

# The Ninth Lecture.

*What Taboo?*



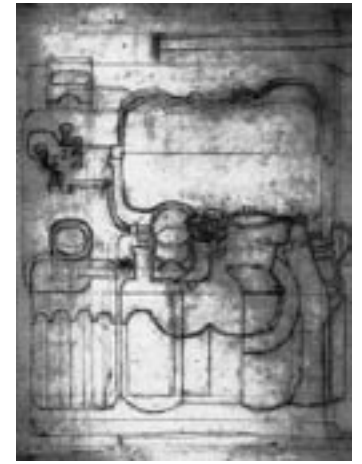
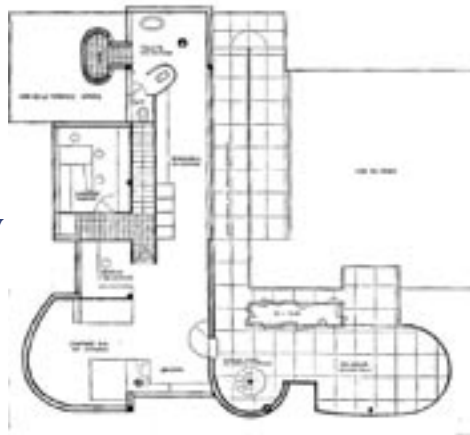


The power of Corbusier's work derives from a profound knowledge of Architectural culture that he resolutely refuses to turn to account - preferring to disguise it as the promenade-deck of a ship. Banham called Poissy a nature morte that 'tabled' the Phileban solids. Banham would have never dared call it an 'entablature'. That would have been too shamefully 'architectural'.

Too wilful to be tied down to the pedantries of real engineering, and needing to remain rooted in the atavistic maternalism of his Purist semantic, Corbusier combatted the earthbound compulsions of the feminine by doggedly eroding its icons until nothing remained of them beyond the wiry profiles of their jugs and jars. Corbusier then built this Saussurean visual phonemic as a whiteness which denied, so far as he humanly could, the tendency to denominate (or 'name) the parts of the human lifespac.

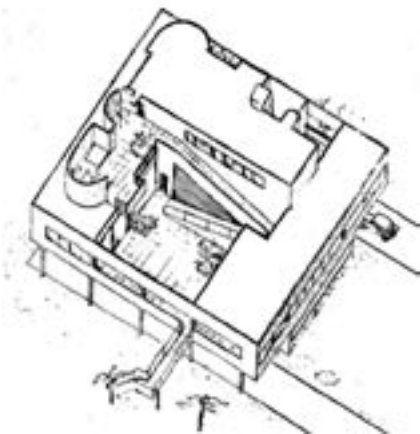


The progenitor of all those week-ending whirlybirds beloved of Archigram, 'Walking Cities', British High Tech and the blow-up blobs of the Sixties and, latterly, the Noughties. This week-end roof-terrace, for a wealthy woman socialite, was projected out of Paris like the end of a pier with the waves of Corbu's putatively savage Nature (a grass lawn) lashing at its steel supports.



There can be no doubt, if compared to the 'etude' on the right, that the forms of Le Corbusier's Plans, in particular, were congruent with his early-morning 'visual researches' into the hollowed-out female forms of domesticity.

A pencil drawing, prior to its translation into a painting looks uncannily like the plan of an Architectural composition by Corbusier.



Axonometric of Poissy - cars 'in' above and 'out' below. Corbusier needed to supplant the Elevational view, with its cast shadows showing how parts of a facade either receded or advanced. His flat white walls, projected no such clues as to either their form or substance. It was necessary, therefore to canonise the Axonometric projection - a 'view' one could 'know' but not see..

The owner of Poissy disliked her cement-white yacht on stilts. Classically-inspired, it was no English 'country house' or Delhi-'Raj' 'bungalow'. Yet its ethos was, even more than that of the English Lutyens, grimly opposed to a friendly, gregarious, social, French 'Fraternite'.

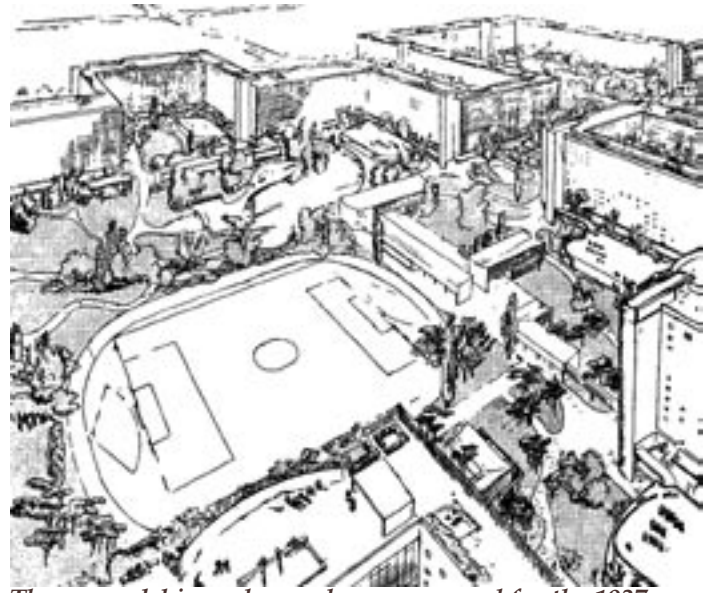
One can imagine her speeding out to Poissy from Paris in some open-topped, 1920's, luxury car only to use his collonnaded portecochere like the gravity of a desert planet to slingshot her wheeled orbit back to Paris, Planet Earth.



Corbusier's proud photograph of the entry of the motor-car, under the 'pilotis'. Formally classical, his Naos of glassy light is screened by a peripteral veil of the hypostylar colonnade of infinity. But who knew that as they accelerated round the back to get the extra Gravitational 'slingshot' needed to fly back to Moderne, Art Deco, Paris.



Corbusier evangelised his inter-war enthusiasm for the sunny, open-air, Rousseauist, Pantheism of the times. But, not content to merely take the occasional weekend or vacation, he promoted the comprehensive destruction of the 'old cities' as well. The 'OBUS' scheme above was proposed, in 1932, for Algiers. Every City Apartment became a primordial Penthouse-Attica-Weekend Cottage. A high-speed motor road ran along the snaking roof, driving the hammering of traffic through every steel rod in this highly-strung mountain-engineering. It is futile to even pretend to apply a pragmatic critique to Corbusier's 'urbanism' It is a theatre for the lonely, alienated, megalomaniacs of the crypto-Fascist, Nordic, New Europe. A 'Kaspar David Friedrich' view of Sunsets were enough to compensate for the destruction of Urbanity.



The more plebian scheme above, proposed for the 1937 Exposition Internationale d'Habitation, transforms the familiar, elegant, 'Place de la Republique', that civilises so many French towns, into a sordid, muddy, piste where men can sweat in the pursuit of some brainless cult of ballistics .

The project of Corbusier that he called 'Urbanisme' was destined to combine the best of the City - such as its connected convenience and high-density life, with the best of the 'country' - such as sunshine, solitude, long views, fresh air, open parkland, physical sports, and so on.

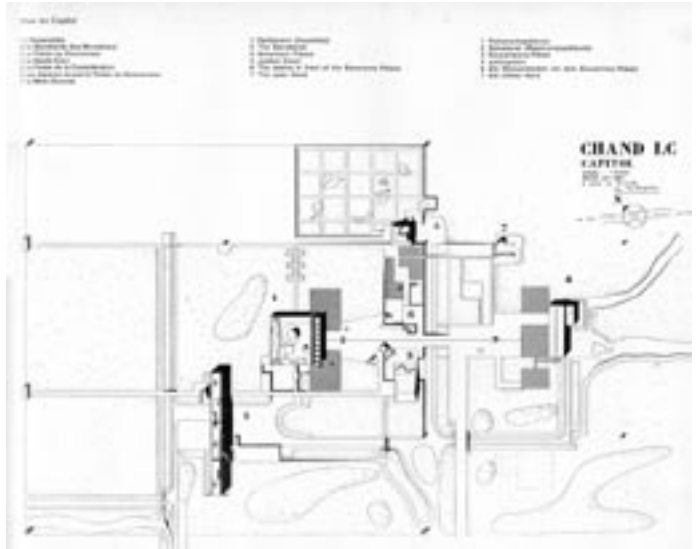
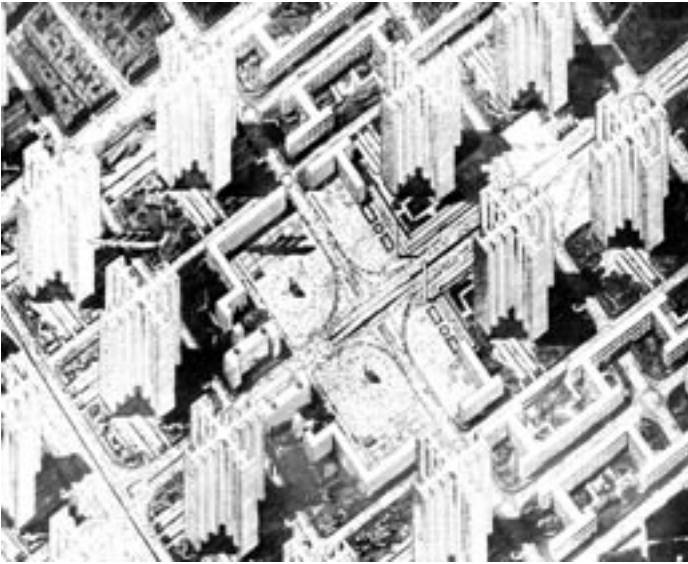
However the first effect of his urban formulae was to collapse the microclimate of the public, street - lifespace. Winds in pre-20C cities were pushed up to blow freely across the roofs of blocks whose height was regulated to be uniform. This left the pavements in relative aerial quiet. It was comfortable to walk in these cities, along to buses and tubes, when the suburbs and country were whipped by driven rain. These powerful aerial effects (which Corbusier, in his world of polemical fantasies seemed to forget, supported his beloved aeroplanes), were now trapped by his long, high, 'slab-blocks'. After hitting the sides of these huge structures winds blew down to the pavements making a high-speed vortex at street level that lifted dust, blew off hats and destroyed umbrellas. A uniquely special feature of the Corbusian city are the high-velocity dust storms that blow through the gratuitous slots created under the buildings by lifting them off the ground on his 'pilotis'.



Corbusier's vision of the Unité d'Habitation, when it was finally realised at Marseilles, became a rough-cast 'Arte Povera' concrete barracks void of any iconic culture save a vague reference to the makeshift shelters that refugees might add if housed on the cliff face of a cindered industrial silo like a grain elevator.



A microclimatic disaster is disguised as "the calm before the storm". Supported on his lusciously curved 'piloti-columns, Corbusier's Pavillon Suisse creates a wind-tunnel that doubles the airspeed, kicking-up hurricanes of dust under his 'gardens in the air' apartment blocks.



For all his cult of technicity the movement systems of Corbusier's city of six million inhabitants cannot bear examination. The roads are enormously too wide for the safety, as well as the microclimatic comfort, of the streams of pedestrians that meander across them. Yet the road widths, and especially their multi-level intersections, are far too narrow for a movement system that is without public transport. Roads for a city moved only by automobiles swell to widths of 60 M (200 feet), including their on and off ramps. These create obstacles to pedestrian movement the size of rivers whose undercrofts are filled with trash and tramps. This is not technological Futurism, it is mechanically infantile. I show later that he ignores everything cunning in the urbanism of the Beaux Arts which even a Francophone Swiss must have understood - even if only intuitively.

*The central area of Corbusier's city-plan for Paris, exhibited in the 1925 Pavillon de l'Esprit Nouveau, causes one to note that Corbusier never, in all of his many city plans, described a public transport dimension, either of buses, trams, trains or underground metros. This profound suburbanity was being proseletysed during a time when London built more underground lines than either before or since.*

**Corbusier hated the cities he found. He thought them trivial. Yet he entirely failed to invent a way of investing them with a new profundity.**

When Jawarhlal Nehru gave him the project to design a new provincial capital for a Punjab, that the departing Raj had failed to avoid partitioning, Corbusier fell back on his old devices of agitating ground plans with Purist patterns. When inflated to the size of a City Capitol, these not only delivered the complete meaninglessness of which he had accused Cubist painting, but (as one might expect if one was to 'build' a painting) a liberal dividend of

Chandigarh was planned from 1956 onwards, to be the new Indian capital of a partitioned Punjab. In a classic French Republican plan the Legislature is at 9 o'clock, the Executive (Governor's Palace) at 12 and the Judiciary at 3. But where is the central plaza, ringed with cafe's and shops, where the powers-that-be may partake of the 'mind of the plaza'? And where are the markets and bazaars, where the politicians, judges, and administrators mix with the plutocrats, traders, manufacturers and producers? This is the mere husk of a Plan. It is vacant of that animated urban culture which the culture of the Mediterranean deeded to the West. The capital of Chandigarh manifests of the preferences of 20C Architects, like Lutyens and Corbusier, for an authoritarian, caste governed, constitution which avoids institutionalising the 'wisdom of the plaza'.



