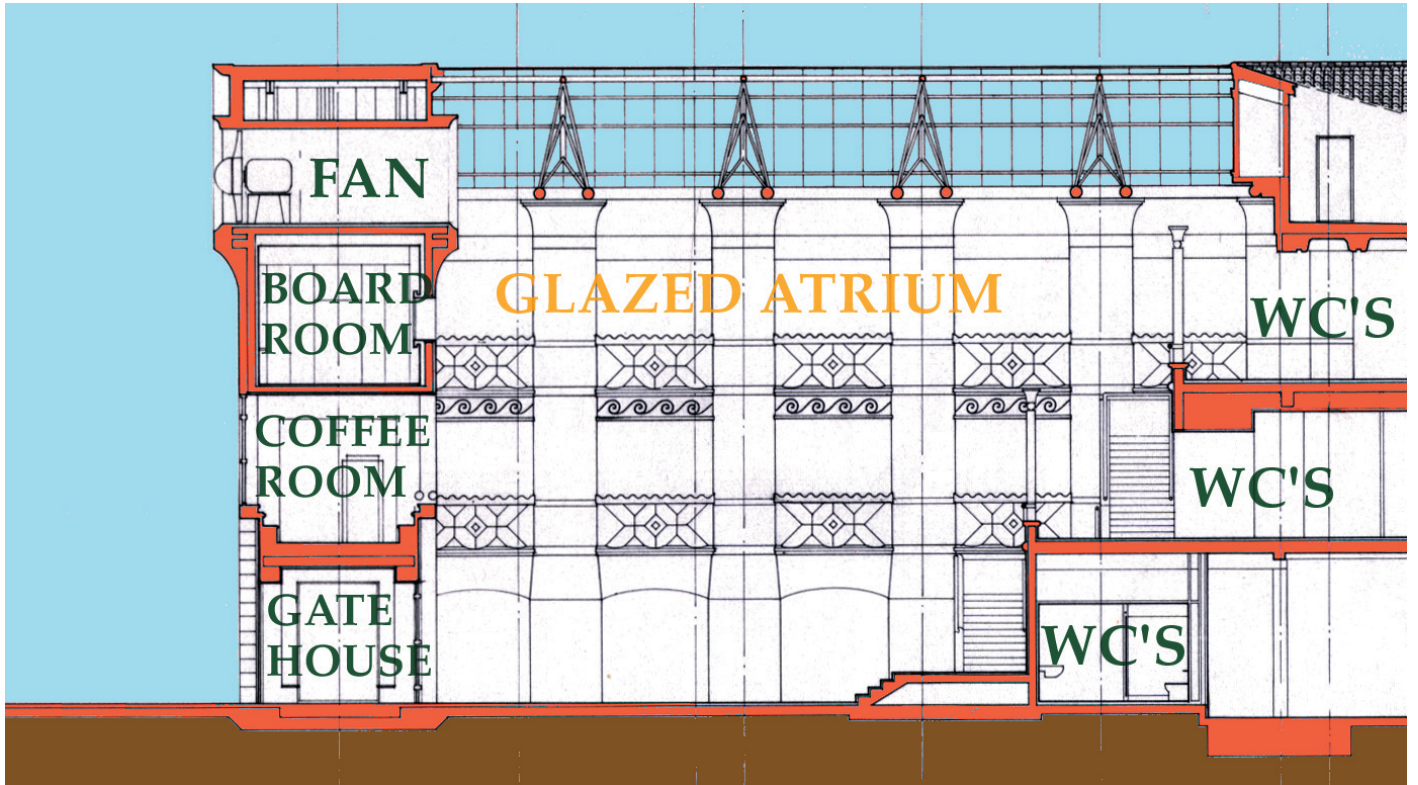


The SECTION cut through one of the Sixth Order Serving-Columns that stand around the exterior of the building. The large cornice-gutter discharges rainwater into it through an almost horizontal pipe, thus rendering the cornice unrecognisable as a sordid gutter.

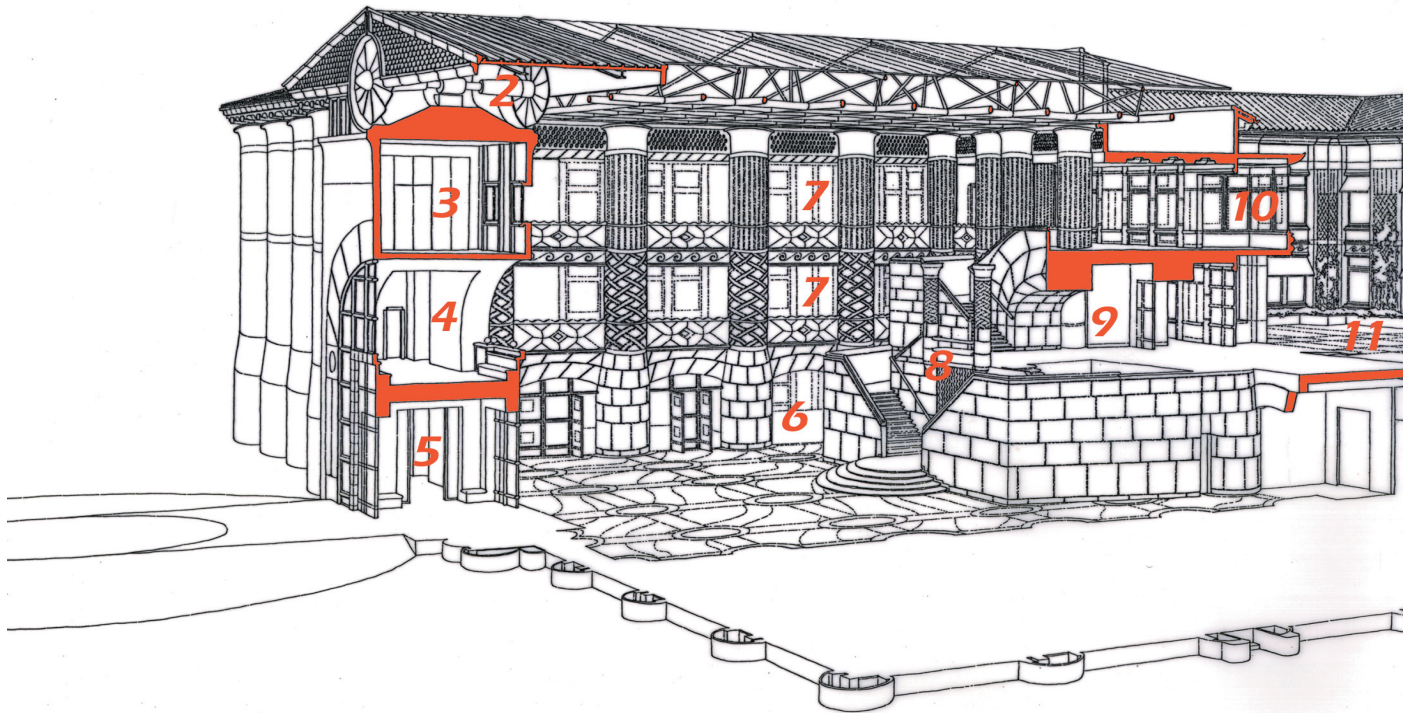


The SECTION cut through the edges of the Floors showing the Photolithic concrete 'spandrels' and the windows. The propped-up floors for pipes and wires under the floor exists only in the half of the building used by the Editorial. The Laboratories rest on the concrete slabs.



