



SECOND EDITION

TWENTY-FIVE BUILDINGS EVERY
ARCHITECT SHOULD UNDERSTAND

a revised and expanded edition of *Twenty Buildings
Every Architect Should Understand*

SIMON UNWIN

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TWENTY-FIVE BUILDINGS every architect should understand

Twenty-Five Buildings Every Architect Should Understand is an essential companion to Simon Unwin's *Analysing Architecture*, and part of the trilogy which also includes his *Exercises in Architecture: Learning to Think as an Architect*. Together the three books offer an introduction to the workings of architecture providing for the three aspects of learning: theory, examples and practice. *Twenty-Five Buildings* focusses on analysing examples using the methodology offered by *Analysing Architecture*, which operates primarily through the medium of drawing.

In this second edition five further buildings have been added to the original twenty from an even wider geographical area, which now includes the USA, France, Italy, Mexico, Switzerland, Spain, Finland, Germany, Australia, Norway, Sweden, India and Japan.

The underlying theme of *Twenty-Five Buildings Every Architect Should Understand* is the relationship of architecture to the human being, how it frames our lives and orchestrates our experiences; how it can help us make sense of the world and contribute to our senses of identity and place. Exploring these dimensions through a wide range of case studies that illustrate the rich diversity of twentieth- and twenty-first-century architecture, this book is essential reading for every architect.

Simon Unwin is Emeritus Professor of Architecture at the University of Dundee, Scotland. He has lived in Great Britain and Australia, and taught or lectured on his work in China, Israel, India, Sweden, Turkey and the United States. The international relevance of his book *Analysing Architecture* is indicated by its translation into Chinese, Japanese, Korean, Persian, Portuguese, Russian and Spanish and its adoption for architecture courses around the world. *Twenty Buildings Every Architect Should Understand* has been translated into Chinese and Portuguese.

Some reviews of *Twenty Buildings Every Architect Should Understand*:

What a wonderful book. I received this book as a gift for Christmas, and I must say it is a delight. The line drawings are clear and interesting, and the way the author moves through each building explaining design choices, such as the setting, form/shape etc. is wonderful. Recommended.

'Mike', Amazon.co.uk website

This book is a systematic study of basic architectural styles. It's well organized and well written... I'd recommend to any architecture student.

'sojourner', Amazon.com website

This book is really a good work, and even if you are an architect you can surely find some details you missed or forgot about these masterpieces. Simple, clear, but not an easy book...

'matteo f.', Amazon.com website

Endorsements for *Twenty-Five Buildings Every Architect Should Understand*:

Simon Unwin's new case studies stretch his original analytical agenda beyond its more conventional architectural history and theory parameters: it broadens the topic to open up themes and concerns very immediate to current architectural debate. A must-have for all teachers of architecture and their students.

Claude Saint-Arroman, Goldsmiths University (Research), School of Architecture, University of East London, UK

Twenty-Five Buildings Every Architect Should Understand illuminates a different perspective on understanding and decoding the theories and philosophies of architects through their works across the globe, signifying the regional context in the design process. This book is an exemplary contribution from Simon Unwin to the academic and practical interest of architecture.

T.L. Shaji, Professor, Department of Architecture, College of Engineering, Trivandrum, Kerala, India

Unwin's writings and drawings harmonize so well, and treat their manifold subject with such surgical precision and care, that they enable the reader who has not visited (in most cases never will visit) these exemplary projects, to feel as though we have entered into them, and felt with our own bodies their widely diverse and often intimate choreographies.

Ted Landrum, Archi-Poet, University of Manitoba, Canada

*In *Twenty-Five Buildings Every Architect Should Understand*, which expands on the first edition *Twenty Buildings*, Simon Unwin continues a 'go slow' approach to architectural analysis. Eschewing flashy photographs, Unwin uses the classic architectural tools of exquisitely drawn two-dimensional plans, sections, and elevations to analyze systematically each of the twenty-five buildings. A valuable work not only for students of architecture, but for anyone wanting to understand the process of creating spaces for human habitation and enjoyment.*

Marie-Alice L'Heureux, Architect, Associate Professor, University of Kansas, USA

Some reviews of *Analysing Architecture*:

The most lucid and readable introduction to architecture I have read.