It is not just that French Urbanisme invented, first, the post-Republican felicities of Beaux-Arts city planning, and, second, the inventiveness of the 1920's Moderne, only to be represented in India by Corbusier's Chandigarh. It is as huge in scale as Delhi, as vacant of both symbolic and vital metropolitan focality and with an even more inadequate microclimate. More uniquely, the chemistry of Corbusier's 'honest concrete' provides alkalis that attract massive daubs of filthy black algae - so different to the sweet, smooth, silvery cement of Switzerland. How did India acquire these crippled denials of Western urbanity when her own architectural cultures were so sophisticated? As ugly as military bunkers, Chandigarh's symbols of institutional reification have such a confusedly 'liberated' ground-space topology that they are ringed, for security, with barbed wire.



Even towards the end of his life, on his greatest commission, Corbusier could not escape from his obsessive 'technicity'. His foyer-columns for the Legislature are impossibly virginal - for such an old man and such an iconically fertile culture. They stretch upwards like fisherman's buoys bobbing on the black ceiling of the abyss into which Corbusier's adamant refusal of Architecture has cast him. Dull brown chairs litter a dismal beige carpet whose chaste lack of figure erases any tendency for this concrete forest to reveal its hypostylar gene-pool.



It was not that Corbusier was unafraid to compose large-scale, 'architectural' graphics. They were, for him, the origin of his Architecture itself. What would be more 'philosophical' than to reveal this by inscribing them into the surfaces of his cubic volumes? This tapestry hangs in the Judiciary. It tables certain familiar and personal signs: the diurnal rhythm, the wheel of Buddhist Time (circular, not lineal) and a tree with sectioned roots - all on a meandering field of red and white. It relieves the eternal greyness of raw cement and reveals a mind that labours, endlessly, with unresolved obscurities.



Corbusier has assembled some 'Purist' skylight-shapes on the roof of the Chamber of Deputies by which the light of the sun and moon is "entered into the lease" - a beautiful idea whose grand shapes are hidden on an inaccessible roof. Corbusier tired as easily as the next man with boxy cement probity and needed conceptual refreshment via some strange shapes. In this case he entertains a monstrous horned visage.

#### dysfunctionality.

This page illustrates the peculiar tragedy of Corbusier's attempt to single-handedly manufacture a novel architecture through the invention of forms via the 'free' media of the 'fine' arts of painting and sculpture.

He failed because the Architecture, as such, remained obdurately banal, mere offcuts from easy-build engineering, while the 'plastic researches', even when 'pinned on' to the body of this impoverished architecture, failed to animate the relentless litany of cubic cavities that useful



Roofs reminded Corbusier of the tables on which he placed his objects before painting them as Purist 'natures mortes'. That of the Unite d'Habitation in Marseilles was the first, and the best, of his aerial 'sculpture-gardens'. What remained hidden from him, as well as his public, was the ancient function of the entablature to 'bear' objects of significance (ie. signs) so that they could be viewed - evidently for some purpose. In the case of Corbusier the 'objects' are rendered not only iconically obscure (which is legitimate) but physically out of eyeshot (which is not). The question that then emerges, but is neither asked nor answered by Modernist historiography, is "why were the 'tablata' hidden?"



Corbusier's new Capital of the Punjab is all made of 'Béton Brut'. It is pitted with air bubbles that, if deep, rust the reinforcement. It is eroded by escaped cement from shuttering joints. This is badly made concrete. It served to canonise the Post war ethic of as-found, off-the-shelf, cornflake-packet Brutalism. An aesthetic that had recognised its iconic bankruptcy retreated towards original oblivion until it felt the primeval ooze well between its toes. Laugier would have recognised its savagery.



Corbusier's two houses in the Parisian suburb of Jaoul were no longer levitated white parcels of the sort swung from expensively accoutred hands, but heavy, hand-laid, masonry tunnels bricolaged with packing-case softwood. This was Bidonville - Existential- Chic.



The 1955 Sarabhai house in India reveals an interior no longer lined in illusionary light and colour, let alone murals. It presents in the rawest 'materia bruta' - as if the budget ran out before the finishes - especially on the ceiling of muddy plaques. Such architecture comforts those who wish to quieten minds consumed by anxiety, minds that wish for hot soup eaten with wooden spoons - of the sort that existed in the 1950's. Voices bounce-back as random sound-echoes from walls, floors and vaults stripped of semantic structure.

**The time after the 'War to end all Wars' had been optimistic. It was thought, in the 1920's, that the retirement of the stiff-necked, militaristic, Aristos of the Ancien Regimes would put an end to the slaughter of the innocents. People were excited, happy and 'futuristic'.**

The situation after 1945 was much, much, worse. War had returned with **greater ethical degradation and new weapons of obscene violence**. The safety-first culture of the 'welfare ethos' arose, along with its aesthetic of quiet, grey, keep-your-head-down pragmatism. Worth noting, in passing, is the report of **Neal Acheron** that **'Pop art' grew out of the refusal of the Post War Establishment to respect the human need for colour, drama, symbolism and the 'sense of occasion'**. Corbusier's response was neither stupid nor silly. He did not abandon the 'primitive' domestic iconography of his forms. Instead, he enlarged their semantic scope. His paintings assimilated more 'dangerously' ambitious signs and symbols from cultures, such as India, that had not yet abandoned their quotidian employment. While this benefited his painting, and, still more his collaboration with the sculptor Savina, it still failed to infuse the slab-sided corpus of his cubic architecture with anything approaching the subtlety and sophistication of his graphics. In response to this, and to the **gritty focus on contingency** by post-war 'Existentialism', Corbusier canonised 'materia bruta'. **If the wall, abhorred by French Classicism since Laugier, could be neither a nihilistic white nor a double-glazed mural of Natura Naturans, then it might as well be 'in your face' primordial muck.**

**The Avant Garde of Modern Art left Paris, during the 1950's, for New York. There, under the rule of Clement Greenberg, it cut all ties with the entities that (even 20C) Architecture was originally invented to mediate - the spheres of law, government, ethics, politics and commerce. In America, with Abstract Expressionism, Modern Art retreated firmly into its Museums and Galleries. It ceased to be a major player in lifespace design in even the oblique way used by Corbusier. Rejected by the 'Art Elite', the human lifespace was now mere technicity.**

But succour was at hand. If the once-brilliant but now-degraded, realm of 20C graphics was to fail her, then "Complexity and Contradiction in Architecture", published in 1962 by Denise Scott-Brown and Robert Venturi, would make of Ancient Architecture herself, that Crone abandoned at the door of the 20C, a **magic medium** that could **play its chastely meaningless games** with a 9,000-year history of strange, previously tabooed and only half-remembered, shapes. These **'traditional oddities'**, after the effluxion of time and the **training of cohorts of Post-War architects to a near-universal iconic illiteracy**, were now **sufficiently meaningless** to serve as the medium of a **purely formal, completely 'Fine', Architectural 'Art'**. There was, in this, **no dividing line between Las Vegas and Venturi**. Both exploited, rather directly, the 'Architectures of History'. Vegas can not afford to be plastically original. **One can not fast-track a 6,000-bed hotel without a generally disseminated 'Style' like 'Venice', 'Rome', 'Egypt', 'New York', or 'Monte-Carlo'**. Venturi could, perhaps, originate formally - although one sees no evidence for it. He sups, with a longer spoon than Vegas, on the same histories of the Mediteranean and the American vernacular.



This, the key image from "Complexity and Contradiction", divides the 88 pages of Museum-Board small-talk from the 26 pages of the Venturis' designs. This ruin of Jane Jacobs's "Great American City" was the image that brought the Connoisseurocracy's reverie, luxuriating in the Rococo and Baroque, down to earth. It gave the real-world context to the Venturis' trashing of Architectural composition. Venturi, and the American Architects who followed him, through Moore, Eisenmann, Gehry and Liebeskind, squandered the legacy of Kahn. They fellow-travelled the road that abandoned the divine orthogonality of the American lifespace to co-operate in its liquefaction in the furnace of the Cold-War economy that Baudrillard described when he wrote: "all that is solid melts into air".

**Vegas and Disney mediated the lowbrow conjunction of American commerce and 'Kultur'. Venturi dealt with the highbrow end.**



The landscape of an ethosphere is one of the ways to understand its constitution. That which Venturi found himself occupying, during a 1950's economic boom powered by television, air conditioning, the telephone and the automobile, needed someone to invent its 'Kool Kultur'. Venturi aimed to be that Agent.

Those who are unfamiliar with the USA, such as Anglos grown in the professionalised culture of the Welfare State, will not know how extremely careful the American intellectual is to both distinguish himself from US commercial culture yet to also exist in easy familiarity with its aggression towards any sense of elitism. They ride two horses at once. Venturi set himself the task of assimilating the 1950's lifespace, which, tooled-up with air-conditioning, television, telephones and the automobile, had obtained enough velocity to permanently escape the constraints and disciplines of urbane space. Stretched out, as on a rack of cheap land and low-tax petrol, the US lifespace became an axial experience of freeways and parking lots. Low, unpretentious, boxes littered these windy subdivisions. Above them a new breed of "imagineer" was constructing huge 'sky-signs'. These were the new 'facades' of American Architecture.

**THE BADGE HAD LEFT THE BOX.**

Taking his cue from the neon sky-signs of the 'Freeway Strip', Venturi set himself to invent an Architecture for America that would pin 'High-Culture' facade-badges onto the balloon framed boxes of the USA. The difference between Venturi's facade-badges and those sported by Taco Bell would be that the Venturi's could get your boxy building into enclosures, like University campuses, that were reserved for the wealthy and cultivated. To this end Venturi revives the categories of 19C formal analysis discredited by Aby Warburg and, with the skill of an advertising copy-writer, employed them to parade his 88 pages of architectural monuments as potential badge-fodder. The palette of formal devices, derived from his list of fabulous models, which he offers to his aspirational customers are the "both-and", the "juxtaposed contradiction", the "redundant enclosure", the "multiple enclosure", the "detached lining", the "spatial superadjancy", the "crowded intricacy" and so on. With these shafts, all of them entirely void of architectural pedigree, he offers a quiver wherewith the Architect may, like the infant Cupid as William Tell, aim at the hitherto forbidden fruits of history.



Supporting cast:  
Villa Aldobrandini, Frascati



Main Star: Vanna Venturi's house,  
Philadelphia. View of front.



Supporting Cast:  
Vanbrugh's Blenheim, Wiltshire.



Supporting cast: Borromini: San  
Carlo alle Quattro Fontane, Rome



Main Star: Vanna Venturi's house,  
Philadelphia, 3/4 view of rear.



Supporting Cast: S. Maria in  
Cosmedin, Rome

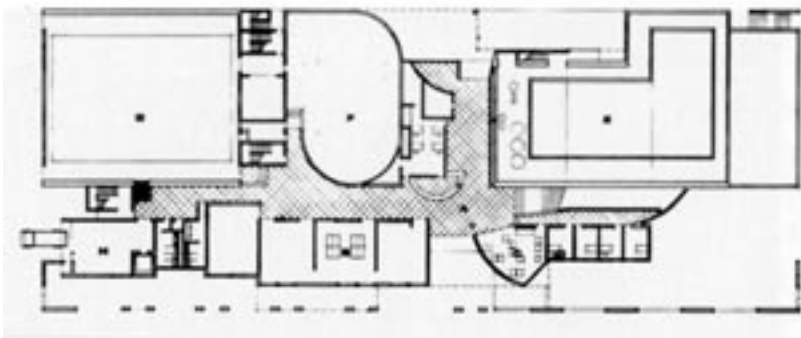
*There is a strained relation between the modestly-stated ambitions of the Author of 'Complexity', which are to maximise the physical conveniences of the 1950's ranch-house structures of his Clients, and the architectural exemplars that he brings forward to authenticate his design tools.*

He offers his reader everything from Macchu Picchu to Michaelangelo's St. Peters. Verzengeiligen's German Baroque is added to Vanbrugh's Blenheim etc. etc. Venturi 'discovers' a compositional manoeuvre denoted "combining (almost) equally contrasting directions in columns, piers, walls and roof" within S.Maria delle Grazie in Milan, the 20C Church of the Autostrada by Michelucci, Scharoun's Berlin Philharmonic and Gaudi's dressing table in the Casa Guell. Not content with this Venturi proceeds, in the next sentence, to propose that all of these are to be further understood as examples of: "dualities of form, extreme inflection and continuity, violent adjancies and discontinuities, complex and simple curves, rectangles and diagonals, contrasting materials, symmetry and asymmetry, in order to accommodate a multiplicity of functions in one whole."