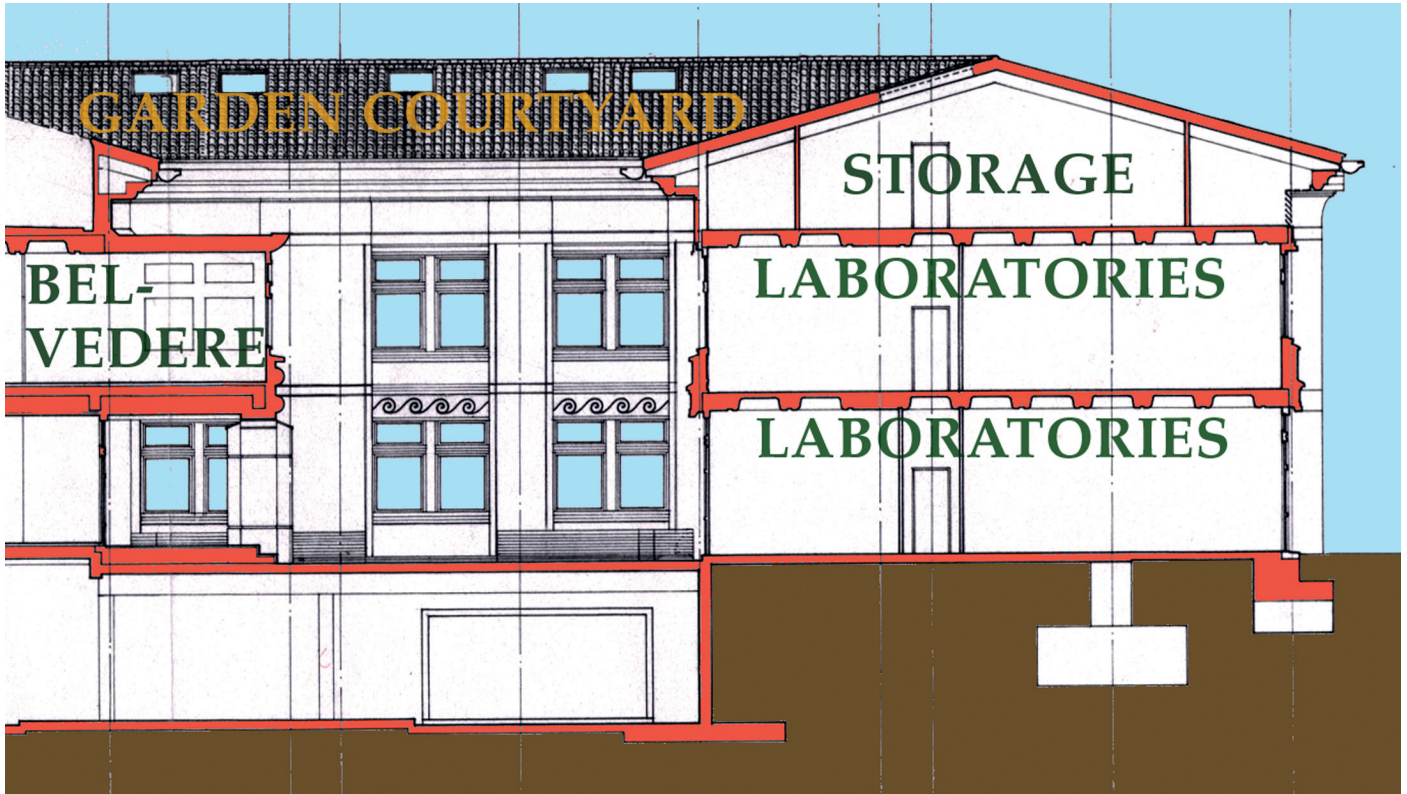


Cross section through the Gate, the Entrance Court and the Social Stair. Visitors will find the Orientation Theatre on the left-hand side of the Ground Floor of the Glazed Atrium. The doors have the arched heads seen in this drawing. As they rise up the Social Stair Visitors can look around and see the Editorial staff working on the first and second floors. The organisation of the fire escape stairs, placed behind the 'double-bubble' external Working Columns, mean that there is no need to glaze-in the internal sides of the Atrium.

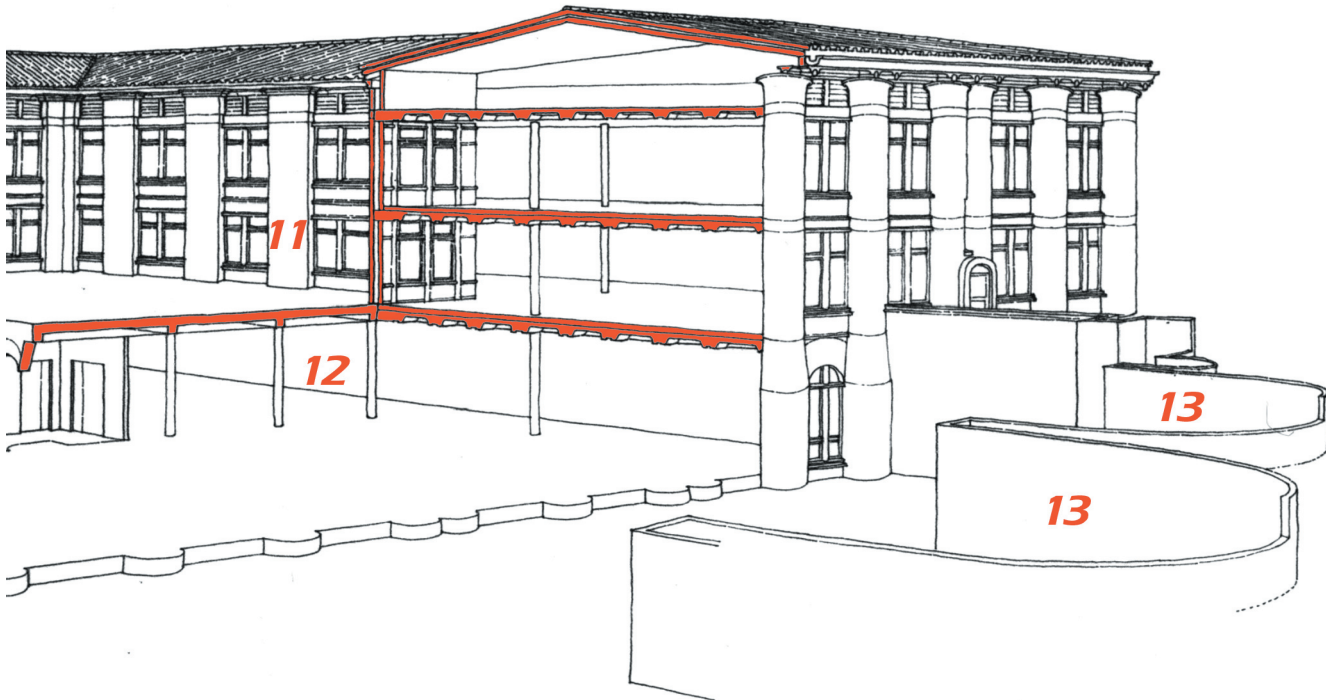


Perspective view of a cut through the Gate-House showing Heat-Exchange fans (2), above the Boardroom (3), that is over the Coffee-Balcony (4), above the Entrance Lobby (5). The Visitor's Theatre is on the Ground Floor and is accessed through the Arched doors (6), to the left of the Entrance. The open-plan Editorial floors (7), can be seen on the First and Second levels as Visitors climb the Social Stairs (8). An Arched entrance (9), leads from the Social Stair, under the Belvedere (10), into the Garden Court (11).. From here a closer view and even some access to the lower level of Laboratories can be possible.





Visitors who have climbed up to the Belvedere can look across the Garden Courtyard into the Laboratories. The morning sun also enters the Belvedere and bounces through into the Glazed Court. The 'waffle-slab' construction of the floors can be seen. The purpose of this is to save concrete while giving long spans without columns. As the day wears-on air warmed by machines and occupants rises to the ceiling. This air is cooled by leaving the underside of the 'waffle-slab' exposed. This heavy concrete ceiling begins the day cool. It has been cooled by having outside air blown over it all night. Blinds of the sort that JOA prototyped at Harp prevent the sun entering - especially before the building opens in the morning .



There is a heavy materials basement (12), under the Garden Court (11). A trap-door in the Court allows large testing-rigs to rest on the strong basement floor and project upwards into the Court. The curved walls in the foreground are for a creche (13), on this Southern side of the HQ. Building.

The Architecture Faculty on the campus of one of our later projects complained that JOA had built in the USA what we had already built in Britain. Neither of us was to know that JOA would go on to build it in Continental Europe. They were parroting one of the most suburban imperatives of 20C Modernist ideology: "That every project should have a different 'architecture'". The argument goes that this is a response to the fact that every building site is different, every Client different, and generally every circumstance special in some way. It is, sad to say, merely training the undergraduate to be passive in the face of the collapse of urbanity which he and she will find it necessary to survive. What can the 'Architect' do in a lifespace of silly little autos traversing the 'Garden of Ballistics' and ending, always disoriented, in some wretched car park? What else than present, instead of the usual crinkly tin shed, a smashed-up joke of a building? JOA never subscribed to this script. So, instead, each one of our projects added some useful fraction to the 'urbane' totality that we would, after a half-century of undeviating struggle, eventually achieve.

## The novelty, in the case of 'Which?' was the column-capital.



was developed because the Swanley fin-capital was too inflexible. I had already rehearsed the clustering of columns in the scheme for Huntingdon at the CCC/ACC in 1963. - same year that Sir John Esher published Leicester.



etc. as shown in the

Competition entry for Barrell in 1922-73.

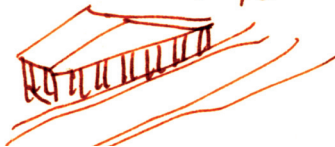


the double-bubble was used in Which. as was the quatrefoil.



a capital had to be developed to suit this.

The pediment also, on the project for NEXT proved difficult to sketch



and began to look ridiculous on long, low buildings parallel to -low 'frontage'.

Some pages from my sketchbook describe the thinking behind the invention of the Capital that became 'canonic' for all three versions of the Sixth Order. The 'fin-capital' of Harp could not be developed to 'head' the multiple, 'clustered' columns that had been found necessary during the composition of Which? A double-column housed the external fire-escape stairs. If these had not been deftly pocketed by our 'double-bubble' Order one might have been tempted, like the followers of Corbusier, to hang such staircases outside the building as testaments to the 'in-your-face' 'Functionalism' favoured by a fully committed Modernista.

One of the imperatives for the design of the Which? capital was that it be formally capable of 'floration' into a pair, a foursome and even an in-between threesome. All of these combinations were present in the design for both the interior of the three-storey Atrium and the four external Facades.