Professor Roger Stonehouse, Manchester School of Architecture

What is striking about the book is the thoughtfulness and consideration which is present in each phrase, each sentence, each plan, each section and each view, all contributing to an overarching quality which makes the book particularly applicable and appropriate to students in their efforts to make sense of the complex and diverse aspects of architecture... Unwin writes with an architect's sensibility and draws with an accomplished architect's hand.

Susan Rice, Rice and Ewald Architects, *Architectural Science Review*

Simply the best! I have just gone through the first three chapters of this book and find myself compelled to write this review. I can simply say it is the best and a MUST to everyone in the field of architecture. Students, teachers, and practitioners alike will all find inspirations from this book.

'Depsis', Amazon.com website

The text has been carefully written to avoid the use of jargon and it introduces architectural ideas in a straightforward fashion. This, I suspect, will give it a well-deserved market beyond that of architects and architectural students.

Barry Russell, *Environments BY DESIGN*

Probably the best introductory book on architecture.

Andrew Higgott, Lecturer in Architecture, University of East London, UK

Analysing Architecture by Simon Unwin is one of the finest introductions in print to architecture and its technique.

thecoolist.com/architecture-books-10-must-read-books-for-the-amateur-archophile/ (October 2014)

Simon Unwin's *Analysing Architecture* is required reading – a primary textbook... Beautifully illustrated with drawings from the author's own notebooks, it also manages to balance legibility with depth: this is a superbly lucid primer on the fundamental principles of architecture. I recommend this book wholeheartedly, for readers both new to architecture, and experienced architects as well. A joy to read, a thing of beauty.

'G.B. Piranesi', Amazon.com website

One would have no hesitation in recommending this book to new students: it introduces many ideas and references central to the study of architecture. The case studies are particularly informative. A student would find this a useful aid to identifying the many important issues seriously engaged with in Architecture.

Lorraine Farrelly, *Architectural Design*

Simon Unwin's sketches are fascinating. He includes simplified and thematic drawings, floorplans with associated views, details and three-dimensional drawings to illustrate the principles of 'identification of place'. He doesn't judge architects, but discusses works in their context through thematic perspectives. It is exactly what he says it is; one broad system of analysis. A comprehensive and valuable overview of architecture as a whole.

'Griffin', Goodreads website

www.goodreads.com/book/show/886984.Analysing_Architecture (October 2014)

Books by Simon Unwin

Analysing Architecture

An Architecture Notebook: Wall

Doorway

Exercises in Architecture – Learning to Think as an Architect

ebooks (available for iPad and Mac from the iBookstore)

Skara Brae

The Entrance Notebook

Villa Le Lac

The Time Notebook

Simon Unwin's website is at

simonunwin.com

(some of Simon Unwin's personal notebooks, used in researching and preparing this and his other books, are available for free download from his website)

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TWENTY-FIVE BUILDINGS
every architect should understand

INTRODUCTION

to this second edition

This is a new edition of *Twenty Buildings Every Architect Should Understand* (2010) with another five buildings analysed. The twenty-five buildings in this book are presented not as being the only twenty-five buildings every architect should understand, nor as the twenty-five 'best' buildings ever. Such assertions would provoke argument about the dimensions of 'greatness' but that has not been my purpose, neither in the first nor this second edition. This book is for those struggling to *do* architecture (rather than historians or critics). I am interested in exploring the scope of architecture – its powers and possibilities – rather than trying to establish criteria of worth or trace historical movements.

The original twenty buildings were selected to illustrate a variety of architectural ideas and to test and demonstrate the analytical methodology offered in *Analysing Architecture* (the fourth edition of which was published in 2014). In particular they were chosen to explore a range of relationships between architecture and the person. I have applied these criteria again in selecting five more buildings to analyse.

The spread of examples has been extended to Brazil, Germany and India, as well as from the twentieth into the twenty-first century. And the lists of references (appended to each analysis) have been revised and extended where possible.

to the first edition (revised)

You cannot understand architecture merely by looking at photographs. You cannot understand architecture just by reading words. Yet many books on architecture have only words and/or photographs. The only way to approach an understanding of architecture is through the medium used in its creation – drawing. Long ago architecture was made by drawing directly on the ground, maybe first with a stick and then by digging trenches or piling stones into walls. For centuries architecture has been drawn at a small scale on paper before being built. Now the same happens on computer monitors. These are the fields, the grounds – earth, paper, screens – where architects have created and continue to create architecture.