*But did the inventors of the buildings Venturi illustrates entertain such conceptual trivialities at the forefront of their minds? Does Venturi's fishing-net of compositional improvisations haul the intentions of Greek and Roman inventors of the columns, capitals, vaults and Diocletian windows from the depth of obscurity in which they have lain for 2000 years? To be persuasive an architectural thesis is best 'proved' on Architectural works which have a commensurate conceptual ambition. Venturi's design ambitions are, in the event, banal. For proof one looks no further than his sentence which ends:*

***"in order to accommodate a multiplicity of functions"??***





*'Quotations' from Corbusier and Kahn drift in out of one's mind while looking at Venturi's Plan for the YMCA. But they are entirely free of the compositional counterpoint engendered by the struggles in the other Architects' work between the syntactic rigours of coherent utterance, and the contingencies of practical planning. Venturi just sells useful planning all by its dumb self.*



*Venturi proposes to remedy his trashing of Architectural composition, in the pursuit of Functionality, by providing a freely-composed 'signature' facade . It stands here, a vacuously fretted wall entirely free of 'function' to demonstrate the superior culture of the architect, the lucky owner and the incumbered tenant.*

**The work of Kahn, though obtaining of the aura of ruin and accompanied by oracular obscurities, was both congenial to Structuralism and its later linguistic flowering. Venturi blocked progress in the development of a literate Modernity by diverting it into a practice that he licensed to ignore both compositional rigour as well as semantic enquiry. He encouraged a modish recourse to historical exemplars whose use had to be accompanied by slovenly incompetence at best, and, at worst, by a the deliberate, dumb, crass, silliness of his successor Frank Gehry. His work was both a protest, which pleased the American 'Beat Generation' literati, a lamentation, which proclaimed his 'seriousness' to American Museum Curators and Donors, and a trashing of elite cultural items so as to obtain the approval of Pop culture.**



*Palazzo Tarugi in Montepulciano is proposed by Venturi as an example of "whimsical windows" that demonstrate how "anomalies and uncertainties give validity to architecture". The upper loggia, upper windows, and the lower arcade have been filled-in. New windows have been cut at random. None of this 'validates' Sangallo's architectural culture, on which Venturi remains discreetly silent.*

**Venturi's novel proposal, at least to any architect familiar with his noble Exemplars, is to accommodate these physical needs by abandoning any rigour, or discipline, in Composition.**

**He proves the eating of this pudding with the shambolic little hut he builds for Vanna Venturi. The result is an object deliberately voided of architectural syntax, and therefore semantic. This is why Venturi pointedly abandons any pretensions as to 'meaning'. The adduction of Venturi's cast list of 'High Architectural' exemplars, whose main ambitions actually include meanings of an arcane and metaphysical richness, is gratuitous and superfluous to his thesis.**

**It degrades the exemplary works he press-gangs to his aid and renders his project blushing pretentious.**

**NOR WAS THIS THE MERELY INNOCENT ACT OF A PERSONAL TASTE-MAKER.**



*It often happens that the work of a literate Architect is more cultured than his writing. The Meiss house has a columna lucis in its chimney and hearth, culled from the American vernacular, along with the pedimental pyre and a fragment of the solar disc and cave of springing within its pyramidal cargo-cone. Two 'fortificatory' walls flank the axial entry. It is this that 'validates' Venturi's architecture, not the intellectually puerile appeal to a whimsical contingency. It only becomes important that the Architect understands these things when he is subjected to ludicrous 'theories' of the sort published by MOMA and Venturi.*

Whereas the first two constituencies were persuaded, the third was not. Disney and Vegas understood that their Public preferred to treat Michael-Angelo 'seriously', even if at only 3/5 full size - a double-take that not even Venturi had the nerve to essay. In the event Venturi's project failed to adhere American commercialism to the 'high culture' of the university summer schools. What it did manage was to block the emergence of a home-grown architectural culture that could build a technique capable of rising to the challenge of its own, American, lifespace. Venturi's specious analogies short-circuited the construction, recovered by Louis Kahn, of an architectural culture which by standing on the shoulders of the Moderne, as it had flourished in both the USA and France, could mate the unique gift of the American lifespace with the global inheritance.



Polystyrene Classicism: Caesar's Palace in Vegas is a 'Dry-it' overcladding of an '80's Gropius-style slab-block hotel. The Casino Bouncers dress in leather kilts, like Roman Centurions. The West's own heritage is publicly trashed.

Venturi's simultaneous trashing of history and composition ensured that there emerged no coherent Architectural culture, whether from the iconography of Popular Art or the conceptual capabilities of the High Culture of the Universities and Museums, which could either 'surf', or resist the transmutation of the American lifespace into the tax revenue which was to be her most overwhelming resource in the Cold War. The 'deconstruction' effected by Eisenmann, Gehry, and Moss followed the lead of Venturi in undoing all of Kahn's initiatives. Instead of building on Kahn's hard-won aesthetic inventions, they ensured that nothing would stand in the way of the pulping and smashing of any resistance to the consumption of the American Lifespace in the 'Fiscal Furnace' of real estate development.

These corrupted 'Devotees of Decon' failed to employ the orthogonality of the US lifespace to overcome its tendency to liquefy its topology into the mere beating and pulsing of a financial surf. They pursued an illusory 'Complexity and Contradiction' that, instead of acting in the way that Romantic Geomancy does in Britain, merely broke the back of the only capability towards order that is on offer in the USA, the 'divine' (as termed by Mies van der Rohe) inscription of its lifespace as a Terra Nullius by its Founding Fathers. Venturi, and his followers denied, and continue to deny, the invention of the Architectures which are needed to bring stability to their relentlessly synthetic culture. It may be that the USA will continue to rebuild itself on quick-fix amortisation cycles that extend until the end of time. But that could even be an imperative to constantly improve, enrich and clarify rather than disconnect, degrade and confuse.

The major problem faced, and never resolved, by Louis Kahn, was the re-invention of the column. His radicality was to re-focus upon what he called "the room". But he remained unable to define it by a trabeated structure. Kahn continued to represent his rooms as delineated by the anti-Classical formula of the flat plane. Here he may



have been inhibited firstly by the 200-year-old reduction of the column to a merely 'constructural' prop and, secondly, by the appropriation of 'con-structurality' by that other American luminary of the 1950's: Buckminster Fuller.



Kahn's inability to re-invent an 'Ordine' led him, in his Yale Art Gallery of 1951-3, to adopt the column-free spaces spanned by the 'space-frames' of August Komendant and Buckminster Fuller. These he 'monumentalised' (as they would never have) in wet-cast concrete.

Whatever the reason, Kahn found himself the prisoner of a formal vocabulary of huge sheets of unrelieved wall and ceiling, in short 'the box'. He was always trying to break out of the box, and failing. This is because the only way to abolish the box is to inscribe its hypostylar genetrix, which lies in the Time before Time, of which every wall is a mere accumulation of the detritus of history, waiting to be washed away by the somatic flow of the Time of Living.

Kahn struggled towards an explication of his own architectural intentions. He wrote 'as if' his Medium was animated with a 'will to become'.



Kahn built the 'recovery of the ruin' that has lain in the brain of Western Hellenism ever since Octavius Caesar decreed that the architecture of the Res Publica was to be that of Periclean Athens. In the Indian Inst. of Management, in Ahmedabad, its Roman body is recovered entirely divested of 'decorum' - big, bold, brainless and beautiful- like the engineering of viaducts.

It is this awe-ful **monumentalisation** of the **detritus of the wall** that provides his buildings with a quality which Kahn himself recognised:- that of 'ruin'. He remarked that "great architecture made great ruins". But one could suggest that this is **not necessarily** when they are inhabited by the living!

While bewitched, as Architects are, by their tragic, sepulchral, silence, one must remain aware that, on the whole, humans prefer to **house themselves amongst the 'quick'** rather than the dead. Dacca enjoys a rich and vital **iconic culture of inscribed surface**. But the **magnificent, telluric, gravitas** of Kahn's bare, rough, brick structures was incapable of discourse with it. They remain dumb, closed and mute.

Kahn's architecture **begins earlier and ends later** than the present. But, in reaching out to these temporal extremities, it leaves the present unfulfilled. He needed a way of inscribing his magnificent architectural paradigms with entities, as even cinema posters are pasted onto ancient walls, that spoke of the ephemeral **interests of the moment** that each of the **succession of generations** enjoy when they are **actually alive**.



Kahn's devices failed him in the minor parts of the 1962 Indian Institute of Management in Ahmedabad. He was faced by the relentless cubic accumulations that are the inevitable urbanistic quality of the 'cataclysm of domesticity'. Kahn failed to validate the transmutation, of these masses of little cabins, into the 'music of measure' made by an Ordine - ever the main means to Commoditas. Kahn proffered his buildings as left by an aeon of time that had erased all traces of iconic 'speech' from their enduring 'figurae'. This was a syntax whose semantic was universal, inspiring, but as silent as the works of a lost culture. In fact the inability of Kahn to reach any accommodation with India proved even more total than that of Lutyens.



In his Salk Institute of 1964, Kahn folds a wall around a room with 90° and 45° corners to provide some 'interest'. He shuns any column or entablature that might trace a Trabeated frame.

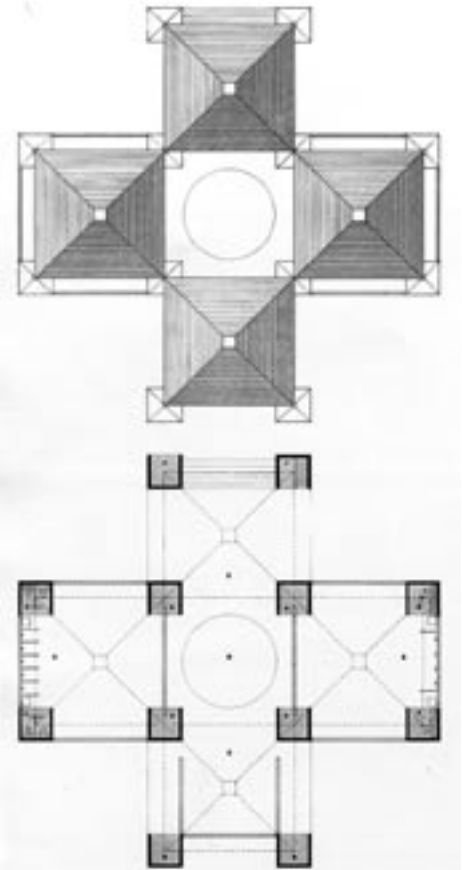


Kahn became renowned for the way he fretted and fidgeted with the 'technicity' of walling. Here the wet mix is allowed to enter between the joints of the wooden shuttering, congeal into concrete, and leave the memory of its making.



The effect of Kahn's Bath House at Trenton, New Jersey (1954-57) was out of all proportion to its physical modesty. This was due to its recovery of the architectural entities of the hypostylar 'forest' over which 'fly' coffered ceilings. Each of these reveal a central oculus of solar illumination. The whole is grouped, bi-axially, around a focal hearth.

**The first building to confirm that something strange had happened to US Modernism was the Trenton Bath House. Its extreme poverty of material culture - cinderblock wall, cement floor and lumber roof - allowed it to escape any quality of 'rustic kitsch'. It epiphanised, like the disinterment of some long-departed culture, architectural devices thought to be incapable of use by anyone of ethical probity in the 20C. Yet, used in this modest little physical health-house, how could they do anyone any harm?**



It remains strange that after seeding his work with this hypostyle of columnar beings, who even address each other through 'doors', that Kahn did not go on to develop an Ordine of some sort.



Kahn described the unwindowed towers of the Richards Medical Laboratories, as "servant spaces". They attended, robotically, to the "served spaces" that were the windowed laboratories. Kahn transformed vertical service ducts into embryonic columns. But he never hatched them as any sort of 'Ordine'.

Trenton was followed, from 1957-61, by a much larger building, the Richards Medical laboratories in U. Penn, Philadelphia. Here his use of columns as hollow rooms for bath-house functions could flower into blind towers filled with machines. Kahn responded to the mid-20C irruption of building services, canonised by Reyner Banham as a "Second Machine Age" of 'consumer products'.

**YET HE COULD NOT ESCAPE FROM 18C RIGORISM'S REDUCTION OF TRABEATION TO MERE PHYSICS.**

His hollow pillars never extended their formal development into the realms of the 'trabeate' that were needed to explicate the destiny of the ambitions which Kahn laboured, so heroically, to realise.



Kahn roofs his most celebrated building, the Fort Worth Kimball Gallery (of 1966-'72) with a silvery-grey cement vault washed with daylight from partially translucent, perforated metal, reflectors. The slit down the crown of the ceiling aids its long-span structure and provides a memory of the coffer's luminous lens into the 'upperness'.

Kahn's commitment to the 20C's planar syntax prevented him from realising the *raison d'être* of the pre-20C Architectural semantic whose utterances he mutely mouthed. He kept on realising 'picture-planes' without going so far as to inscribe their iconic cargo. Nor did he reify the trabeated frame which projects them out of the materialistic dimensions of natural space.

**To defeat a material plane one renders it into a picture-plane 'steadied' by a Trabeated Order. The plane becomes 'ideated' not as such but via its cargo.**

Kahn had recourse to sunlight. This he learnt to wash over the surfaces of walls and ceilings in ways which recall a much earlier Architect who was as obsessive as Kahn about arriving at an aboriginal version of 'Classical' Architecture - namely John Soane of London.

The circular orifices centring the Library for Exeter Academy (1967-'72), describe a sphere of space as cosmic as that of Hadrian's Pantheon. An oculus open to the sky would be impractical in a library concerned to preserve its books. But Kahn's inability to 'rise to the occasion' is most striking. He 'frames-out' the ceiling but then can only 'cancel' it with cement 'diagonals of denial' topped with smoke-vents..



The First Unitarian Church in Rochester NY, 1959-'67, puts four shafts of light down the corner-walls but the ceiling is blank.