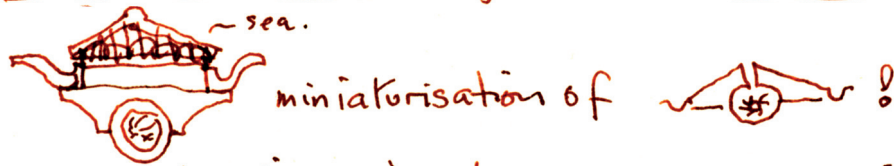
**A geometrically simple 'bell' performed these transformations.**

It did so with an ease quite alien to the ornamental complexities of the 'Canonic' Orders. What the bell gained in syntactic flexibility it lost in semantic polysemy. Against this, however, I had the 'tattoo-able body of what would later be titled the 'Talking Order'. I could write, in the way that the Mayans wrote on their stelae, on the magnificent cylinders of my Sixth Order and spin them like Tibetan prayer-wheels -

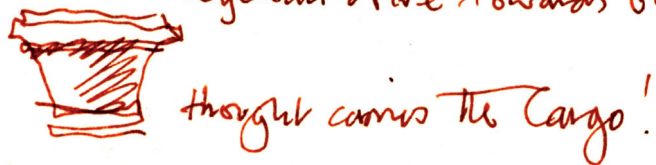
## If only I had the iconic wits!



As I became more confident of iconic engineering, I preferred to believe that the 'aetos' should be reserved for its properly complex iconic cargo. Even though that was never, on any project, to be deployed. So the Substrate emerged as - the 'Universal Potter' - suitable to all end every situation. - the Raft - the Trabea of Trabeated Architrave column & beam - bearing the pediment-cargo.



hegelian drive towards universalisation - the generic!

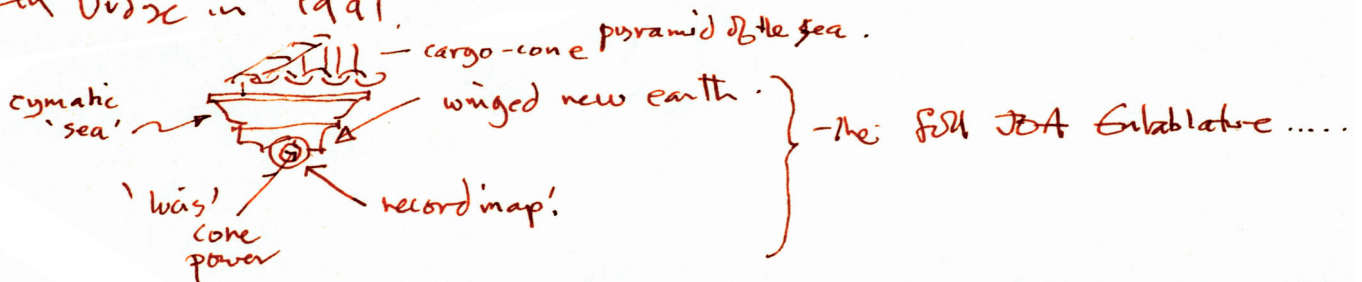


This describes a congruence, which I characterised as a 'Hegelian' drive to Universality, between the 'aetos' and the elevation of a single 'trabes' of the 6th Order 'trabica'. The Raft 'bears' the 'Cargo' of the 'pyra' and is, in its turn, borne by the New Capital - which is black, and signifies the opacity of 'thought' to a reification via iconic media.

It seems that the distinct element of the Entablature is needed in order to project the quadrature needed for the Hypostyle of Negation, or the Forest of Infinitude, to be projected. Thus the Entablature = Trabeation = Modus = Modularity of the Proton Chronon.

Harp was a jump-start ... shown by Pediment above!

The 10D ~~was~~ had no trabes either! only which, <sup>1988</sup> that came later, established this device! - which was not built until the 1990s in 1991.



This section explores the idea that it is the quadrature of the Entablature which 'seeds' the Hypostylar Forest of Infinitude. For what is novel about the 'Which?' capital is not so much its shape or colour but the fact that it introduces, for the first time in JOA's work, the fully-'rafted', or trabeated, aspect of the Entablature.



The Hegelian principle of Negation is useful in understanding the narrative development of the Architectural drama.

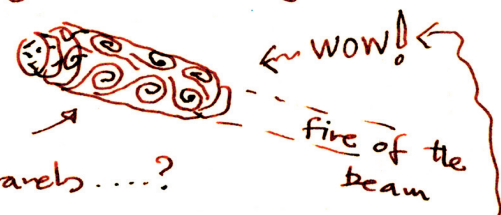


both wing and weight (maintain of ashes)  
buried fire and seeking eye.

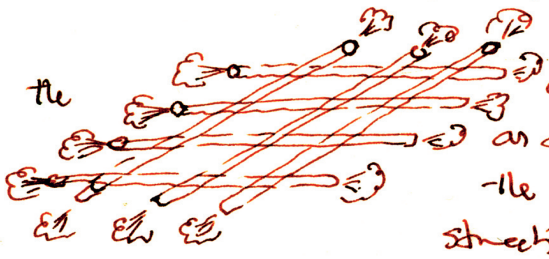



transition from winged  to winged bearer 


so in becoming 'bearers' - the wings became green-earth signs  
and the lifting force became - the 'beam'




a coating to show where it has been - aerial & aquatic travels....?

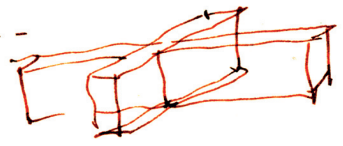


quadrature of the beams (figured)  
as time in the Renaissance   
- the serpentine net (as in the scaling streets of the city-grid).

by linear spatial time - the time of the arrow   
directional - obliquing, time!

blue for water  for directional flow symbol of  
the Meander - wow, wow wow! Somatic time!

It is Time, somatic time that institutes the Quadrature.  
both why quadratic ...



the watery walks of time.

time creates the space of the imagination both creates it,  
walks it off from contingency, frames it - gives it  
perspective.

The Hegelian principle of synthesis requires that the contradictions which it 'resolves' remain patent within it. This allows a sequence to progress for, example through the idea of Time, while 'resolving' the question of the Past and the Future within a Present that is alive to their contradictory ambitions. Abstracted visual icons are of perfect utility for this. The more a sign is abstracted from any naturalistic connotation, for example a wavy line for a snake, the more the abstraction becomes polysemic. This can, if the context encourages, allow a sign to mean two opposite things. The critical quality being the iconic culture of the users, both 'writers' and 'readers'. No culture, no meanings!

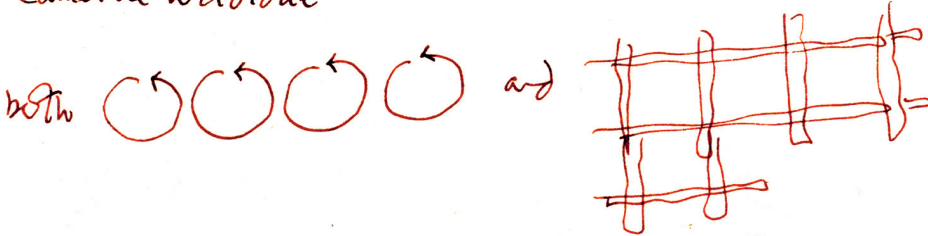


surrounds it

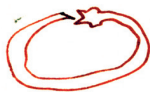


so the quadration could be the camera-lustation of space is

walking-off from the chaos of contingency into a city of camerae lucidae



and there bear the new earth & the cargo of the Aearth  
as beavers they quadrate but iconically they are cones



as beavers the green earth-figure quadrates

- when they quadrate they become picture-frames & either coffers or sail-vaults.
- they also become receptors of the capitals of thought.

- the quadration of somatic time comes to impose the space of 'perspective' upon the chaos of contingency - into which one may construct a coherence.

the cone of Hestia is best understood from below, when it has been supported ..... beams of somatic time ... the Raft of Time Raft of Rivers.

Rivers of Five Rivers of Light.

in which they neither revealed or supported themselves! without the talking about! But they were the right colours & forms - of more later! - then discuss the early experiments in scripty....

The 'Cones of Hestia'/Coffers/Cargo of Light are here discoursed with the deep-black Capitals of Thought. Quadration is explored as the 'navigation' that brought them together so as to 'seed' the Hypostylar Forest of Infinitude. Perspective is both the child of Quadration, in that it enables the reticule which draws the transcendent towards the immanent. It must be cut away, however, if the full enfleshment is to be conceived. For if the traves are not cut away the 'sail' of the vault can not fill with the 'breath' of an epiphanic afflatus.





The elevation to the South looked a little forbidding. So we decided to partition it chromatically using our familiar red, yellow and blue bricks, enlivened with bands of black and white glazed bricks. The heavy blue arches are the exits from the fire-escape stairs in the 'double-bubble' columns. These allowed us to avoid walling-in the Entrance Atrium - even with glass. The double-doors on the ground gave into the Creche.