Originality may often express itself suddenly but never without some previous experience with form... Imitation is a method of assimilation. In accepting it as such the student gains knowledge and experience and is quicker thereby to discover his own originality.

'Comments of Harwell Hamilton Harris to the Faculty, May 25, 1954' (written by Bernhard Hoesli and Colin Rowe) printed in Colin Rowe, edited by Caragonne – *As I was Saying: Recollections and Miscellaneous Essays*, MIT Press, Cambridge, MA, 1996, p. 48

There is no one right way to do anything in architecture. It is not possible to write instructions (formulae, rules) for how to do architecture without restricting its possibilities, any more than it is possible to write instructions for what to say without constraining the possibilities of language. When we begin we learn the workings and potential of language by attending to and imitating how others (parents, friends, teachers...) speak and write. Gradually we find our own voices, using language in different ways. Learning the workings and possibilities of architecture is similar; it is cultivated by studying how others

have, in their own multifarious ways, done it and by trying it ourselves.

Drawing is situated between the mind of an architect and the architecture that mind wants to create. That is why drawing is termed a 'medium'. Architecture resides in the drawings (and nowadays in the computer-generated models) of buildings. It is in drawings that you find the intellectual structures architects give their designs. It is through drawing that you, as an architect, give form to your ideas. It is appropriate therefore that it is through drawing too that you should study and imitate how others do architecture so that you can learn to do it yourself and find your own architectural 'voice'.

One uses one's eyes and draws so as to fix deep down in one's experience what is seen. Once the impression is recorded by the pencil it stays for good, entered, registered, inscribed... To draw oneself, to trace the lines, handle the volumes, organize the surface... all this means first to look, and then to observe and finally perhaps to discover... and it is then that inspiration may come. Inventing, creating, one's whole being is drawn into action, and it is this action that counts.

Le Corbusier, translated by Palmes
– *Creation is a Patient Search* (1960), quoted in Le Corbusier, translated by Žaknić – *Journey to the East* (1966), MIT Press, Cambridge, MA, 1977, p. xiii

In learning to do architecture, the study of plans and sections takes precedence even over visiting buildings. Visits to buildings are enjoyable and provide a chance to see how products of architecture, conceived through the abstraction of drawing, change the real world and make places for life. Visiting buildings gives you the best chance to experience architecture in relation to the world of light, sound, setting, weather, people... and to assess the effect and performance of the abstraction when made real. But to understand the underlying architecture of buildings you need to study them in and through the medium of drawing.

Architectural ideas

To add a layer of complexity, architecture is itself a medium, through which we change the world, making it better: more comfortable, more beautiful, more efficient... according to

our aspirations and beliefs. While drawing mediates between the mind and the architecture it wants to create, architecture itself mediates between the life it accommodates and the world around.

In architecture we do not deal in 'truth', we deal in a kind of fantasy (dreams, visions, philosophical propositions, political manifestos) though sometimes those fantasies focus on what we think might count as ordinary everyday pragmatism ('reality'). Architects often try to suggest that their particular fantasy is the truth of how the world should be. But different architects (like politicians and philosophers) propose different answers; and they can become frustrated when the people they design for fail to use (or appreciate) their buildings in the ways they think they should. Architecture is a matter of proposal and evaluation, call and response, proposition and trial... where imagination interacts with (hits up against) the world in all its multifarious complexity. Architecture depends on giving form to ideas and launching them into the world as buildings (cities, gardens, landscapes...).

Remember the impression given by good architecture, that it expresses a thought. It makes one want to respond with a gesture.

Ludwig Wittgenstein, edited by von Wright and Nyman, translated by Winch – *Culture and Value* (1977), Blackwell Publishing, Oxford, 1998, p. 16e

We tend to think ideas are expressed in words. Architectural ideas, however, are expressed in line (drawing) and manifest in material construction, formal composition, spatial organisation... Architectural ideas are the intellectual structures (you might call them self-generated, intrinsic 'laws') by which buildings are designed and conceived.