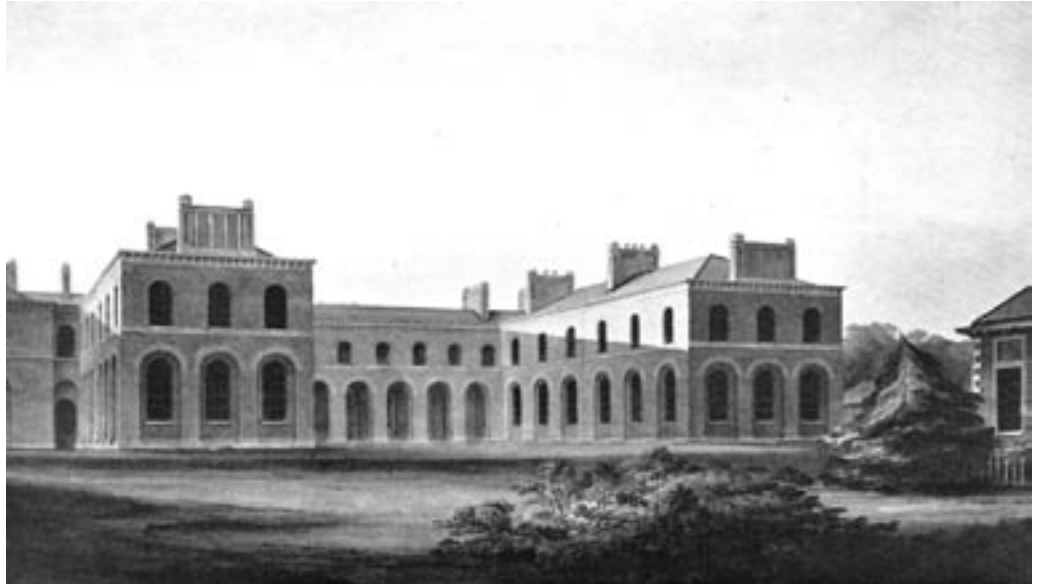
The Wolfson School of Engineering, Tel Aviv (1968-77) enlarges the ceiling and 'light-louvers' of the Kimbell.



A detail of the Wolfson Laboratory 'skylight' shows a complex reflecting surface which leaves a space for powerful downlighters for night-working. The ceiling remains a smooth sheet of cement that balloons lightly upwards towards the light. It is a beautiful illusion which focusses reflective sound - which the light baffle is useful in dispersing.



Soane's house, 1813-37, supports no entablature. Columns trophy their burdens directly, while arches web the wall.



Soane's 1810 Infirmary of the Royal Hospital Chelsea. is as rationalised as any design by Durand, except that Soane eliminates the columnar verticals and the entablature horizontal that comprise a trabeated architecture. Only the mural remains, expressed by cookie-cut openings round which the sheet of the wall-plane flows.

**Soane was as attracted to *Flachenkunst*, or the art of flat surfaces, as any 20C Modernist. Soane used arched openings, as did Kahn, to accentuate the planar, mural, quality his forms. His was also a Neo-Classicism which oscillated, as did that of Kahn, between ideating columns as free-standing pieces of sculpture or buried away inside the wall.**



Even the fireplace of the Drawing Room in Soane's House is strikingly vacant of the projecting shelf that is the minimal version of the classical entablature.



The Column as free-standing sculpture has lost its framing entablature to a ballooning vault - in the 1822-27 design for Court of Requests in the proposed House of Lords.



The 1814 Stables to the Royal Hospital at Chelsea manifest the wall as a unique succession of arched incisions worthy of an Egyptian 'door of appearances'. The entablature appears swallowed by the layers of wall in front of that the layer into which the doors are actually fixed.

A most striking quality of his work remains unremarked by 20C critics. This is the **regular disappearance of the Entablature** from his 'Soanic Order' at every scale from building to fireplace. Soane was possessed, as were his contemporaries in Enlightenment Paris, of the desire to arrive at an Architecture shorn of what **they all regarded as the superstition** and irrationality of ornament. Soane pursued this further than most Practitioners of the time. He pursued a physical ideal of joining the surfaces that defined a room into a **seamless, disarticulated envelope** that no longer distinguished between wall and ceiling but combined them into a **single, spheroidal enclosure**. He had no way of **inscribing** this novel conception except to engrave its surface with slight lines and whorls, and as in the magnificent design for the 4% consols Office in his Bank of England (shown opposite): a system of cofferings that become a **barbaric dazzle camouflage worthy of the 1930's Moderne**.



*Gandy's drawing of the original (1798) design for the 'enrichments' of the 4% Consols office in his Bank of England shows the pilastered flutings of the Soanic Order continuing from column over into column with an uninterrupted curve that would have pleased Buckminster Fuller, seven generations later. Soane also translates, to magnificent effect, the Rigoirist Tectonics of the interwoven 'beams' of the coffer into a barbaric pattern reminiscent of both Fuller and the Parisian 'Moderne'. Soane's iconic lexicon was imprisoned by the 18C ethic of 'structural honesty'.*



*This charming picture, in the manner used earlier by Clerisseau for Robert Adam, is Gandy's attempt to conjoin Soane's 4% Consols Office to 'Antiquity'. It is an intellectual comedy, and an architectural tragedy, that the Iconography of Ruin was the most persuasive poetic available to an iconically challenged Transalpine Classicism. At least a century would pass before the figures of Architecture, as such, would begin to be deciphered.*



*Soane is best known, amongst contemporary Architects, For the way in which he slides light down walls from unseen skylights. Soane cuts real as well as virtual (mirrored) holes through walls and ceilings. He opens the fabric of his thinly planar home, now his Museum, to both the solar and optical (visual) ray.*



*The magical Room of the Privy Council, in the House of Lords. Doors as muscular as 'ruins' of triumphal arches stand under the 'open sky' whilst the Council sit as if 'outside', under a ballooning tent. The roofscapes of Soanes ceilings are criss-crossed with 'secret' gutters. They are monuments to the leadworker's craft.*



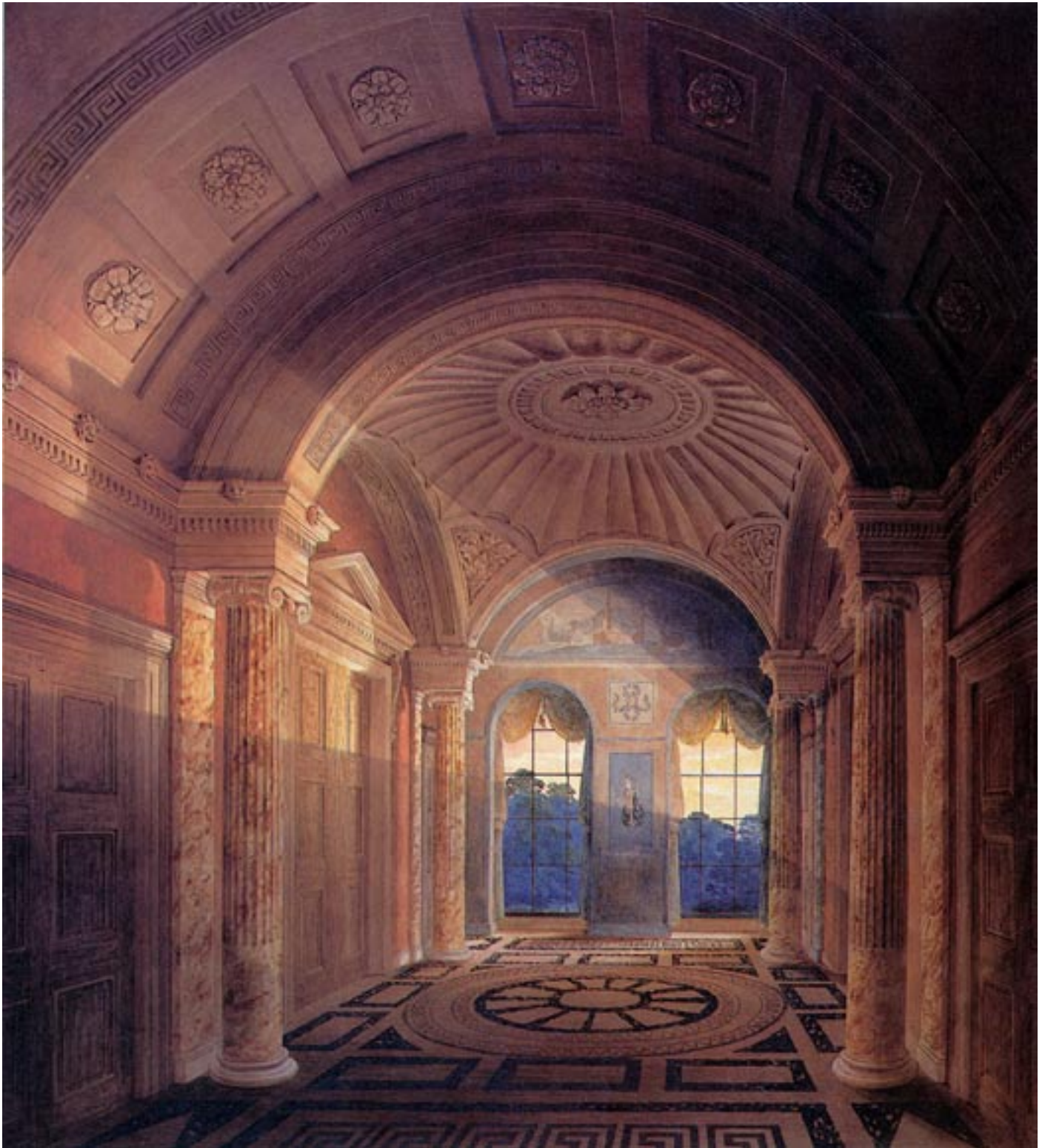
*The Entrance Vestibule to Tyringham Hall, is a dark cave walled in ashlar masonry whose four muscular, free-standing, Doric columns, support a groined vault capable of holding up a cenotaph.*

**Soane's Enlightenment ambition to invent an Architecture that progressed far beyond the rules and rituals that he inherited, led him, as it still leads many such radicals, to dematerialise the fabric of building and replace it with something less than solid masonry. Soane was, for this reason, interested in the technology of construction. But, beyond this, he became concerned with light itself. Light is the prime antithesis of Matter.**

**SOANE CUT AND CARVED HIS MATERIEL SO THAT LIGHT WOVE INTO IT IN NOVEL WAYS.**

**But, when daylight was denied him, as by a second storey, his ballooning ceilings became sepulchral vaults. Soane can neither dispel not take advantage of this 'loss of light'. The reason is that his Nordic Classicism, especially, as pointed out by John Harris, in its English branch, never came close to using the 'conceptual light' shed by architectural surfaces scripted by the iconography of Hellenism that was already freely used in the Italy that they 'Grand Toured'. Nor was anyone in Europe able, as yet, to exceed this iconic tradition.**





Another Entrance Vestibule, this time designed, in 1800, for Aynho Hall, illustrates the difficulty that Soane had with developing a plausible 'script', both literary as well as visual, for the surfaces of his internal spaces. He recalls Lutyens in the way that he meshes spaces together with the well-oiled rotations of a machine. The circular columns, the circular floor-pavings, the circular window-heads, the circularity of his segmental arches and, finally, the circle-on-circle work (always the costliest of forms), of his spherical vault, all attest to the native command of precise measurement and mechanical skill. The iconic density of the decorative enrichments is thin by comparison to the spatial competencies of the Architect, and his builders. A coffer is a view up into a 'chest of valuables' at whose summit a golden point of illumination opens a small aperture to a conceptual 'fire' above. This cargo of 'illumination' is carried by the entablature as a 'raft', which is the Latin meaning of 'trabica'. One can not bend this raft upwards as if it was made of rubber. Nor can one depict a point of illumination as a large and flabby beige flower on a soft pink ground! The ceiling of the coffer has been the darkest, abyssal, blue from that of the Athenian Propylea through to the Italian Renaissance. When the rigid raft of the entablature is absented by a vaulted surface, it is the signal for the cargo of the raft to be revealed. One can not then go on to veil the screen on which this story must be told with a miserable kerchief that opens to reveal what? - Surely not just another misplaced 'rosette'!

It can be no surprise that the feeble iconography of this Neo-Classicism was displaced by Pugin's febrile Neo-Gothic.