Thus the **only new invention, beyond those of 'Harp Heating', on the 'face' of the Consumer's Association Milton Keynes H.Q** was the **Capital** to the 20 single exterior columns, 10 ditto double-columns, 4 ditto trefoil corner-columns and 2 ditto quatrefoil columns. This **capital, shown below**, was made of a **glossy black bell, cast from black concrete and then clear lacquered**. On this 'rested' a **'raft of (cobalt-Bayer-blue) pre-cast 'logs' each inlaid with spirals of white concrete**. These in turn **'supported a pair of wings cast from the Scottish granite and copper pigment green pre-cast**. The last two would be acid-etched in the normal way so as to accelerate the weathering-off of the weak cement ('laitance') surface.

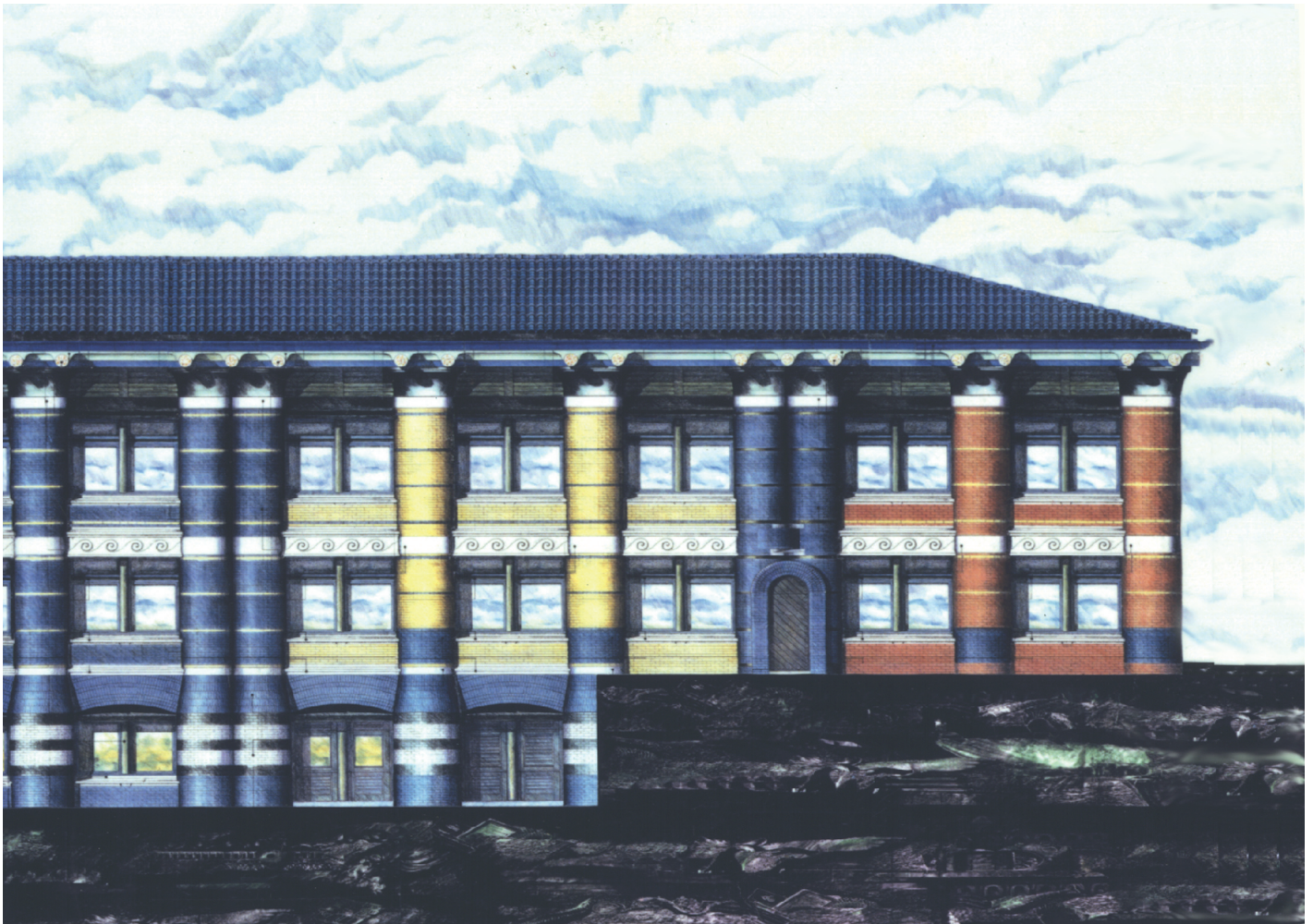


My final 3-D sketch of the new capital, one that was to become the canonic shape for the 6th Order. The Entablature is the 'Trabica' of 'Trabeated Architecture'.

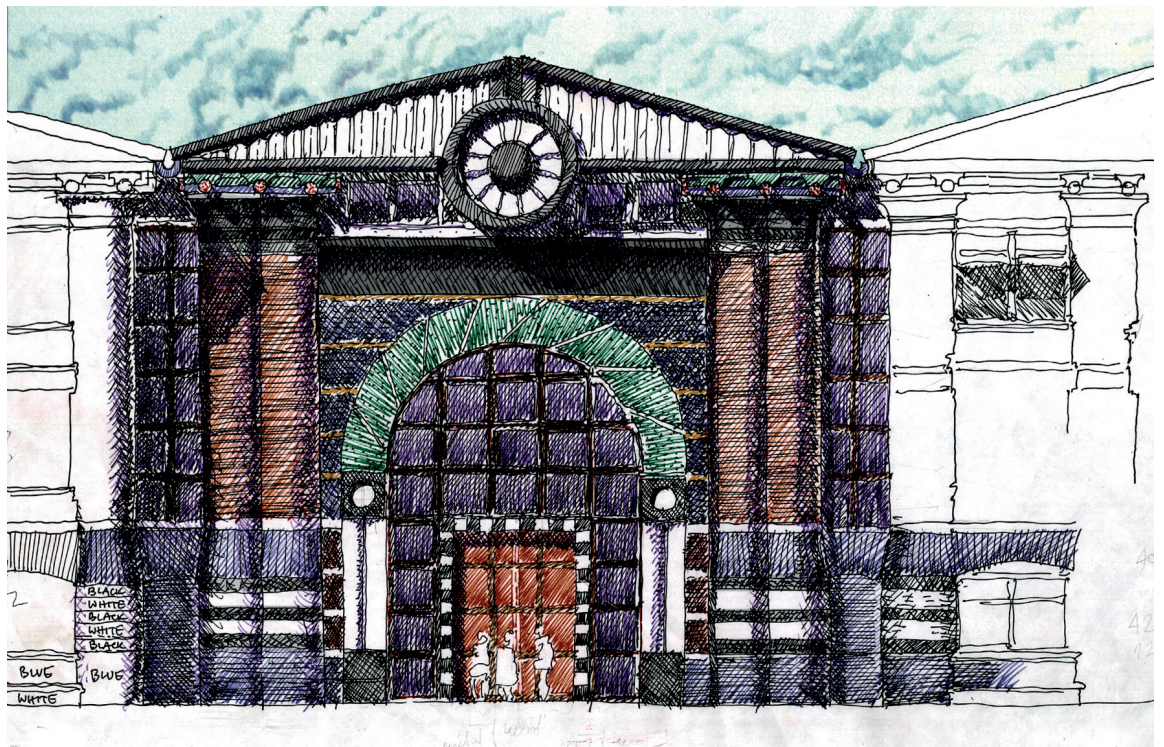


A model shows the Axes of Power' flying the New Earth to its support on the Fifth stage of Human Phylogeny -the impalpable medium of Thought.





*The Eastern end of the Southern side to the building contained the Laboratories. The strong slope to the building-plot, which we had 'narrated' as the flow of the River of Somatic Time, presented a two-storey face to the Eastern End. This enabled a Vehicle Entrance to occupy one of the 3.2 M-wide inter-columniations.*



*The composition of the 'Entrance -Face' responded to the need to be recognised from automobiles passing at anything up to 50 mph. I have raised the glass roof of the Entrance Atrium so that it could be made solid and lit by a clear-storey side-light. This enabled me to stretch the green arch upwards, so giving windows to the Boardroom and Coffee Balcony. But this elongation brought the need to redesign the flanking columns etc. etc. It was never finished.*



**Although, back in 1989, I had not yet formulated any clear theory as to what I was doing, the foregoing pages show that JOA could, for the design of the 'body' of the home to the Consumer's Association, rely on several years of the successful proving, in actual buildings, of the components of an Architectural technique. Far less such support was available when it came to the INTERIOR.**

## **YET IT IS THE INTERIOR WHICH MATTERS THE MOST.**

The foundation of what political stability has been achieved since WWII has been in what one might call the 'domestic economy'. In short improving the house, mortgaging it and moving ever upwards on the ladder of 'domestic capital'. The prime marker of the late 20C recessions in this 'progress' have been the reductions in the price of houses. These items, houses, are not judged, for the most part, on the quality of their external 'scripting'. External appearance matters, but the interior matters more. The size and disposition of the rooms is more important than their furnishing and decoration. But any owner with the ambition to 'appear' on the public stage, however modest, is concerned with the 'look' of the rooms which, they feel, in some way 'represents' both how they 'see' themselves and how they would wish that others 'saw' them.