Obeying laws, the maker works like his creator; not obeying law, he is such a fool as heaps a pile of stones and calls it a church.

George MacDonald – 'The Fantastic Imagination' (1893), in *The Complete Fairy Tales* (edited by Knoepfelmacher), Penguin, London, 1999, p. 6

In his 1893 essay, 'The Fantastic Imagination' (quoted above), George MacDonald theorised about how to write stories, fairy tales in particular. He suggested that however fantastic and far from natural reality a story might stray, to be plausible it must obey its own intrinsic laws. To make a story

without such discipline was, he suggested, like throwing a pile of stones on the ground and calling it a church.

MacDonald's use of an architectural metaphor is pertinent and revealing. It reminds us that it is *architecture* that turns a pile of stones into a church, i.e. that architecture is the mind's share: the sense, the order, the organisation of form, the ideas that a mind applies to material in the design of a building.

MacDonald, Queen Victoria's favourite writer of fairy tales, lived in the nineteenth century. In the twenty-first century, a pile of stones might itself be considered a work of art – in that merely the decision to throw the stones into a pile, or even to leave a found pile of stones undisturbed, might be asserted a generative idea. But the point of MacDonald's parable remains valid: that the creative activity of human beings depends upon (is strengthened, given 'backbone', by) the generation and application of ideas that give discipline (consistent form, sense – even if it is a sense hermetically sealed in its own realm) to their work. This argument holds even if the operative idea applied is one of formlessness, indiscipline, mystery, chance, emptiness, irresolution... But without an idea (without the involvement of the mind) nothing, not even the undisturbed pile of stones, can be said to have form. It is in the mind – the realm of ideas – that architecture (whether of a building, a story... or of a pile of stones) originates. And it is through drawing, on whatever ground (even if only that of the imagination), that such ideas are forged.

Analysing architecture

The present book is related to another. *Analysing Architecture* first appeared in 1997 and has subsequently been published in second (2003), third (2009) and fourth (2014) editions. It has been translated into Chinese, Japanese, Korean, Spanish, Persian and Portuguese. As one (Amazon.com) reviewer commented (gratifyingly and reassuringly), *Analysing Architecture* 'establishes a systematic method for analyzing architecture'. The book's aim was to begin to formulate a methodology for exploring the workings of architecture in ways analogous to the ways in which the workings of language and the structures of its products have been explored academically (as grammar and syntax) for many years. And to do so on the premise (as stated in *Analysing Architecture*) that 'place is to architecture as meaning is to language' – i.e. that the fundamental burden of architecture is identification of place. These arguments are explored in more detail in the relevant chapters of *Analysing Architecture* but they also pervade the analyses that follow.

My aim in assembling the twenty analyses in the first edition of the present book was (as I have said above) to assess further the applicability of the methodology explored and illustrated in *Analysing Architecture* by applying it in more depth than was possible in the case studies at the end of that book, and to a diverse variety of examples from different countries and dating from various times during the last eight decades of the twentieth century. Architecture has never been more diverse than during that period. In this second edition five more buildings have been analysed, reaching into the twenty-first century and widening the geographical spread of examples.

Choice of examples

Of course there are rather more than twenty-five buildings that any architect should understand to underpin their fluency in the language of architecture and connoisseurship of the canon of great works. The collection here is diverse but not random. Not all are 'great'; some may be familiar, others less so. All are of a size and complexity of brief (program) that might be presented to architectural students during the early years of their architectural education.

As well as the two main criteria identified above, two particular themes have informed the choice of examples analysed: these can be characterised by the words *space* and *the person*. These words label themes around which many architectural ideas cluster. And, as *the person* cannot do other than occupy *space*, these themes are of course intertwined.

You might think that there is only one sort of space. In a sense there is. But architects mould and engineer space according to various ideas. We might leave space open to infinity or close it off from everywhere else. We might emphasise its horizontal dimensions or its vertical. We can give it focus and definition or leave it vague and amorphous. We can excavate it from solid matter or even from itself. We might give it a specific direction or make it suggest and provoke labyrinthian wandering. Architects can make space that is static, dynamic, or both at the same time. We can make space that works in straight lines and right angles or space that curves and flows. We can make space that is neither here nor there but in-between. Architects have even tried to warp space.