*Soane's 3% Consols office of the Bank of England, 1798, drawn by Gandy, prior to plastering, would have been as much to the taste of the Friar Lodoli in the 1760's as to the Louis Kahn of the 1960's. The nice use of diverse structural materials combined with the sweeps of blue sky seen through round apertures recalls Kahn's Dacca. To most 20C Architects this drawing is far more attractive than Gandy's adjoining view of the finished surfaces .*

**Making buildings less than solid was one recourse explored by 18C architectural radicalism. Another was its opposite. it was rendering a building as nothing more than that which it physically was - a brutal construction of materiel. This 'tectonic poetic' coincided with the calculatedly 'Romanticising' strategy of acquiring the political authority of 'Antiquity' as deliberately confused and mystified in the form of a Mysterious Ruin.**



*A curiosity of construction, that is hidden from the public, is that it is more often than not the most beautiful things (at least to the technical eye and mind) that are discarded, and the uglier which remain. The wooden centring and shutterings required to form masonry and concrete are far more expensive to construct than the simple, durable materials which such timbers are used to shape and support during the constructive process. Here Gandy shows the cut stones and vaulted bricks that will support Soane's costly curved-on-curved spherical domes. One reason to plaster and decorate 'rough carcassing' is to recover the precision of their formwork!*

**Gandy was even worse at figure-drawing than Claude Lorraine, however he had an undeniable genius for joining Architecture, Construction, Ruin and Light.**



*The 3% Consols Office after plastering, as it remained until demolished during the 1930's. While more refined than anything Herbert Baker built in its place, Soane exhibits the striking inability of Neo-Classicism to refresh its iconography.*

**We come, finally, on this page, to the aspect of Soane which has remained beyond the ability of 20C Criticism to fathom - his passion for rich ornaments and his way of living in amongst great piles and sheets of them like some devotee of obscure, exotic and forbidden cults. The huge divergence between the neurotically chaste poverty of the scripted surfaces which he and his '(18C) Purist' Clientele actually realised, and the wild excesses he was allowed to license for his home and workplace are too striking to be passed over by a period, such as ours, which has grown accustomed to refusing the watertight ethological compartmenting practised by 19C manners. Clearly Soane and his Clients had a passion for these richly loquacious surfaces - a passion that was impossible to satisfy, at that time, except by merely heaping them up in dimly-lit Museums!**

**Anthony Vidler argues that the modern museum was born at this time, in the cauterising flame of Revolution. The past was to be swept away for ever by the raging torrent of linear, 'Progressive', time. Only its charred and broken fragments would remain. Vidler denotes a roomful of broken pieces of Gothic ruins, burnt during the Paris of the Terror, as the first such 'curatorial collection'.**

**Soane's 'Monk's Parlour' is the theatre of this period of the tragi-comedy of Nordic Neo-Classicism, Already possessed of the basis of the industrial revolution, and about to enter on a global war against Napoleon, the best that this powerful culture could do for a syntax and a lexicon to render its own lifespace into an intelligible state was moon about with candles in a charnel-house of dismembered limbs.**



*Soane's own workspace was embedded in the iconic prolixity of his collection of antique ornamentation for which there existed no reliable code-book..*



*Gandy painted Soane's workroom as an Ali Baba's cave, open at last to the archaeologist's lamp. But what was the formula that would enlighten its meanings? Soane's time could only dream.*



A section cut through Soane's so-called 'Monk's Parlour' points-up the contrast between an Architecture as smooth as a well-reamed gun barrel and its profusion of shot and shell that stayed inside it with no energy at all to project its marvellous images onto their erstwhile lodgings on the faces of temples and cities. Architecture had always been conceived as an assembly of components making, like any history, a landscape of ideas.

Soane attracts 20C Modernists because they see in him a man working towards a future in which the human lifespaces would no longer have this quality of being inhabitable by the ordinary mind. 'Soane is a safe set of hands'. For here was an Architect who could assimilate all the strangest icons, images and symbols of the occulted practices of Antiquity and come out of the experience not only completely and chastely rational but flooded with light in all of his potentially dark corners.

Soane could live in the midst of these disturbing visions and come out each morning dressed in black and white - the perfect 'Engineer'.

It had become conceivable, during the post-Newtonian 18C Enlightenment, that, when compared to the truths established by mathematics and the natural sciences, the world of images deployed by the human imagination out of our lived experience were fictions incapable of congruence with ultimate realities.

The French Revolution swept everything away, creating a tabula rasa, floating on a sea of blue blood spilt from Europe's aristos. The 18C Enlightenment achieved, for the West, a seemingly permanent retinal detachment of imagistic culture from the serious mental labour required for science, technology, commerce and war.

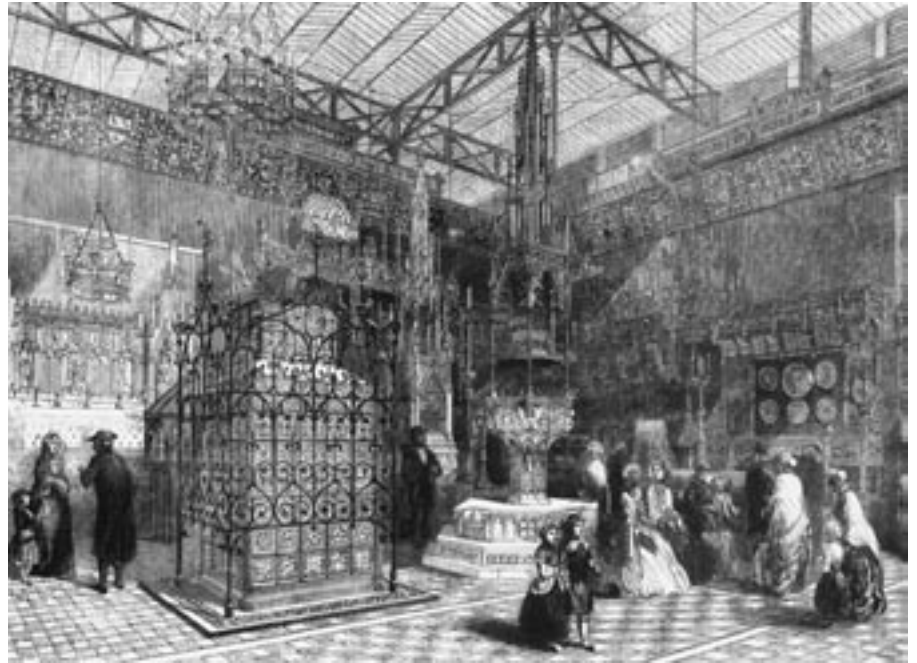
Soane's collection of antique fragments was, for the 18C, a 'cabinet de curiosites' that only became serious after the Terror. For it was after the destruction of Bonapartism (to a large extent wrecked on loans from London), and Metternich's imperative "that every Nation should have a Monarchy" that the antique images, well marinated in the 'mysteries of tradition', were dusted off and brought out to persuade the 'ordinary man' that the quotidian processes of human thought could be trusted to be true. The discarded and pre-scientific world of Christian Gothic was recalled to serve as the Neo-Monarchical State of Being.

The utility of Walter Scott's Arthurian Age (its frescoes ring our own Monarch's Robing Room, the most magnificent room in the Palace of Westminster) was similar to that of the role of the mythic Golden Age employed by the nascent 'ideal state' of the Italian Renaissance. Antique Hellenism was a weapon to be used, in the 15C, against the younger 'upstart' culture of Christianity.

19C Neo-Gothic was an ethos fabricated to be armoured against the corrosive rationality of the 18C Enlightenment - and especially the French Revolution.



Millais paints the 'Bard's' "Marianna of the Moated Grange", in 1851. He shows the woman of the Neo-Feudal reaction pointlessly occupied in needlepoint. She exposes her figure, swathed in virginal blue velvet, to a Nature mediated by Goth-fogged spectacles.



Augustus Welby Pugin was the Architect who turned the Rustic Folly Architecture of 18C haunted-house 'Goth' parties into the State Style of the British Empire at its zenith. Here his works join those of the Imperial Department Store in the great Exhibition of 1851. Paxton's glass roof soars its dusty panes overhead as impartially as they might elsewhere 'force' a taste-free Christmas pineapple from a coal-fired Ducal orangerie.



Owen Jones' design project of 1851 shows the modern condition fully illustrated for the first time. He paints a constructive production freed from any ambition but that of enclosing air. The furnishing of the human livespace is reduced to a flotsam of mass-produced 'fittings' and architecture-as-scripted-surface reduced to scrawny, pseudo-heraldic grays. The disjunctions have become total.



There was no architecture that could not be cast and moulded by McFarlane's of Glasgow in their black-sand iron-casting beds. This pre-fabricated Mogul-style Durbar Hall, was ready, in 1891, to be unbolted and shipped Empire-wards. Cast-iron Architecture was also a cast-iron investment. It could be unbolted and sold onwards, to a second site.



A cult of 'Social Ballistics' is one of the imperishable gifts of the Nordic West to the Global culture. The sporting rites of the West celebrate the triumph of a culture imposed by gunpowder-propelled projectiles. Emitted by ships that had mastered the navigation of a spherical surface by virtue of the elliptical paths of heavenly bodies. This complex of wandering spheres is recovered by all of the pastimes which require one to follow the parabolas of flying balls. Collapsible Damascene drinks-tables are just one of the benefits of the Triumph of the West.

After **imagistic thinking** had been **sundered from science** it steamed from continent to continent with Europe's explorers, **assimilating an ever-enlarging lexicon of inscrutable icons**. The 19C's industries stamped out copies of these forms, as they came back to the public memory-banks of Europe's Museums. Europe's visage changed from the Neo-Hellenism of the Rational State to a **motley consumerism of the middle classes**, as they stormed the barricades of aestheticism with **Chinese shawls, bazaar brassware and collapsible Moroccan tea-tables**.



The loosening of the bonds between the 'Reason' of science and technology and the mystical aestheticism of the Arts was part of the drive to novel ways of economic being. No one followed the ways of their parents down the capital paths of global commerce. In the 19C the adventure could be 'ballasted' by some sort of 'Historical Tradition' - even an entirely alien one.

Karl Popper's thesis, that Science is a labour of destruction which progresses by disproving engaging theories, is **only half right**. The part of Science that matters to real life is the knowledge acquired during the **work of verification**. This knowledge, as Levi Strauss proposed, is determined by the 'attractiveness' of the original theory. The gravitational forces here are not 'Natural' in any cosmic sense of generality, but **narrowly human**. Humans make the science that serves their species-specific state of being.

The inverse of this truth is that humans design their lifespace to manifest those truths that they wish to live amongst in the sense of constantly experience. This **living of the truth** is inseparable from the human condition and is one of the sources of architecture, and even of its larger dimension of Urbanity. The science of this phenomenon shows that it is various and changes from place to place and time to time. In England, for example, the human lifespace has been characterised, for many centuries, by a suspicion that towns and cities are the province of the irreligious, in the sense of those who do not conform to, and practice the rites of, the prevailing versions of the 'truths'. As a result, such towns and cities as have emerged have (with some notable exceptions) been **disorderly and vacant** of that structuring found in towns and cities, outside England, which reify truths (whatever those may be) which their specific cultures admire, believe, and hold dear.

**This tends towards a conceptual frivolity in the works of English architects and urbanists. It is not so much that they are obliged to reify the idea that images and colours are, as Newton denoted them, 'secondary realities'. For one may erect an epistemologically ambitious lifespace upon the thesis that the given conceptual envelope of ordinary life requires extension by cultivated media to apprehend better what is true, even if only provisionally so - in the manner of science.**



**No**, the problem with English Architecture and urbanism is that this very medium of **urbanisation** itself is denoted the habitat of persons who wish to avoid subscribing to the truth in any form.

**CITIES ARE ASSUMED TO BE THE HABITAT OF SWINDLERS, PROSTITUTES AND CRIMINALS.**

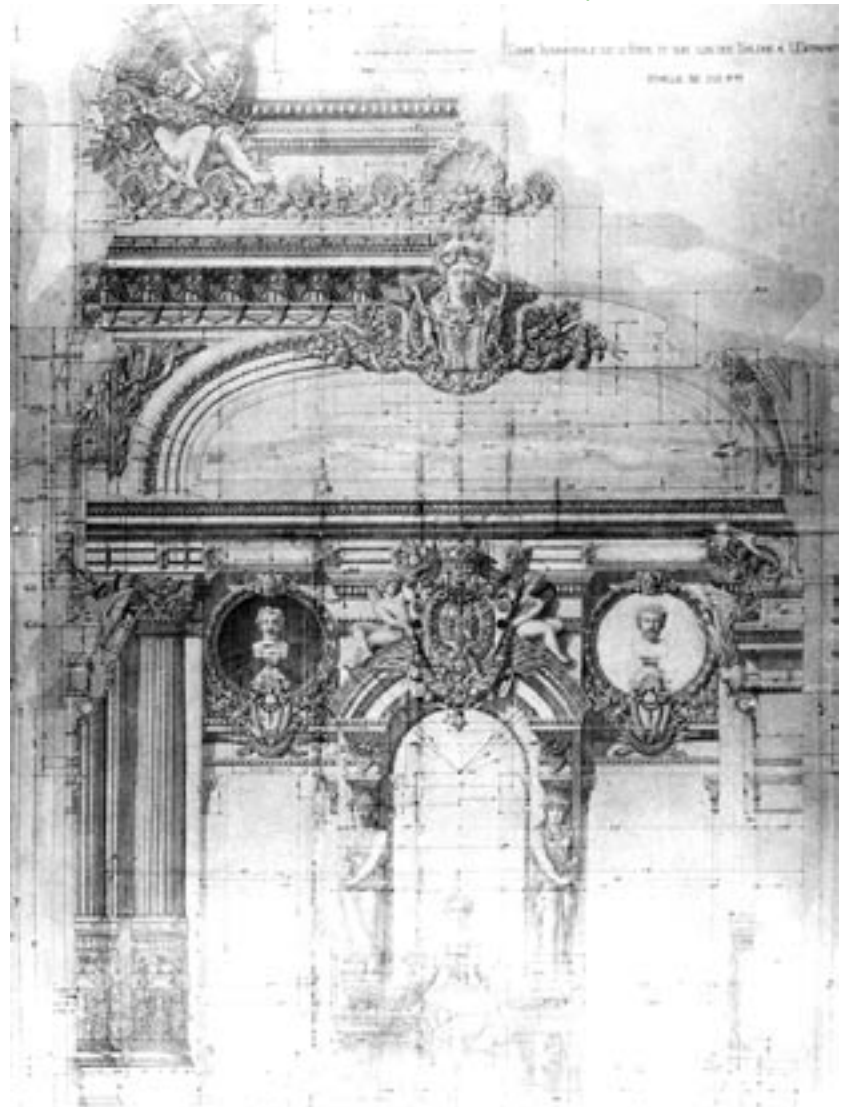
Honest persons, wishing to dwell in a landscape of truths, are, whether wealthy or poor, whether living in palaces or cottages, advised to be **inhabitants** of the **country-side**.