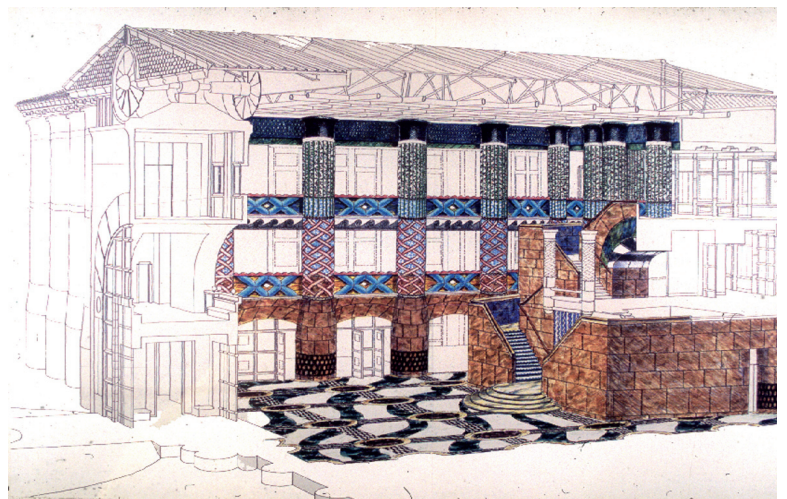
Architects should, an Outsider might believe, find themselves at home in this business. They discuss, in language extending from the unsupportably arcane to the exhaustingly banal, the external look of their designs. They spend unreasonably large amounts of their own time in rendering the external appearances of their work. But when it comes to the internal decoration and furnishing of their rooms they profess an incompetence and an ignorance that soon surfaces, if pressed upon these matters, as a repugnance for the subject that carries a force akin to the deepest of religious and sexual taboos. No-one is hated more unreasonably, or more viscerally, by the upstanding technophiliacs of late-20C Architecture, than the 'Interior Decorator'.

## **There, I have said the 'I.D.' Word. Wash your mouth out Outram!**

Yet my colleagues in this ancient Profession are well advised to entertain such fear and loathing. For when, much later in my career, I was tasked to examine Las Vegas by the Client of by far the largest of my projects, I found that Architects, by their stubborn stupidity, had been knocked off their ancient pedestal and reduced to the rank of mere Project Managers. The design of 5,000-bed hotels had been assumed by the Decorators - graphic designers whose principal tool was not the computer, but the hand-held felt pen and whose armoury of weapons was a shelf, constantly updated (already, by 1997, including Decon), of Architectural Styles. Their Formal fluency, allied to their iconological illiteracy would have struck Aby Warburg as the living proof of Architecture's failure to follow his very early-20C advice to eschew formal structures and focus instead on iconographical narratives. Architects now merely served these Fluent Fools of the Facade.

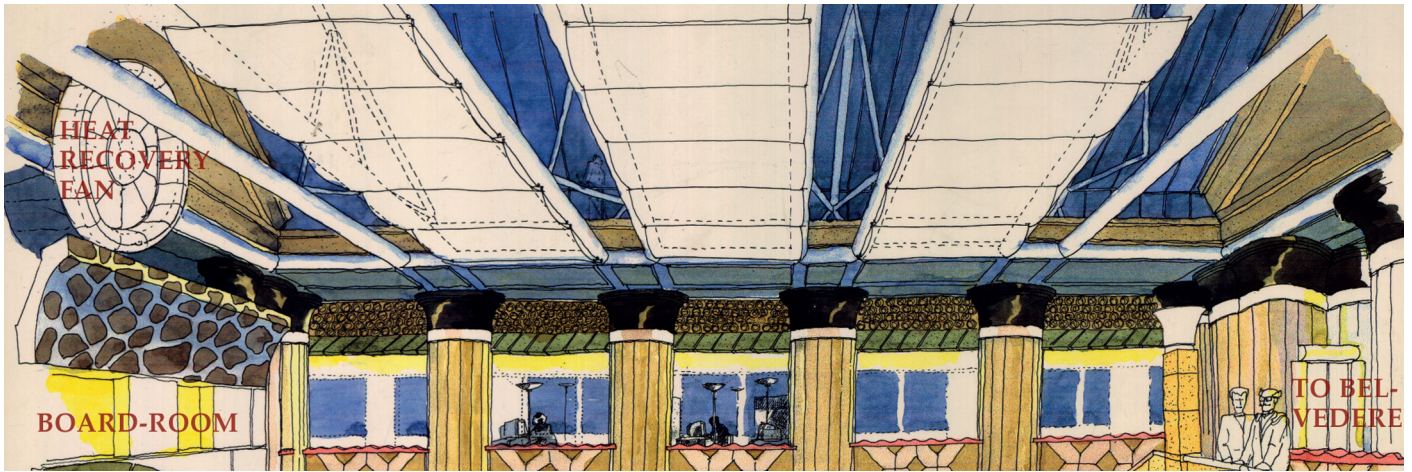
***The Architects of the late 20C, and their American representatives in particular, bear the historical burden, along with their admirable, but equally futile, Architectural writers, for destroying both my Profession, and, even more importantly, my Medium.***

**It needs little imagination to see that the Consumer's Association was one of the bedrock institutions of late 20C culture. Even more was this true as the 'consumer economy' moved into cyberspace. A product's internet rating in Which? held its commercial fate in its hands. Millions turned on every issue. The building committee of the CA understood this. It was why they were so concerned about how they would be 'seen' by those of their Members who took the trouble to pay a physical visit to their new HQ - the fount of all of the advice to which, one must assume, they paid the serious attention that should attend spending their own hard-earned money.**



*The furthest point reached by the Atrium interior shows the Social Stair - our first in JOA's history, and very much liked by Which? The floor was splendidly marine, as well as Hypostylar - truly Deltaic. The columns had not reached 'closure' and there was, of course, (one feels deliberately) no 'ceiling-cargo'.*





The "bent tin cavetto", made of glittery galvanised steel, splotched with silk-screened-on black patches, can be seen on the far left of this interior perspective. It stretches across the full width of the Atrium, below the circular extract/heat-exchange fan and above the three 'internal' windows into the Board-Room.

If one examines the Entablature of any of the received Hellenic Orders, one will find an out-jutting moulding forming the topmost edge of the rich assemblies of form that constitute their full rhetoric. JOA, in a typically 'Modernist' manner, employ here the rhetorical device of Metonymy in which the part stands for the whole. I focus, therefore, upon the identity of this moulding as the outer edge of the 'picture plane' that all walls actually offer - were they only stripped of the glaucous myopia of positivism. This moulding signs the Edge/End of the World.

Its outward-curving profile is what gives it the technical name of a 'cavetto', or as it can also be called, a 'Scotia'. The word 'scotia' means darkness in Greek. It well describes the shadow that is typically thrown by this moulding when, for example, it is scribed around the head of a top of a column. It can be seen, as well, from this sketch water-colour by Bill Gregory, that this is the shape, as well as the colour, of the column-capital which I invented for this project and which I have retained for all subsequent compositions. My explanation for this Capital, its colour, and its high polish, is that it signs the quality of 'thought'. For 'thought' is how I characterise the fifth stage of an history (or as I prefer 'istoria') of our Human ontogeny, as well as phylogeny, that I proposed to the Consumer's Association was the proper meaning for an Order of this, our time. The Fifth Stage is the one where the human animal leaves the home that it was born into and goes, metaphorically, into the 'outer space' of thought. It is for this that I make these 'capital'-heads curved, shiny and dark - the proper sphere of the 'dark arts of the 'magic' of thoughts that can be turned both to good and evil.

For ours, according to the general opinion, was now the time that humankind could no longer expect to be borne-up, as of a God-given right, by horned capitals of the Ionic Order, or the floriated heads of the Corinthian Order - both signing the 'natural' world. Ours was now the time that Man had to shoulder the burden, if not of 'supporting Nature', then at least supporting a Culture which recognised a new and necessary symbiosis with what, as a shorthand term, we may call the phenomena of 'Nature'. The columns of my new Order were anthropomorphic, by the ineluctable process of empathy. They were, like the Persians and the Caryatids of the Hellenes, actually representational of the new burdens which Man, by his extraordinary progress in the technical arts, now laid upon himself. This order was no regression to an earlier, more 'natural' state. It was a progress to the most 'artificial' condition that humankind had ever known. Such an 'Order' was the most 'Modern' thing on the Planet.

Here there immediately arose the beginnings of a conflict. Those who worked in the CA were not only competent and intelligent, they were diversely cultured. How did they 'present' themselves in their private lives? How much would they enjoy 'acting' some part prescribed by the CA for 'public consumption'? Should everyone go around in white coats and stethoscopes - like a White-Goods Emergency Ward Ten? The entertaining thing about humans, as with the other mammals, is that we like to play around. So, although these thoughts were entertained, they were soon judged unworthy.