Space is indeed the medium we (human beings and other creatures) occupy. The second theme informing the choice of examples analysed in this book concerns the different ways in which architects think of people (including themselves, and maybe other creatures) as ingredients/components/recipients

of architecture. In the presence of music the person is called the 'performer' or 'listener'; in sport the 'player' or 'spectator'; in theatre the 'actor' or 'audience'; in television maybe the 'presenter' or 'viewer'... But in architecture we do not have a specific word for the person who experiences (either from within or without, actively or passively) a building: 'user' is too functional; 'visitor' too transient; 'dweller', 'resident' or 'inhabitant' too domestic; 'man' or 'woman' too gender specific; 'owner' too possessive; 'experiencer' too ugly. And although it seems some buildings are designed primarily for spectacle, the term 'spectator' is too detached, excluded from the inclusive accommodating experience works of architecture (should) offer. In the following analyses I have had to resort to using the word 'person', which may occasionally sound a little clunky. A person sees, hears, touches, smells (and occasionally tastes), walks around, uses, occupies (inhabits), and may be emotionally affected by a building, whether he or she is a member of an audience, family, workforce, congregation, tour party, school class or whatever. Architects also use the person (body, human form) as the model for their architecture, whether in its biology, dimensions, geometry, skeletal structure, articulation, mobility... I have not covered all of these in the following analyses, but the ways architects have sought to accommodate the person, or found inspiration in the body, has influenced my selection of examples to analyse.

It is a subtle distinction, but the analyses presented here are aimed not so much at identifying the actual historical gestation of the selected buildings, as at drawing out ideas they present to the mind analysing them. The analyses are teleological in that they focus on the architectural end products rather than on (though not to the exclusion of) historical record of the design process (which is often obscure, incomplete or non existent). This book has been written (not so much for the historian as) for those who are expected to generate architectural ideas (students and architects), and so it focuses on the general workings of architecture and the possibilities the

buildings analysed suggest, rather than on history for its own sake. History, though it surely informs and may influence, holds no necessary authority in creative matters. 'Time', as the Italian-Brazilian architect Lina Bo Bardi suggests (in the quotation below left), 'is a marvellous tangle...'.

The analyses in the present book seek to extract ideas evident in particular works of architecture, and they do so in awe of and respect for the astonishing (miraculous) ability of the human mind to conceive intellectually. There is no other faculty that makes human beings more human than our ability to have ideas. The question of where ideas come from and how they come into being is a mystery that science has made no progress in answering. But perhaps 'where they come from' can be partly answered by suggesting that our critical and mischievous playfulness, when it encounters the ideas of others, has an ability to distort, reinterpret, contradict and reinvent them in such a way as to produce what passes for new ones. Certainly it is difficult to find ideas that are radically and essentially novel. Usually they may be interpreted as developments from, or contradictions of, ideas evident in the work of others or apparent in nature. Some creative influence and friction between ideas is apparent in the following analyses.

Architecture is open to analysis like any other aspect of experience, and is made more vivid by comparison. Analysis includes the breaking up of architecture into elements, a technique I frequently use even though it is the opposite of the integration which is the final goal of art. However paradoxical it appears, and despite the suspicions of many Modern architects, such disintegration is a process present in all creation, and it is essential to understanding.

Robert Venturi – *Complexity and Contradiction in Architecture*, Museum of Modern Art, New York, 1966, p. 18

Linear time is an invention of the West, time is not linear – it is a marvellous tangle in which, at any moment, ends can be chosen and solutions invented, without beginning or end.

Lina Bo Bardi, in Marcelo Carvalho (editor) – *Lina Bo Bardi*, Lina Bo & P.M. Bardi Institute, São Paulo, 1993, quoted in Olivia de Oliveira – *Subtle Substances. The Architecture of Lina Bo Bardi*, Romano Guerra Editora Ltda, São Paulo, 2006, p. 32

Each of the following analyses begins with a building and tries to understand (infer) the thought processes and decisions behind its conception. As far as is possible, the reader (of the drawings as well as the words) is put in the position of the architect. The question is asked: what moves did 'I' make when designing this building? Trying to answer this question gives insight into the workings of architecture.