The English lifespace has (again with notable exceptions) tended to focus upon the 'truth' of the superior virtue of the '**unmade**' as opposed to the '**made**'. The **Made** is constantly dressed-up to look '**natural**'. After this it can be ignored so tha the gaze can be turned outwards towards the Natural or '**really**' **Unmade**.

The entry of Beresford Pite in 1882, a century after Soane, for the medal in his name given by the Royal Academy signifies the British version of the Public realm, that is to say the world of ordinary, public truths on which a society is founded. The city is seen as an occult apparation, springing from the soil and shaped by the a-memorial, Feudal, Gothic genius of Britain. The institution it housed was that equally native invention, the 'private club' - flower of an Empire built on joint stock enterprise.

One may see this in the grotesque English cities of the 19C. **Chaotically unplanned** and clothed in regressions to a lexicon of scripts lifted from here and there around the Globe without any attempt at **congruence with the science and technology** that were changing 'living' at unprecedented speed.

The 'Philanthropic Gothic' of Pugin collapsed, around the 1870's, as suddenly as any baseless fiction will, The 19C began, after this, to implode into a series of **privately-invoked** lifespace-phenomenologies that had to admit to no persuasive basis in reasoning of any sort. A rudderless eclecticism ended in the mushy a-formality of Art Nouveau.



A working drawing from the hand of Tony Garnier, Architect from 1871-'75, of the *Nouvel Opera* in Paris, shows the impact of reality upon the Revolutionary project of an *Architecture Parlante* which could discourse directly with the newly enfranchised citizenry. The Hellenism of the Neo-Classic Enlightenment was inflated, by the aptly-named '*Stile Pompier*', with such energy and force that its musclebound parts left those of intelligible speech far out of earshot.



*Designed in six months by Garnier, the 1881 Casino at Monte Carlo is as rational in plan and massing as his Paris Opera. Garnier explicitly abandoned any recourse to reason or theory when justifying his ornamentation. He argued that it was invented out of his personality alone and subscribed to the imperative to merely charm all to who wished pay their way into his iconically delinquent 'Space of Appearances'.*



*This is the 1880's version of an 'Architecture parlante': a 'talking architecture' that all could 'understand'. The Casino Theatre interior is an intra-venous elixir that sang (and danced) to the Plutocracy, who inherited the Revolution, of the ecstatic beauties of a public lifespace that all could inhabit uninhibited by thought.*



*Garnier's design for the decoration of the Paris Opera continued to use Hellenic myth to en flesh the body of the Rational State. Shrined in the Temple of Pleasant manners, the icons come close to a striptease 'Des Folies Arcadiens'. Iconics should be graphically clear, but conceptually veiled. Note the armorial vacancy of the tympanum at the 'honorific centre'.*





*The British, after the French Revolution, entirely broke their connection to the European project of the Rational State. The island ethos split into a 'culture' relegated to sundry atavistic rites designed to be of no major, or public, political, import, and a commerce bridled only by its own, internal, private, ethics of contract. Public, urban, space, as the theatre of any 'real' activity, vanished into the chasm opened between English Art and English Science. An architect interested in Urbanity will find more of interest in 19C France. There, whatever its consequences, one finds a culture that remained ambitious to install the 'space of appearances' of a rational politics. The tragedy of France can be read in the iconology of Garnier's Opera. It lies in the empty tympana of shields and blazons onto which focus the titanic rhetoric of Le Style Pompiere. This was a culture that had decapitated one of the most precipitous feudal hierarchies in Europe, but whose lifespaces lexicon had not invented the iconics needed to reify its novel ethosphere.*



Soufflot's St. Genevieve (design of 1767) took the structural system of French Gothic and supported Early Christian Byzantine saucer domes on a forest of Hellenic columns inside high, heavy, walls that stabilised the flying buttresses to the stone vaulting. The perspective illustrates Somatic Time 'springing' in the apsidial retro-choir and 'flowing' down the nave between the hypostylar forest-columns of Infinity. The entablature has been cut away to reveal the vaulted space of the Cargo of 'that which came from afar'. The vault-surface is a solecism, being inscribed with aniconic coffers.

The plan is an exemplary fluvial narrative of Somatic Time inscribed within the hypostylar forest of Infinity

**It is arguable that there has never been such a supple and practical way of planning, shaping and modulating the human lifespaces than that worked out in Paris during the 19C under the various titles of Beaux Arts, Belle Epoque and Stile Pompier. 20C Modernists pursue functional planning and the 'honest' revelation of the interior upon the face of the exterior. Yet, even though this was the expressed and achieved creed of Garnier there is no architecture more disliked by modernists than that of post-revolutionary 19C France. If pressed, these 20C revolutionaries will evidence a preference for the arcanelly hermetic Architecture of Louis XVI.**



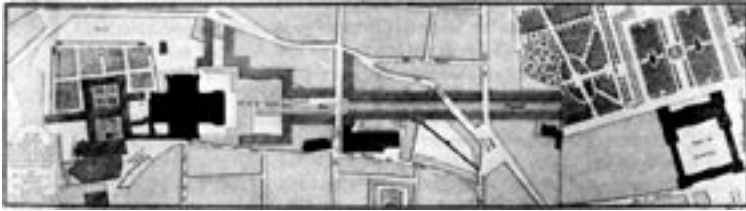
A section showing the 'flying buttresses' being stabilised by the high and thick external wall.

Joseph Rykwert ends his "The First Moderns", by analysing the sequence of designs made from 1764 to 1777, by Soufflot for the new church dedicated to St. Genevieve, the patroness of Paris. He argues that the design is a synthesis of French Gothic, (early) Christian Orthodox Byzance and Greek Antiquity. It combines what is Gallic, French Gothic, with what is most originally Christian, with what is most canonically Architectural. Interestingly, Rykwert describes this church as "possibly the last (arcane) Architectural Hieroglyph". He could be on safe ground because Diderot, as Rykwert reports, praises the hieroglyph for its indecipherability.

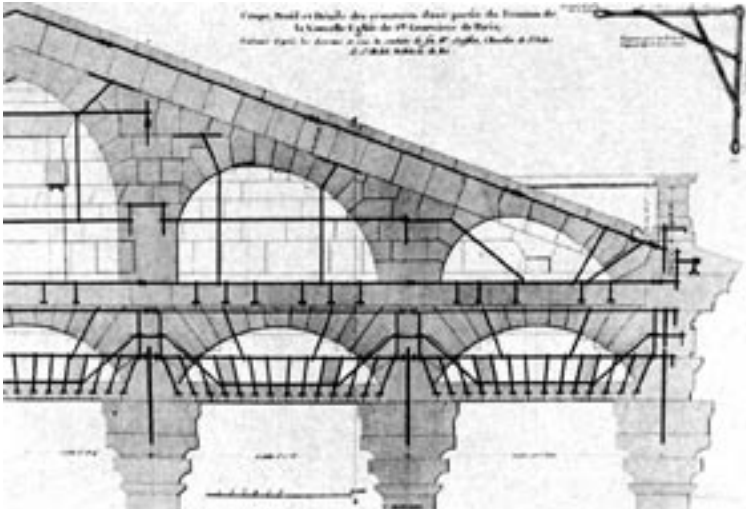


A perfect icon of the formation of the 'cataclysmic' Space of Appearances within the massive mural flanks of the Mountain of Perdurance'.

St. Genevieve allows her church, however, to be very sweetly deciphered by narratives of temporality. There is never either a first, nor a last, in the human understanding of human acts. There is only the search for clarity.

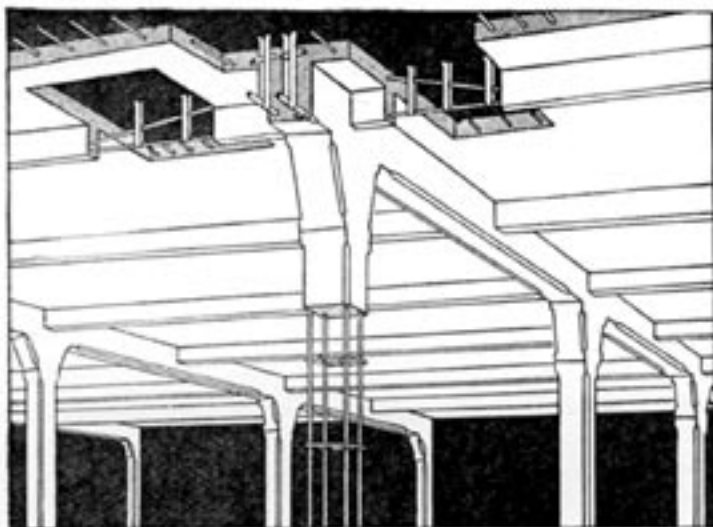


The urbanisation proposed for the West front of St. Genevieve was surprisingly illiterate for Paris.



The drawing is not unique to St. Genevieve. The stonework of the Nordic neo-Grec did not consist of giant balks of Attic marble. Every stone in the roofs of these 'Antique Temples' was, by the 18C, hooped and cramped with iron flats, bars and bolts. 18C French Architecture may have been conceptually tectonic, but it was structurally scenographic.

The technical drawing, immediately above, showing how every stone block of the structure of St. Genevieve is suspended in the air with iron hoops, bars and flats, is the single drawing on this page which most shocks Architects trained in the 20C. Evidently, this is because they know that all of the others illustrate a 'past history' that no longer concerns their 'new' modern architecture. They are unable to condemn this 'historical' architecture for any less trivial reason than that its apparent means of support is not its apparent physiology.



The Mouchel-Hennebique system of reinforced concrete was one of hundreds developed by French constructors pursuing the holy grail of the 18C Tectonic Rigorists. It is still a conjunction of 'stone and steel'. But the steel is rust and fire-proofed by the wet-cast 'artificial stone'.



Soufflot's 1767 design for the West front was later abandoned for a dome that Rykwert advises was inspired by Wren's St. Pauls. The roof to the Crossing is original in that it reifies the entablature as a trabeation supported on four legs constituted of aedicules, or as Rykwert terms them, tribunes. Their cargo, a stepped cone, is more graphically a 'cone of ashes' than any dome could be.

The Western fronton is a columnar Veil of Lethe (Hypostylar Infinitude), topped by a cargo-pyre-hearth inscribed with the Saint (replaced by a Cross in the 1777 design) in the solar position surrounded by supplicants. Soufflot planned no apotropaic Western Towers to guard his 'city-gate'. Yet that would have made it more 'Gothic'.

They dismiss it, unread mechanics that they are, because it is a mere lash-up exhibiting no structural 'economy of means'. Yet nothing has changed. 21C building is still a price-driven compromise with many an 'impure' mechanical recourse. High-Tech only 'looks' supersonorically tailored to some fictitious wind-tunnel of imperatives.

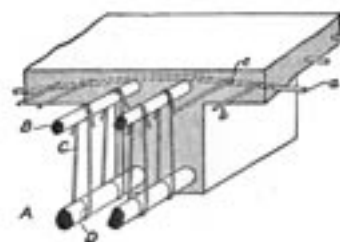
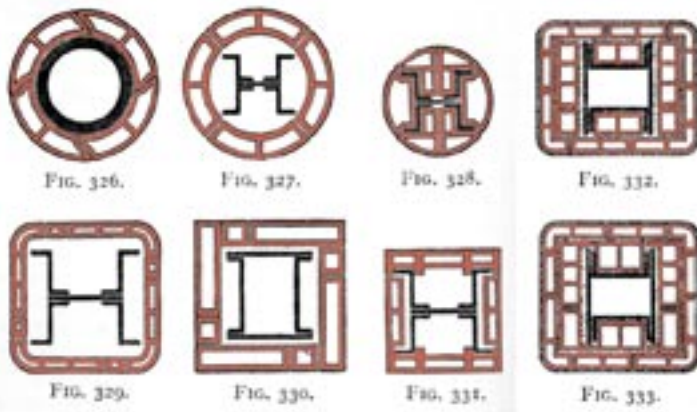


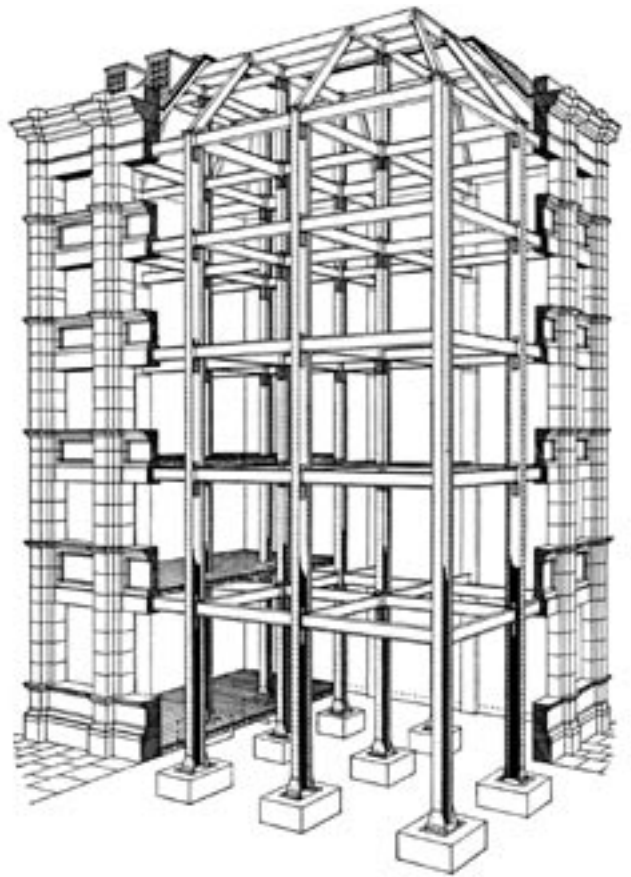
FIG. 253.—Beam Reinforcement, (Colgnot System.)  
 A=Main tension bars.  
 B=Main compression bars.  
 C=Web ties connecting bars of types A and B.  
 D=Anchored wire holding ties C in place.  
 a=Principal rods in slab.  
 b=Secondary rods in slab.  
 c=Anchored wire ties at intersection of rods a and b.