## There is a difference between Theatre, Las Vegas and Life.

Theatre is serious. Las Vegas is a fiction invented by Americans wedded to a cult of honest toil so that they may holiday in a regime where money rests on the flip of a dice. All this is set on a sandy stage, patrolled by rolling bindweed balls, designed to persuade them that the freeways and hutlets in parking lots that are their lifespace are better than the half-scaled Architectural splendours of the Old World that they left behind (and to which they must never return). Life ought to be more serious than either of these, but is generally treated as if it were not. So the decision was taken not to 'dress-up' the 'theatre' of the ACR headquarters. Visitors should see it just as it was. They would be more likely to take the Institution seriously if they believed that 'wys' was 'wyg'.

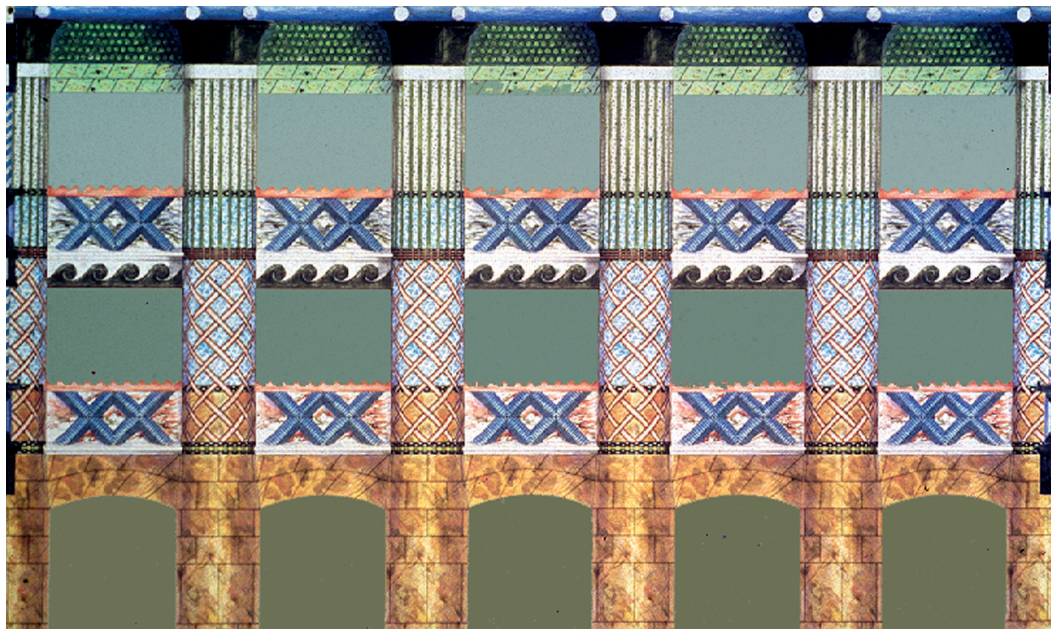


*But this merely*

*to Which?  
themselves!*

What was the Entrance Atrium when  
- by the CA  
itself? How did the CA  
want to use this room  
when they looked inwards,  
and  
even, most ambitious  
of all,  
which they  
certainly  
through their  
communications?  
It was well-understood  
that the Atrium provided a

- one that  
even provided a dais at its  
base, another half way up  
and galleries all around for  
an 'audience' participatory  
or receptive. It had also  
been understood that this  
Atrium was also a part of a  
much to  
which I already gave various



JOA's first attempt to 'script' a colonnade of internal members. It goes without saying that the colours and finishes available to an interior exceeds that of the exterior by thousands to one. But these internal finishes not only tend to be costly. They are, because of 20C Architecture's compulsive Positivism, held to be a fount of ontic immorality. An 'Interiors' tradition and the industrial and craftsmanly base one would expect to support it simply does not exist at the 'higher' end of Architectural Practice. JOA spent around £100,000 of our hard-earned fees, over the years, just researching all the possibilities for chromatic surface-scripting - wherever they could be found.

names, which stretched from East to West, beginning and ending

*glass ceiling*

*Order whose 'Cargo'*

decisively 'tabooed'

**WE WERE OBLIGED, EACH ONE OF US, BY  
OUT ON THE**

**POLICY OF 'A-DUCARE', TO STEP**

Banham, Smithson and Lawrence Alloway,

Avant-Garde 'Independent Group' of





The sketch water-colour by Bill Gregory shows a musical evening, debate or lecture in the Entrance Atrium. It might have interrupted the concentration of anyone working late. But there are such things as ear-muffs. Such occasions and others which could be held in a space like this make of an Institution a 'body' that is experienced 'physically' - as opposed to merely over the talking heads of a CRT. They also build-up a collective memory for the Institution which allows a more complex level of bonding than can be achieved without, firstly, this physical proximity and secondly, this level of ritual formality. The final design and technique for this interior had not been fixed by the time the project went out to Tender. So it will never be known how it would have turned out. All of these challenges were successfully overcome in the next few years. But it could have been the case that they would not have been solved in time for ACR to benefit - such were the novelty of JOA's final techniques.

**Nothing in my six years of education, thirteen years of apprenticeship in both private and public sectors and now fifteen years of my own bureau, had provided me with any real, that is to say built, experience of a major public room in which an important institution might feel itself 'at home' on an 'Arendtian' stage commensurate to its ontological status. Which?, with all its vast, and rapidly-increasing knowledge of the 'Real World' did not know how to do it. Indeed an Engineer, a new member of their building committee, unfamiliar with the year-long gestation of the design, was entirely panicked by this final stage, that of creating a script for the Entrance Atrium itself.**

**But his colleagues were made of sterner stuff and, so to say, 'held his hand'.**

Being what we were, all 'techies' by training, we began by inventing a few surfacing techniques.

**JOA HAD BECOME ACCUSTOMED TO MAKING THINGS LIKE INDUSTRIAL GUTTERS OUT OF SHEET STEEL.**



**Steel is cheap and can be bought ready-galvanised so that it does not rust, even when unpainted. Moreover, when used inside, away from the stresses of sun and rain, the beautifully-crystalline surface of this inexpensive, fully-industrialised process can be lacquered so that, like polished brass, it does not oxidise and dull. We thought of using it to make a part of the internal entablature, such as a large Egyptian-esque 'cavetto' above the major-order columns around the Atrium.**

**I ALSO LIKED THE WAY IT COULD BE FOLDED AND JOINED BY ROWS OF POP-RIVETS.**

**It was the type of conjunction that I pursue, in which something is both dense, dark and hard, like steel, and also something insubstantial, like a flickering, fragmented, light.**

**The only time I met Mies van der Rohe, in a house on Royal Avenue, Chelsea, a student asked him: "why he did not paint his steel white, because it was light", Mies in his expensive suit, silk handkerchief and cigar, replied: "I paint it black because steel is heavy". Glass, in fact, is heavy too. Both are dense, solid things. Mies was for real.**

**The student just wanted his problem, Architecture, to disappear. So what was new?  
We now had a bent tin cavetto. So what?**

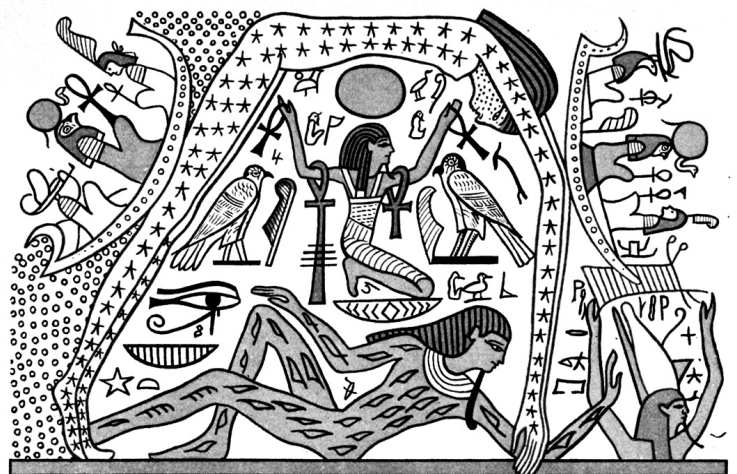
**A major reason for the collapse of Architecture and city-design was the consistent, endless, failure of the West to progress beyond what Demetrios Porphyrios, with a truly staggering technophilia for such a literate Architect, conceives as the terminal perfection of Architecture in stone-cutting. For a Greek, he is doubly mysterious in avoiding the fact that the buildings of Antiquity were not only stained and coloured to a high polish but 'inhabited' by anthropomorphs with ivory eyes, rouged lips and gold-hemmed peploi. The architectural members of Antiquity were 'inscribed' with patterns that James Mellaart, in his excavations at Catal Huyuk shows were a precursor to writing itself. Hellenic and Roman Architecture were no different. The members of their major works were 'garlanded' with 'mouldings' into which repetitive forms were first incised and then coloured and even gilded. These were 'Architectural Scripts' whose ontic status was primary. Their iconic machinery entirely 'outranked' the puerile 'constructive' propositions of the 18C positivists.**

