



The Architecture of Light: Recent Approaches to Designing with Natural Light

By Mary Ann Steane

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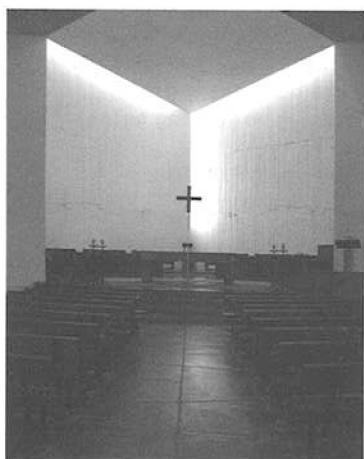
Reviewed by Peter Fisher

In the preface to the second edition of *The Architecture of the Well-Tempered Environment*, Reyner Banham lamented that librarians tended to file his book under technology rather than theory and philosophy, where he felt it belonged. As ecological awareness has grown, and the environmental impact of buildings has been better understood, there has been a tendency to view anything connected with environmental design as being technological and often additive in nature: something that is *done to* architecture rather than *is* architecture. In essence, Banham's book charted the impact of new hidden technologies on the theory and philosophy of twentieth-century architecture. Mary Ann Steane's book *The Architecture of Light* is about a series of buildings in which natural light is central to the task of architecture.

As pointed out in Steane's introduction, the widespread availability of artificial light has meant that the word lighting is usually taken to mean electrical rather than natural light but, appropriately, throughout her book it is taken to mean daylight. Whereas much of the recent dialogue about natural light has tended to be about simple quantity

of daylight – lots good, little bad – the central argument here is that the pursuit of successful lighting brings structure and discipline to the creative process, given the requirement for a comprehensive understanding of location, ambient climate, orientation, use, building type, materials and colour. As such it can cultivate an inherently humane architecture rooted in place and habitation. The ten chapters are essentially grouped into two sections, with the first five covering more mid-twentieth-century projects and the second five more recent ones from the 1990s onwards.

A book on daylight and architecture would struggle to exclude Corbusier and the first chapter charts his evolving attitude to light through *La Petite Maison*, a small house for his parents



2 Redrawing the liturgical stage: Guarda and Correa, Las Condes monastery, Chile, view south towards the altar along the diagonal axis of the nave

completed in 1925, and the chapel at Ronchamp. His own documentation is seen as useful for examining an evolving attitude to light, with the contrast between the 'illuminated object', epitomised by the quote that 'architecture is the learned game, correct and magnificent, of forms assembled in light' and a more subtle use of light to articulate the way that buildings are encountered sequentially and experientially. There is a marked change in his view of darkness from something the early projects would not have too much of, to the later ones where it was actively used.

The next chapter discusses another religious building, the church at the Las Condes monastery in Chile, where the profoundly simple double cube form belies the sophistication of the lighting strategy and its relationship not only to climate but also to a desire to redraw the liturgical stage. The designers Guarda and Correa had completed their architectural training before entering the Benedictine Order and the resulting building is seen as a moment of stillness in an ever-changing world, much like some work by Kahn and Corbusier. This relationship with the wider world is later explored again in a further Chilean example, this time a collection of buildings rather than a single case study: the Open City at Ritoque. This unusual and idealistic project grew out of a question in the 1970s about Chile's place in the world and its response to post-colonialism. The discussion is of a range of built and unbuilt projects, including an unrealised

chapel, simple yet sophisticated.

Returning to Europe, Scarpa's Fondazione Querini Stampalia in Venice – in particular the interconnectedness between the city's history and the building's design and detailing – is explored within the context of the particular lighting typology of Venice, with its narrow streets and luminous, reflective canals. It is then compared with the work of Lewerentz, where Steane observes that both are more reticent than many of their more certain Modernist contemporaries and both use dim light to articulate movement.

The following chapter then considers not only light for reading, but also for the articulation of the sequence by which one arrives to read in libraries by Aalto and Siza, at Seinäjoki and Viana do Castelo respectively. Siza's debt to Aalto is clear, with a common concern for how light modulates the inhabitation and navigation of libraries. And while the buildings differ, with the latter's reading rooms being much more enclosed and the former offering more expansive glimpsed views, they share what is referred to as the 'inhabitation of light' as opposed to the vision given by the form of the building. Consequently inhabitation is predetermined as much by local context as by more global interests, by the low light of Finland and the harsh sun of Portugal. The resulting buildings are in many senses modest at first glance, but in both light is an



3 Ambient light contributing to spatial richness: O'Donnell + Tuomey Architects, lower-floor classroom and one of the small shared courtyards at Ranelagh School, Dublin (photo by Dennis Gilbert, by permission of the architects)

intrinsic element of spatial design rather than a mere technical determinant.