The 20C Modernist 'lash-up' of choice merely hides the 'steel hoops' inside an artificial 'stone'. Modernists use it not only for its practical uses but because it synthesises, as does no other construction, material reality with surface appearance.



Before steel frames were fire-proofed by concrete, they were clad in hollow fireclay bricks that were shaped to knit into the angular metal. Extra layers could be of glazed terra cotta and imitate, in the manner of a fine-painted sculpture, any shape made, apparently, in any material.

**The radical separation between the Arts and Sciences effected by the 18C Enlightenment delivered the physiology of construction into the hands of a new profession, that of the Engineers. The complex iconology of a Trabeated Architecture invented in order to fix and frame views into extra-ordinary realities became, in their hands, pillars and beams resisting deformation by gravity, wind, thermal stress, corrosion and 'creep'-deformation due to ageing. The upshot of these concerns was the invention of the frame, rivetted together from steel plates, tubes and 'I-sections'. This was then merely surfaced by non-structural stone, brick, plaster and wood whose material function was also to protect the steel from the effects of fire and rust. In reality, again, the thinking behind this development was lineally descended from the 'shocking' way the 18C laced stone voussoirs with iron 'corsetry'.**



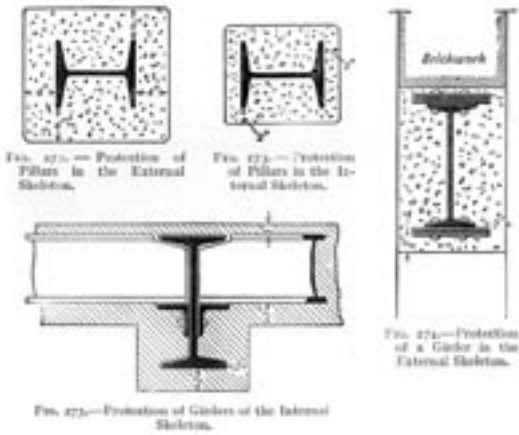
During the Middle Ages Architect, builder and engineer were all one. Then, in the Renaissance, the Architect was required to become literary and versed in the rites of courtly culture. Finally, during the Enlightenment, the professions of Engineer and Builder split off and achieved an autonomy, constructing 'works of engineering', such as steamships and railways with little or no advice from architects. This fluid state remains today with no-one being clearly demarcated. Steel buildings in the USA topped 60M (200'0") by 1870. USA.

*An equally common recourse was to cover the steel with pieces of fired clay, made in brickworks, that contained air-pockets which would serve to insulate against the heat of a fire. The final step, taken in the 19C, was to explore the space between steel backbone and fire-proof skin as a location for the new mechanical and electrical viscera.*

## The 'service order' variant of the Sixth Order germinated 150 years ago!



Versions of what I first called the 'Service Order' variant of the Sixth Order, equivalent to a 'modernised' Firmitas in the Vitruvian Triad, began to appear first in the work of 19C Engineers. They sought to 'duct' the new media of piped and wired services (shown in blue) within the trabeated frameworks that both supported and defined the habitable room-spaces.



'T'-beams and columns use steel to resist force with the minimum of metal. A steelbar is squeezed, when still hot, between four rollers. As much of it as possible flows to its two ends, and as little as possible remains to hold apart the two ends of the classic 'T'-beam 'dumbbell'-shape. This must then be protected from fire and rust, Fireproofing can be effected by baked clay pots shaped to fit around the steel. These can also be coloured by a second, glazed firing. Clay will not prevent the steel from rusting. Also the dimensions of any fired clay item is unpredictable when it comes out of the kiln. Casting wet concrete around the steel both rustproofs and fireproofs it. But colour is hard to introduce in cast-on-site concrete. A precast concrete cladding will fireproof but, equally, not rustproof.



FIG. 282.—Spiral Column Reinforcement.

Who could resist the invitation to make the spiral geometry of concrete into a new architectural column?



Auguste Perret could not resist the temptation to use concrete to reify the idea that there could be an Architecture which was nakedly honest as to the material of its body and the way that its body was made. Concrete dried with the imprint of the wooden planks that shuttered its wet body both as to overall shape and as to the very grain of the timber itself. Its surface was a monument to the memory of its making.

The interesting potential of 100 years of disjunction between technology and iconology meant nothing to August Perret. What Perret saw, with the eye of the Flying Dutchman sighting land, was the realisation of the ideal of the 18C Purists and Rigorists: an Architecture that would be Architecture, as it always was, but totally and rigorously true and honest to its material body and mode of making.



Auguste Perret's Factory at Issoire 'writes' richly textured but inscrutable 'picture-planes' in a brutally 'Positivist' Ordine.

An industrial building at Issoire by Auguste Perret. The trabeated frame is made of the 'universal stuff' of concrete. So is the infilling 'masonry', the window-bar divisions and the uplighting 'torchere' on the column. Perret's facade, demonstrates the purity of its materialism as well as an enthusiastic tectonophilia.

Perret was both Beaux-Arts, Classical, and Modernist - not an easy trick.



The Factory at Issoire is a hypostylar forest of props whose 'upperness' is a cindered sky of burnt cement.

Cost-efficient concrete for the factory interior at Issoire shows concrete as it really is - cast in boxy wooden forms and as massive as the sacred grove of an orthogonal Arcadia. 20C Architect's love concrete used this way - as massive, rough and crude as a 'natural formation'.



His design for a Church at Carmaux, like the vestibules of Soane, treats its columns as free-standing sculptures. His ceilings are, like those of Le-Corbusier, traversed by down-standing beams which divide them into cavities reminiscent of coffers. But that identity is denied them. Perret frames, with French economy and precision, the futility of a trabeated architecture that had lost the medium of the inscribed surface'.

Perret kept the wooden moulds of his castings in a field, and re-used them for all his contracts. It is the secret of the economy of cast-concrete buildings. He termed his 'capital' a 'joint'. But it was 'special pleading' it is clearly a 'capital', and a miserable thing it is, not even qualifying for the lowly epithet of 'Deco' - let alone the Magnifique Moderne.

**I became interested in Perret in the 1960's but could find no book on him in English. He had, I discovered, been quietly building, for some 40 years, the final issue of the 18C Tectonic Rigorists and the Napoleonic Rationalists, such as Durand, who founded and taught the Parisian Grandes Ecoles. I was interested to see whether one could be more 'rational' than Perret and still invoke, as he did, the Orders of Architecture.**



But I had to admit that Perret's own Order was a dismal thing. He gave his columns 'Doric' chamfers, but reversed their taper from bottom to top. He called his column Capital, a 'joint' because he designed his columns and beams as continuous frames which rested on the ground with 'pin-joints'. None of which spurious structural rationality would have mattered, at all, if only he had not made such dismally feeble forms.



Perret's staircase to the 1937 Parisian Museum of Public Works is a beautiful piece of geometric wooden shuttering, all of which has been trashed to leave only its cindered shadow - the tragedy of concrete. Perret believed, like Kahn, that the more a building was opened to its own 'ruin' the more it revealed its architectural truth. His was still the 15C Renaissance poetic of Antiquity.

Perret could plan with the suavity of the Belle Epoque and make 'social stairs' that invited promenading in the flamboyant way proper to Hannah Arendt's 'the political theatre of appearances'.

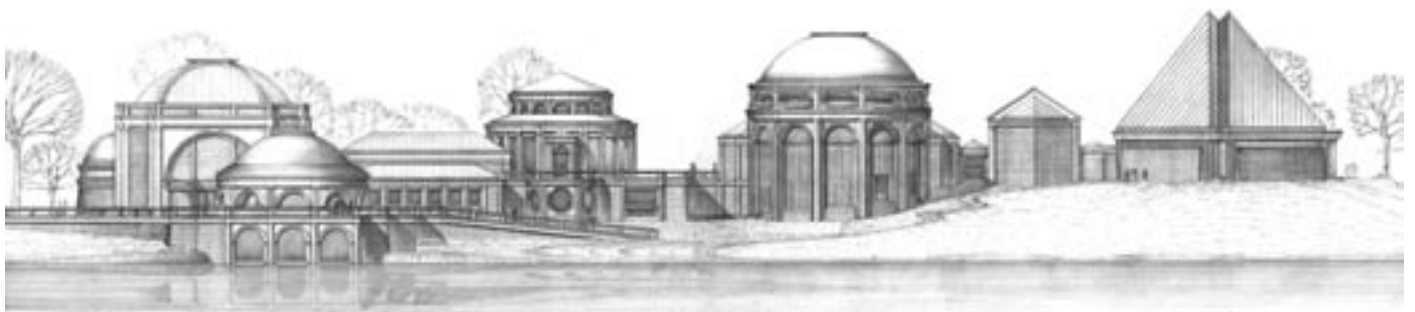
Perret's rebuilding of war-torn Le Havre, was dry and dreary, but at least it had echoes of the monumental dignity that a city requires for its public places. Why did Pomp need to be so Prole?



Perret imposed raw concrete on the white-collar bureaucracy and the blue-collar workers, but not the Parisian theatregoer. The finishes are finer, but remain iconically exiguous. The coffers, in his Theatre des Champs Elysees of 1911-1913,, frame an 'up-view' into Nothing, picturing a 20-20C vision of a cargo-free culture. This is what happens when Architecture stops promoting technophilia - it reveals a conceptual void.

Perret's interior to the Theatre des Champs Elysees has a smooth and beautiful elegance that recalls the velvet-lined boxes of Parisian perfumiers. But, like the photo of the Foyer to the left, it looks better empty and in monochrome. Theatre is one of the occasions when iconic inscription adds conceptual depth. One may see this from Theo Crosby's (after Frances Yates' *Ars Memoriae*) reconstructed Globe Theatre in London. How much more powerful, and equally elegant, Perret would be if 'inlaid' in the manner of Islamic designs, with a 'integumenta parlante'.

Perret believed that that for Architecture to become an Art required of it no symbolism. He thought that constructional technique should be the chief inspiration of the Architect. His proposal was: "One is born an Architect. One becomes an Engineer". It is clear that for a boy, at least, the reverse is normally true. Whatever may be the case at root infancy, boys are very soon trained to put away their pencils, paints and crayons. The role of the man, until wars became fought by robots, was to become a warrior - which is nearer Engineering than Architecture. I wrote to my father at sixteen saying "I do not want to be an Architect, I want to be an Engineer. I want to design things that work". I became an Architect after discovering the intellectual boredom of engineering conversation and seeing the fine 19C centres of North American cities being replaced by Lever House slabs and elevated urban motorways. I would retort, to the 20C: 'A Boy is 'cast' as an Engineer and becomes an Architect with great difficulty'.



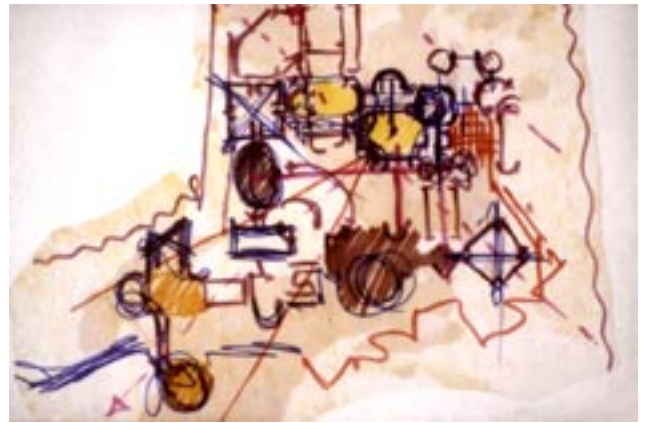
Inspired by Perret's bony Classicism, I entered, in 1972, my first competition. The contest for the Burrell Museum, in Pollok Park, Glasgow, offered, in those days, an escape-route for the 'serious' English architect from the blanket prohibition upon anything except the proudly illiterate Neo-Modernism promoted since the '45 War by the Welfare-State Establishment. My invention was received with incredulity by the only regular architectural correspondent of the day, who wrote every Monday in the *Financial Times*. The enormous tectonic rigour of making all columns cruciform and all beams 'Tee'-shaped, was appreciated, as was its ingenious planning. What proved insuperable (to my professional peers) was a 20C syntax to an Architecture that I treated as a 'given-by-History' semantic a-priori.

Structuralist semantics was unknown to an English Architectural theory rendered provincial by the loss of Empire. Most of England's 19C and 20C 'big-history' was written overseas. Shorn of this the Island was reduced to rehearsing local events that meant nothing outside their provincial scope. Team 10 romanced the red-brick back-to-back urban cottaging of a Bratby-esque soup-kitchen Socialism. The Smithsons added American consumerism - while decrying it as "aluminium folk art".