**The stone was there 'merely' to support an iconic narrative that the depredations of centuries have left us with no persuasive verbal decryptions. 20C Theorists are afraid, even after 200 years, to drop the thick white veil of positivism which the Rigorists and Purists of the Enlightenment drew over what was being uncovered, even then, by an increasingly scientific archaeology.**

**But I, as a mere "Practitioner, had no such qualms.**

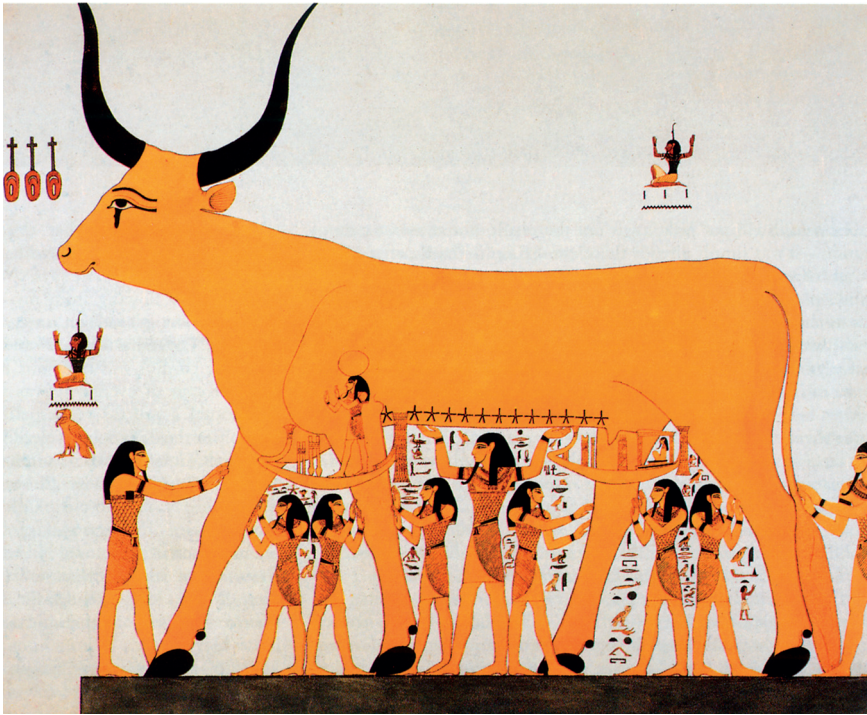
**Most practising Architects believe that there is no purely theoretical path to a successful design. The process, especially in its beginning, and then towards its final, critical, ending, tends to be buried out of the sight of the conscious mind. Some, more youthful practitioners than I, make a point of ensuring that almost the whole of their design-process remains inscrutable to the point, even when presenting it to their Clients and the Public, of deliberately appearing careless of every rational consideration. By this means both they, and the Public, are ensured that their work, being usually ugly, often hard to use and frequently badly-built, must be nothing other than Works of the finest of Fine Arts.**

**Contrary to this assumed Cloak of Cretinism I hold that it can not be 'authentic' to propose an Architecture that is addressed to a human being, rather than some merely physical entity, like water, or the stars, and not to 'write' something both decipherable and (hopefully), arcane upon its surface.**



*The goddess Nut ingests the sun at dusk and births it in the ruddy glow of dawn. While she keeps the sun inside her, she exhibits her 'teats' as stars in the sunless sky of night. Tattooed with the five-pointed signs the Egyptians favoured, she shimmers seductively, in skin-tight glitter, as she is parted by 'Father Shu' (the Air) from the embrace of her incestuous brother Geb (the Earth).*





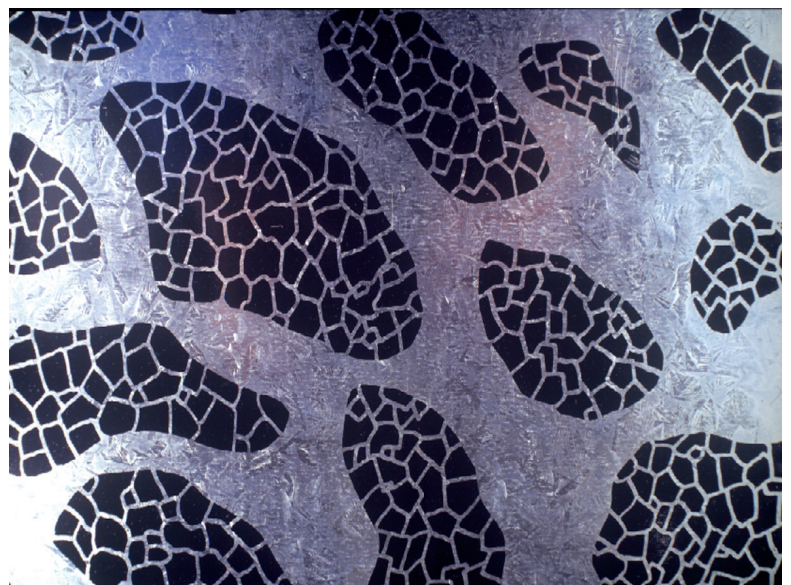
A 'Celestial cow' from the Tomb of Seti I (ca. 1280 b.c.) in Western Thebes. From a water-colour by Robert Hay. The 'stars as teats' had to be spread, somewhat implausibly, all over the slender form of the night sky as a woman. Here a cow gives a more persuasive symbol! The sky also rests of four 'legs' which could serve as the columns in the more 'architectural' cosmogonies.

Way was visible, they coined it as either a woman, the Goddess Nut, or a Cow. What united these two icons was the idea that the stars were the teats, (from which its 'milkinness' remains to this day) of these **two alternations**.

## This degree of epiphanic ambiguity was normal to Antiquity.

Unseen powers were not to be as unambiguously (even as positively) delineated as Science has accustomed us today. The Ancients were accustomed to the idea that **knowledge was only partial**. This said, it can be recognised that even our all-powerful Science uses first the particle and then the wave to conceive its fundamental phenomena. Cosmology, also, has to posit impalpable masses and energies to satisfy the way phenomena and formulae disagree. We no longer 'believe' that the sky is a cow. But the quality of the heavens' milkinness, and the fact that science now recognises that we are all 'mothered' of the stars makes a 'poetic' that still reverberates down the millenia of the brief existence of our 'civilisation'. Why 'reject' what modest facts the labours of Scholars have attested when they can be turned to the good effect of enriching, in spite of the Abyss of **Time**, our quotidian existence?

Thus it is that these formless black 'clouds', of the geometry of the **cracking, black, mud** that accompanied the emergence of the first **Islands of Creation**, born from the Nile each year, float, like the Dark Matter that inhabits galaxies. These patches, to the iconically literate (and perhaps the intranet-prompted!) can bring to mind the obscure information that the Egyptians like to picture their cows as patched with black, and that they conceived that the **milky teats of such an animal**, or even a beautiful woman, described the very extremities of the **Cosmos!**



The stencil pattern called, for obvious reasons 'Cow-Galo' can be given a curve after being printed without the ink flaking off.

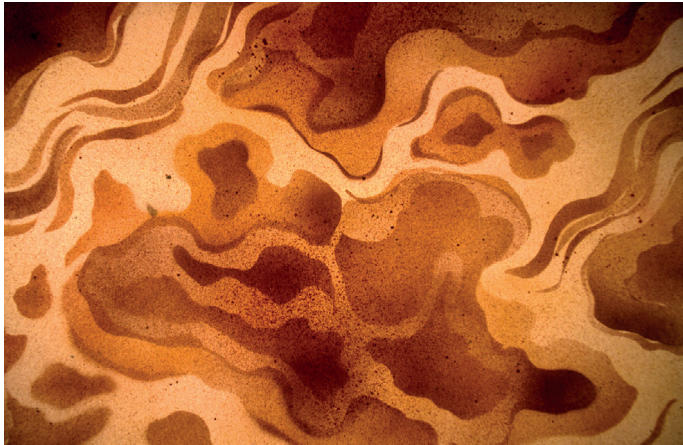
Architecture, being a medium of great longevity is fortunate in having a literature', which are its buildings, that is as old as civilisation itself. This must, inevitably, be the **primary resource for its iconology**. If Architecture itself, is **illiterate concerning itself**, one may be sure that any other field which it adduces to its iconic resources, such as those of the aeronautical machines favoured by English High-Tech, will be used in such a way that their imagerys will reveal the 'architectural' illiteracy of their practitioners all too clearly.

My own researches, which reached a critical stage of 'confidence' in the 1960's have taken me **well beyond** the confines of **Italy and Greece** that were the exhausted fields ploughed by the Post-Modernism of Venturi.