The second half of the book begins with a two houses in Australia by Gabriel Poole. These explore the nature of light in Australia as part of both a climatic and a cultural response to what it means to be Australian, similar in some ways to the questions of identity concerning the Open City. This issue, of the nature of identity and light, is highlighted also in O'Donnell + Tuomey's Ranelagh School. Here the relationship of the school to Dublin, the Irish climate, surrounding streets and the school curriculum can all be viewed through the approach to light, in particular the sheltered external spaces attuned to Ireland's seldom very cold, but often inclement, climate. The large, tall windows of the classrooms have proportions and an offset disposition that not only relate to that of Georgian Dublin but also reveal the influence of Vermeer's paintings of Delft. Like the work of Aalto and Siza, this is a modest, episodic and spatially rich architecture where an understanding of ambient light is crucial to its success.

Whereas most of the examples in Steane's book seem concerned with place and habitation, Libeskind's Jewish Museum in Berlin uses light to remember and articulate history by provoking, reminding and unsettling. As such it is concerned not with climate but with memory and, in part, by challenging conventional lighting approaches and subverting assumptions.

The final two chapters are both concerned with refurbishment projects in London, albeit at very different scales. The first of these discusses both the Carmelite Priory by Niall McLaughlin and 1A John Campbell Road by Lisa Shell. These two complex and beautiful projects have been carved out of Victorian buildings on tight urban sites in London. Through careful understanding of the local 'light ecology', these buildings have been transformed with surprisingly minimal changes to the apertures. The final chapter is on Herzog & de Meuron's Tate Modern, which fuses natural and artificial light. Concluding with a study of a building that uses a hybrid of artificial and natural lighting strategies seems to invite a return to the introduction to reaffirm the underlying theme of the book, the key role of natural lighting in architecture.

Reviews, a bit like awards, often reveal at least as much about the person doing the reviewing as about that being reviewed. Most of the buildings discussed, while eclectic, nevertheless explore a consistent theme where daylighting has driven a modest, understated, humane and emphatically rooted architecture in which the emphasis is on that being contained rather than on the container itself. It is precisely because that is such a compelling position that I found the less engaging chapters to be those about the two most spectacular and global buildings, namely the Jewish Museum and Tate Modern. Ultimately this is not

really a book about daylight, but rather one about architecture in the widest sense, with daylight providing a lens through which to view and discuss it. In all the projects, daylight is used to articulate both the experience of a building and episodic, sequential movement through it. It reminds us of the importance of placing an emphasis on the space and inhabitation that is contained more than on the form of the container itself. As we live in a seemingly ever faster, more global and more rootless world, architecture better serves its inhabitants as a calm counterpoise rather than as a willing spectacular participant. In that context, the view that daylighting can provide a structure and creative discipline for architecture appeals greatly and seems all the more pertinent as architecture comes down from the credit-laden sugar-rush that has produced so much formal spectacle in the recent past.

An initial observation is that the illustrations are small, and printed in black and white, but on reflection this sobriety reinforces the notion that both the book and its subject matter are quieter and subtler than a first pass will reveal. It also reflects the fact that such architecture is generally quite difficult to capture in images and thereby difficult to communicate through the medium that is most used to judge architecture – seductive imagery is increasingly seen as synonymous with reality. By contrast, here we have a book and arguments that present a blueprint for a more creative discipline in architecture: students, teachers and practitioners should be compelled to read it.

So, returning to the librarian's dilemma, should the book be filed under culture or technology? Well, ideally this reviewer would recommend that libraries buy at least two copies ... but, in the reality of our straitened times, a single copy should be in the theory and philosophy section – ideally just next to a thoughtfully designed and lit reading room.

Peter Fisher is an associate director at Bennetts Associates in London, where he has been centrally involved with projects such as Hampshire County Council's Offices in Winchester and the Humanities Building and Library for Oxford University. Current commitments include highly sustainable new headquarters for the London Borough of Camden and for the Dogs Trust.



4 Taking account of 'light ecology': Niall McLaughlin Architects, Carmelite Priory, London (photo by permission of the architects)