

Surface Matters

Richard Weston and Phil Coffey

With contributions by Stephen Kite, Wassim Jabi and projects by Phil Coffey and others...

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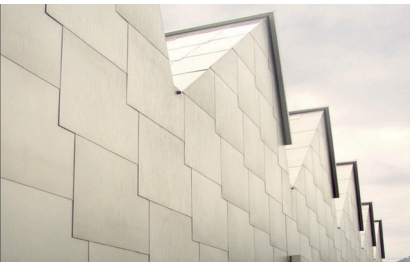
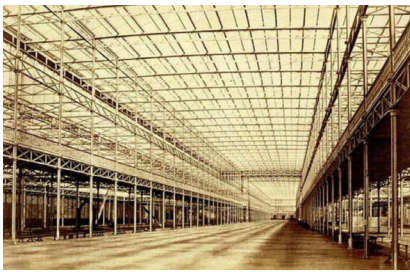
Part 2: Towards a new architecture: theoretical projects

Introduction (Richard Weston; 3,000 words)

The following themes to be presented with 500 word texts, diagrams and projects:

Individual dwellings, Housing, Urban centres Sheds (??)

Conclusion (Richard Weston)



Architectural innovations are driven by ideas, changing social needs and technical developments. Among these the most far-reaching have often been new means of construction. The Romans' development of systems of round arches and vaults, in alliance with the invention of lightweight concrete, made possible vast public interiors, of which the the Pantheon in Rome is the only intact survivor. The Gothic innovation of pointed arches and structural ribs made possible the vaulting of rectangular, rather than square or circular spaces, and permitted the dissolution of walls into cages of light expressive of the divine grace which Catholic theologians argued filled the created universe.

Most far-reaching of all was the arrival of cast and wrought iron structures of slender columns and beams, soon replaced by steel and reinforced concrete frames. Combined with large sheets of glass they helped to usher in Modern architecture, with its continuous 'flow' of space that interconnected the interior spaces to each other and to the surroundings.

A new technical change has been around for several decades and adopted without a major change in spatial thinking. Generally known as 'rainscreen cladding' it was invented to save energy by wrapping buildings in insulation, screened from rain by assorted external cladding systems. It made possible the ultra-cool mono-material aesthetics of the so-called 'Swiss Box' school of the 1980s, the flamboyant surfaces of Frank Gehry's mature work and, among those eager to express their 'green' credentials, Western Red Cedar and other timber claddings appeared in urban centres, where formerly masonry, concrete, metals and glass ruled.

It is our contention that the architectural implications of rainscreen cladding could prompt a radically new way of thinking about, and making, buildings and settlements, from houses and apartments to dense urban centres. By detaching 'appearance' from the underlying structure, rainscreens offer the opportunity to design elevations with unprecedented freedom. But they also challenge us to re-think the nature of architectural space in response to changing social needs and environmental imperatives, much as the Modernist 'open plan' was

attuned to a new openness in society, institutions and families. In response to current social trends, we propose heterogeneous mosaics of particular spaces, responsive to, and expressive of, social and natural diversity. Our thinking envisages a new *ecology of space* that embraces both Earth's living inhabitants and what the philosopher Jane Bennett calls 'vibrant matter'. As Stephen Kite discusses in his essay, a living whole was invoked by John Ruskin in his conception of the 'earth veil' of nature. Describing this as 'a carpet' and 'a fantasy of embroidery', he saw it transmuted into architecture in the 'wall veils' of gothic Venice.

Following Kite's historically-based thoughts on 'shaping surfaces', Wassim Jabi explores the innovations being made possible by digital technologies, from parametric design to Artificial Intelligence. I conclude the first part of the book by looking at both the material means for rainscreen design – from light to heavy to digitally printed – and new ways of envisaging the ecology of surfaces designed to support a living 'earth veil'.

In the second part, following an introduction to the scope of this new vision, various architects respond with theoretical projects that re-think everything from housing to urban centres to the 'sheds' needed to house manufacturing and distribution facilities. The 21st century will no doubt demand radically new kinds of buildings to serve new patterns of living and working, but we have chosen to reinvent familiar forms so as to heighten awareness of the new architectural approach.

Peter Barber, architect of some of the most interesting new housing in Britain, extends his practice's ideas to speculate about both suburban and urban residential patterns. Phil Coffey (+ three or more others) then focus on the potential of light, materials and inhabitation to create a new, richly varied mosaic of urban spaces. Finally, (???) takes on the challenge of reimagining sheds of all sizes as part of the new ecology of space. By way of conclusion, I speculate how these ideas could be implemented in the short- and long-term re-thinking of architecture.