Thus, when I wished to introduce a **certain 'literacy'** to the idea that the **Cavetto**, or **Scotia** moulding that signs the **extreme outer** and upper edge to any 'world' I went to the iconology of the extreme outerness **depicted by the Ancient Egyptians**. When they looked up into the sky at night, when the full immense, prolixity of the Milky



**The black clouds were a stain on the pristine surface of the galvanised metal. They sank holes, with the burning sweetness of poetry, into its dull techno-fabric, stinking of the sulphurous baths of labour. Their darkness invoked a human past whence one might theorize truth, beauty, utility and poetry. Pulchritudo splendor veritatis est.**



A beautiful 'Chaos/Earth' pattern made by moving wavy-shaped stencils over the surface while aerosol-spraying a white-painted wall with different densities of paint. The icon is perhaps a trifle literal, leaving little room for the visual 'punning' needed to 'motorise' an iconic metaphor.

Another technique that we explored was stencil. Stencil is like printing, but reversed. In printing the ink goes onto the object, the piece of type, and comes off onto the paper. In stencil the object shields the paper from ink which used to be applied by brush. Now it can be put onto the paper with an aerosol spray-can. The old way had the problem that the wet paint would creep under the metal or card stencil. This would smudge the paper and ruin the work. With an aerosol the paint droplets are almost dry when they reach the paper. Indeed the paint droplets travelling around the edge of the cone of spray do dry-out before they arrive. They turn to dust and settle everywhere. But spraying is not only quicker but, in the hands of an expert, the 'shadow' thrown by the spray can be manipulated so that no two parts of a pattern are exactly the same.

**The examples here are a metre in length.**

The stencils, which were irregular shapes like the old hardwood profiles used by railway engineers, were made of flexible plastic and were themselves up to a metre in length.

Quick as it was, and therefore as relatively inexpensive, we could not imagine its cost being regarded with enthusiasm! There was another problem. We wanted to apply this graphic to the base of the Atrium columns. But these were cylindrical and the idea of curved stencils posed physical problems that did not appeal.

We were finding difficulty in 1989-1990, in discovering a way of 'scripting' the vast surfaces of a building. Yet the Architects of that time, 30 years ago as I compose this Lecture, were well used to manual techniques.

Back in 1955, when my own training began, the first two terms of the first of the five years of study, were spent merely in becoming expert at making marks on paper. It was called "The Bauhaus Method". In fact it was inherited from the Beaux Arts.

**Today, in 2010, few architectural students are taught any of these skills.**

After six months we had learned how to draw freehand to a high standard and how to paint with guache and water-colour - difficult skills to master. We could razor-cut cardboard balsa-wood and perspex sheet and glue them into beautiful little models, which we then painted either with brushes or with spray blown with the mouth off of old toothbrushes.

Models are the way to show a building to anyone untrained in 'orthogonal' drawing. Yet to the practised eye, models are more misleading than drawings. Who, except God, sees a building from the sky? The perspex was expensive for students but it made a good 'glass' for windows. We could gild or use metallic paint and frame drawings with professional card mounts.



Overprinting the 'earth-pattern' with a 'basketwork' pattern derived from "Linen Basket" - one of the five hieroglyphs for column in Gardiner's Egyptian Grammar.

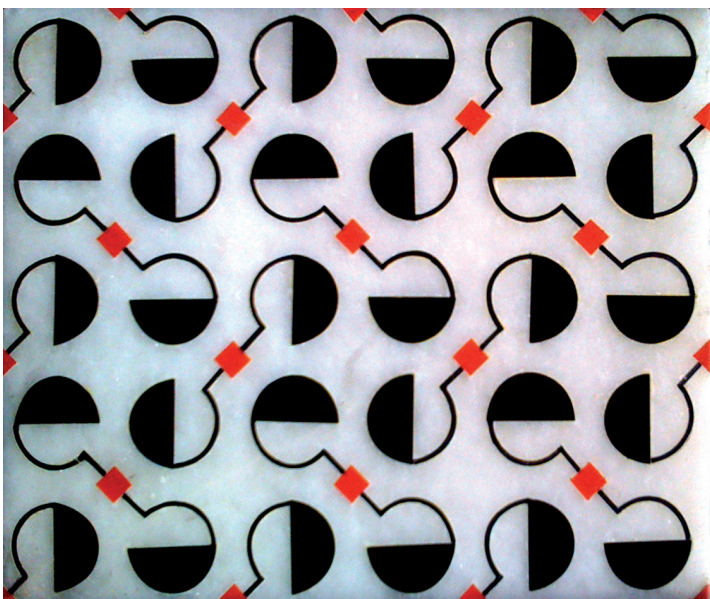




*Disaster-Plaster, as it was inventively named, was our in-house equivalent to 'Blizcrete' concrete, the external material perfected, back in 1981, by David Knowles, my amanuensis in the pre-cast concrete industry,*



*We found a firm that made plaster mixed with resin, who could create curved panels inlaid with a pattern I eventually called 'The Spiral of Janus'. Its ambition, at first, was to sign the sea or the air. The sample sits on a paper version of the same thing, painted in gouache.*



*A pattern I called 'Anemos', derived from anemometers, that could sign 'Air'. It was inlaid into marble as a try-out for a exhibition of crafts from Jaipur, India..*

*So we were not, as we researched the problem of the 'surface-scripted' interior, without resources in our own hands. But they were designed to be economic on the scale of drawings, paintings and models, mere fractional miniatures of the full-size building!*

## **HOW WERE THEY EVER TO BECOME ECONOMIC WHEN MULTIPLIED IN AREA BY FIFTY TIMES?**

*In addition, few of them seemed to offer much hope of being inscribed' into the curved surface of a column, or even the doubly-curved surface of a capital.*

We continued to experiment, and bring-in likely craftspeople while all the Specifications and Production Drawings were completed. Then, a week before going out to Tender the project was shelved. There had been an understandable reluctance, on the part of some of the Consumer's Association staff, to move from Central London out to Milton Keynes. When, after the recession of the late 1980's and early 1990's, it was no longer possible to buy the new building by cashing-in the London property, the need to borrow money gave the pro-London 'protestors' the leverage they needed to stop the M.K. project.

**The curiosity of these years was that one cancelled project succeeded another.**

**JOA never built and finished a single building between 1987 and 1995.**

*Yet my Bureau grew to 25 architects and was well-funded by aborted projects and major 'invited' Competitions. I look back on it as an interlude during which JOA carried out a great deal of technical as well as compositional research. It enabled us to perform quickly, spectacularly and to budget, when, eventually, we received commissions from Clients who were not accustomed to failure - even preferring to blame everything on their Architect (not always justly), and even sack him too.*

*It also revealed to us the sad fact, known in our Profession, that the Architect makes more money by not building than by building. For it is when he builds that the work of the Architect multiplies as he increases his vigilance so as to stop the builder from making irrecoverable errors.*



## ***AFTERWORD for the ELEVENTH LECTURE: 'WHICH CARGO?'***

*We post-WWII Architects were trained as honest haptics brought into the Professional World to serve the supposedly sub-literate masses of the Welfare State. When we discovered, with Neal Acherson, that no such class of cretinised vegetables really existed, we Post-War Architects invented 'Pop' characters of our own. To these we served a menu of 'genres' or, if one wishes, 'styles' - High-Tech, Brutalist, Vitalist, Organic, 'Pop', Expressionist and so on. It was for this reason that JOA professed surprise that we, a firm noted for its unusual recourse to colour and ornament, let alone an excess of flame-headed columns, should be chosen to build a laboratory for testing 'white goods'. Apart from the Rausing House at Wadhurst, Which? was the first project upon which JOA discoursed with a Client Body (of the hydra-headed sort) who were clearly not satisfied with what they saw as the 'received' or normative Architectural service. I suppose one might have expected this from an organisation dedicated to apply fierce criticism to almost everything else! But the whole enterprise of 20C, 'Architecture Autre', Modernism had, by the 1980's, become so conscious of its ethical fragility that it was already retreating behind the barrier of unreason that would become, in the 1990's, the Art pour l'Art of 'Deconstruction'. JOA were eccentric, here, also in that we still clung to the Universal Architecture project to which more than one had subscribed back in the 1950's.*

*Thus it was that JOA sailed quietly along with the physical body of Which? to set-up a situation that most other Architect of the late 1980' would have been careful to avoid: A huge internal room of axial symmetry, ringed with giant columns ending in a theatrical, Busby-Berkeley, stair complete with 'torcheres'. For JOA, of course, no such paranoias threatened. For us, this interior, the logical outcome of every physical and social imperative sanctioned by our Client Body, held the promise of a long-sought benison. Here, at last, was a great public interior to disprove the suicidal premonitions of my old Tutor - Peter Smithson.*

*Yet it was not yet to be. The surface-scripting techniques available to the Interior Decorator are a cornucopia compared to the few, and miserably crude, abilities to colour and script allowed to the Architect, banished as he normally is, to the outer pales of the lifespace. Yet this profuse bounty proved to be all but beyond our reach. The scale of a 'public' architectural graphics is too large to bear the cost, once all those square metres are multiplied-up, of even the meanest of stencillings and stampings if these are to be applied 'BY HAND'.*

*JOA had to spend, over the years of our endeavours to this end, some £100,000 of our hard-earned fees before we had successfully explored what the lifespace-design industry had to offer to our project for an Urbane Interior. But, before we had reached this happy end, the Which? project fell foul of the 1990's property-value crash and was cancelled one week before going to Tender.*