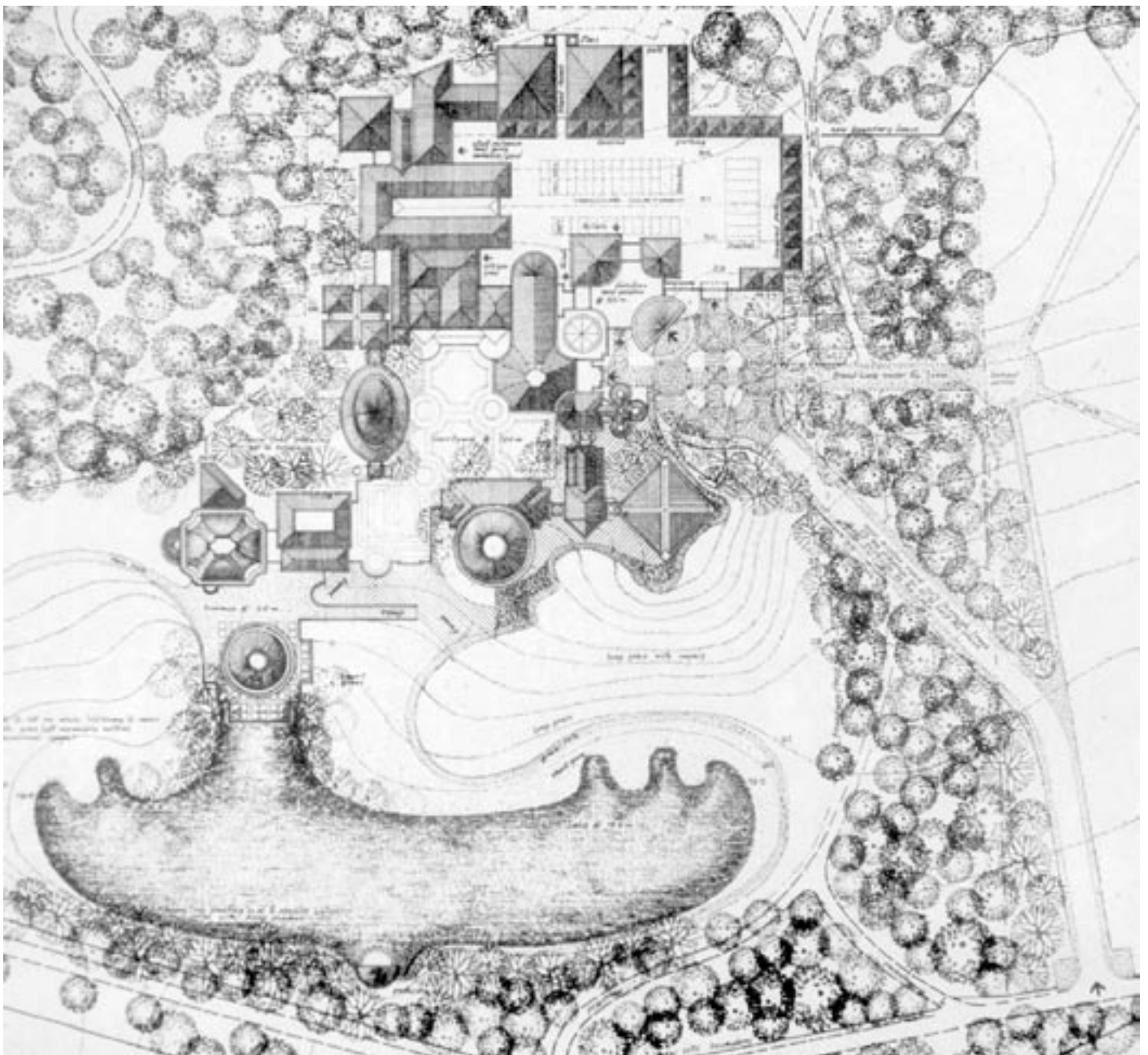
The Burrell competition was the last thing I designed before founding JOA in 1973. Classical Architecture, to give it a name, is commonly criticised by English Modernists as being too rigid and inflexible to obtain the full employment of the compulsively anti-orthogonal English plot-shape. But this is to subject Britain to the trivial accidents of her peculiar history.

*The truth is that the English lifespace has been deliberately dis-orthogonalised for 1500 years - since the Romans.*

It made it harder to install anything most people would recognise as Architecture. The purpose of this was to destroy the power of the Romanised towns and cities and ensure the dominance of the dispersed, parochial agriculturalism of the Germanic invaders over that of the imperial commerce of Latinised Britons.

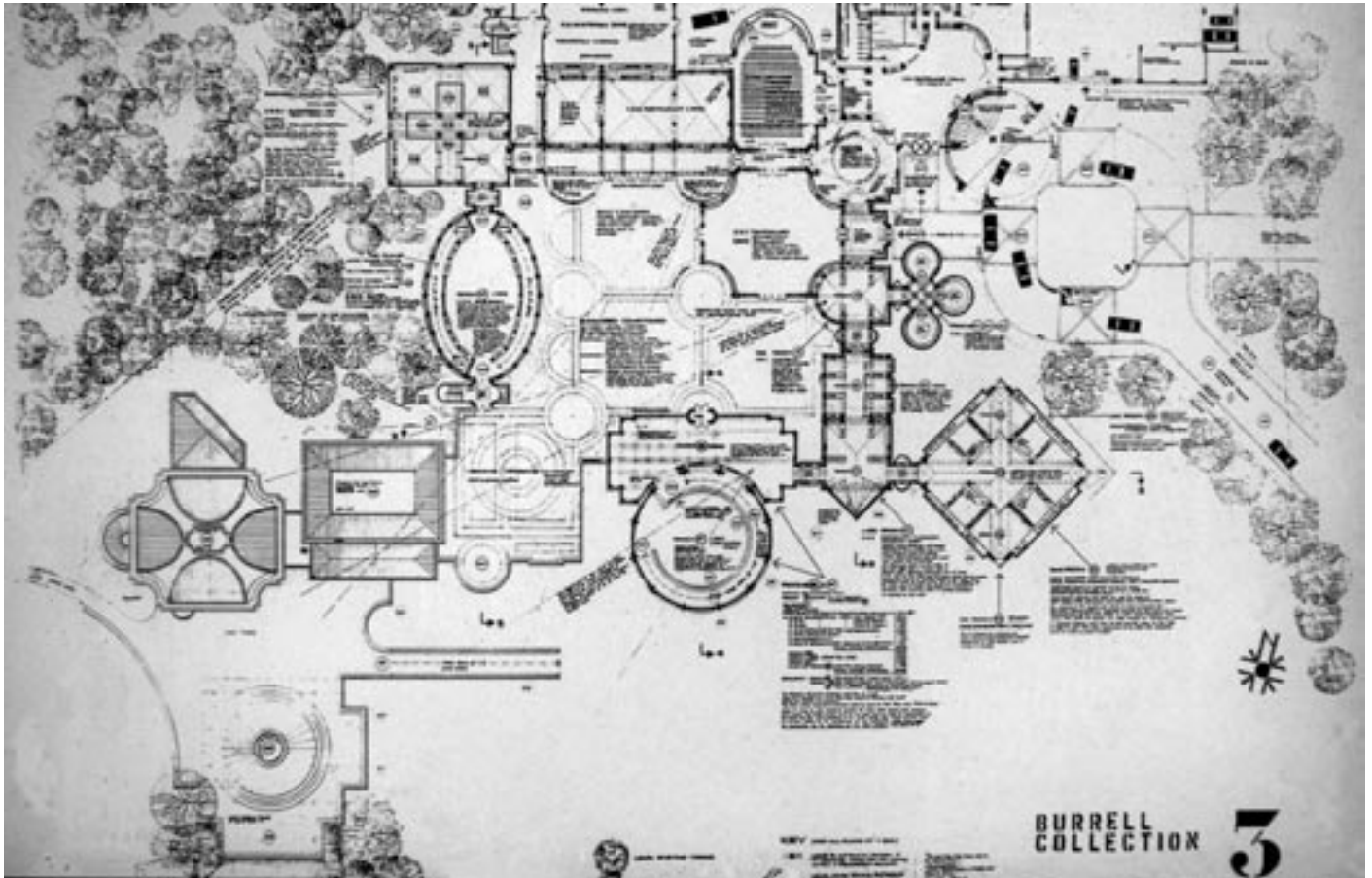


*This drawing records the moment when I knew that the compositional problem that I had set myself was finally resolved. Everything was structured by modules upon an hypostylar field, yet was surely 'picturesque' enough for anyone.*



*The influence of Louis Kahn is clear in my work. Understanding that the cult of ruins was an iconically illiterate evocation of Antiquity (itself a Roman invention) cured me of Kahn's own cult of ruination. I was, at this early time, innocent of knowledge in many departments. But I still warm to the compositional effort. It 'worked'.*





*Drawing on a piece of paper the size of a table-cloth is the only way to lay out a complex formal organisation. One sees it with one's eyes and one feels it, viscerally, through the pen in one's hand. Architecture is 'known' by the body as well as the mind. All of the buildings are made from just lines (walls) and crosses (columns). The path through the Museum is clockwise from the Entrance Hall at 2 o'clock. A chronological promenade took one around an internal courtyard, open to the lake, from the tripartite Mycenaean tholos-rooms (at 2.30) around to the tea-rooms at 12 noon.*

**The formal disciplines of Architecture are a necessary foundation for the installation of a landscape of discursive ideas. My ambition, in the Burrell Museum competition, was to prove that these geometries could be disposed with sufficient flexibility to assimilate the ideologically-inspired chaos of Britain. I wanted to prove, in addition, that one could design a grand classical scheme by employing the most meagre means - of the sort to which I learned to use in the London City Council, Fitzroy Robinson and Louis de Soissons.**



**The buildings that JOA built, from 1973 onwards, were all disciplined by the Classical devices of the hypo-stylar tabula rasa, a columnar order and a module.**



*An absolute modular rigour possesses every surface of Wadhurst (1978-86), yet its plan (Lecture Two: 'A Sixth Order', pages 02-08 to 02-10 09) slips & slides around half and quarter modules of its 90x90cm column. It confirmed the ability of a trabeated architecture to empower an iconically scripted surface.*



*The 'monostylar' porticos of Kensal Road (Lecture Five: 'Happy in Limbo', pp. 05-15 to 05-23) wandered loosely along the curve of the plot as only the 20C could have authenticated through its invention of Cubist composition.*

*The permission for Poyle 1976-78 (Lecture Five: 'Happy in Limbo', pp. 05-02 to 05-14) was won by dividing its modularised and trabeated 100M-length into twenty little 'caves' after Corbusier's 'Roc et Rob' of 1948.*

## ***AFTERWORD for the NINTH LECTURE: " WHAT TABOO?"***

*When Bob Maxwell, Dean Emeritus of Cornell and biographer of James Stirling, wrote, of JOA's first big building, that it had both 'broken the taboos of Modernism', performed an "act of architectural terrorism", and entertained "an impossible dream" one was obliged to reflect upon such august opinions. This was especially so as Maxwell is my old Tutor and the man who ultimately persuaded the External Examiners to accept (at the third attempt), my final 'Design Thesis'. Then when JOA had finally built, in Houston, Texas, our 40-year-old ambition to realise this so-called "terroristic impossibility", the Dean of the Rice's Faculty of Architecture placed JOA's invention "out of bounds" to his tender Architectural Innocents.*

*I was always surprised by these violent responses. My own ambitions were merely to have the shades of the Architects of old, should they return, feel envy that they did not live today, with all of our advantages of scholarship, capital and technology. Yet when I looked around, I could not help reflecting upon the opinion of Rem Koolhaas, that our present time was the "Age of Trash".*

*So what was this 'taboo'? Maxwell's focus had been on the "Invention of a Sixth Order". Yet JOA had never entertained such an hubristic ambition. Our tactic had merely been to extend the idea of Louis Kahn's 'Servant Spaces'. Kahn's gesture was to 'architecturally recognise' the machinery that even the 19C had commonplacéd. Our new move was to upgrade this 'recognition' to the status of 'Architectural' columns and beams. It was not until my visit to Rome, along with the Cambridge Students led by Dalibor Vesely, that I obtained an insight into the workings of George Hersey's 'corpo trasparente', and through that of the peculiar landscape described by Christian Elling and, finally, of the extraordinary urbanistic technique, hinted at by Mark Jarzombek, which had been employed by L.B. Alberti and his quattrocento compatriots. When I 'reversed' these 'insights' it seemed to me that, lacking the preconditions of a Mediaeval city-scape (!), a Modern urbanity required the use of 'scripted surface', or what I called 'iconic engineering'. This required the use of an Architectural Order so as to 'steady its graphics' in quotidian, everyday, space. Both of these needed to be validated by being 'narrated', or as Ricoeur would say 'emplotted'.*

*Lecture Nine was my search amongst certain Architects of note to discover whether any these 'imperatives' could be detected within their works. I was sad that its 32 pages registered a negative. But the fault is easy to diagnose. It is that they all subscribed to the 20C ambition to invent an 'Architecture Autre' which no longer used, as all Architectures have done, a narrative structure mediated by an 'Order' and reified by a Scripted Surface, or Decoration.*

*It is ARCHITECTURE itself which was placed under a 'taboo'.*