The analyses are not presented in chronological order. There is a benign mischief to this. It is consciously intended

to subvert the orthodox historical interpretation usually overlaid on the discussion of architecture. I do not mean to suggest that such interpretation is irrelevant. But I do share the concern, expressed a century ago by W.R. Lethaby (as quoted at the beginning of *Analysing Architecture*), that the labels and classifications of architectural history can distract from appreciation of the fundamental powers of architecture as the medium through which people build their world.

The analyses that follow show that architects do not always do the obvious, straightforward and direct thing. Sometimes it seems that architecture consists in wilful deviation from some undefined norm. If the variety of approaches exposed in the following pages does not make the task of design any easier, it will perhaps illustrate some of those powers available to you as an architect, and make anyone who wants to design buildings aware of some of the possibilities and potential of this richest of all arts.

A note on methods of study

This book intends not only to provide ready analyses of specific buildings but also to show how, more generally, such analyses might be done by the student of architecture. Readers will probably learn more about the workings of architecture by doing their own analyses than merely following those offered here. Together with *Analysing Architecture*, my analyses suggest the sorts of things you-the-analyst might look for when studying the work of others and that you-the-architect might try in your own design work.

In preparing analyses we are dependent necessarily upon published material. In working from published sources the analyst is likely, if not certain, to encounter inaccuracies in drawings and possibly be thrown off course by the occasional cases where photographs have been printed the wrong way around. Even architects' own drawings usually (not sometimes) differ from what is built because variations are often made during construction or because architects sometimes would prefer to record idealised ('platonic') versions of their buildings. This is a practice that goes back at least to Palladio in the sixteenth century, whose version of the house known as the Villa Rotonda published in his *Four Books on Architecture* is different from the actual building to be found on a hillside just outside Vicenza. Amongst the analyses present in this book, for example, the plan of Un Cabanon published by Le Corbusier in Volume Five of his *Œuvre Complète* is different from the plan of the shed as built. In the following analyses I have tried to draw attention to where the real might diverge

from the platonic, but probably, since I am interested in what I have called (following the fairy tale theorist George MacDonald) 'the mind's share', I have focussed more on the platonic than the real.

Interrogating published material is part of the analytical process. And redrawing the plans and sections of buildings under scrutiny is an essential part of that interrogation. It is through redrawing that the analyst is able to correct the frequent mistakes found in published material and acquire a deeper perception of what the architect has been up to and how decisions might have been made.

Positing a designing mind behind the architectural reality lets the analyst explain architectural change. The person who will be a maker of houses travels through architectural experiences from the beginning of his life... Like the learning singer of epics or chanter of sermons, he passes through an apprenticeship of imitation. But at maturity, like the best of the epic singers, he is reliant not on one original, but on a competence constructed out of numerous originals.

Henry H. Glassie – *Folk Housing in Middle Virginia: A Structural Analysis of Historic Artifacts*, University of Tennessee Press, Knoxville, TN, 1975, p. 67

It is of course impossible to get inside the mind of an architect (other than your own) but it is arguable that you may get closer by redrawing their architecture than by reading the words they write or say. This is not to suggest that architects intend to be disingenuous in the ways they sometimes obfuscate or elaborate their architecture with words. But, as has already been suggested, it is impossible to explain architecture fully verbally. Architecture is a means by which thought is ordered and applied to the world but it is not a verbal language; and despite claims to the contrary, there are some intellectual places verbal language cannot reach.

Understanding how other architects have made decisions helps you understand what is possible in your own work. Understanding the variety of ways in which architects have made decisions, the variety of criteria they use, introduces you to the problem of deciding your own values and priorities in design. In the analyses contained in this book you will see that in each of the twenty-five buildings a different approach to design was adopted, different values and ideas

were in play. By looking carefully at the work of others you can ask yourself the questions: 'do I find this way of designing interesting, pertinent, sustainable... or vacuous, irresponsible, self-indulgent...?'; and, 'can I learn something from this that I can use (emulate) in, or makes me reflect critically on, my own work?' The answers to such question are yours.

Some terminology explained

The following analyses use the methodology and conceptual framework offered in *Analysing Architecture*. Nevertheless the present book may be read on its own. The only slight problem may relate to abbreviations used for some concepts that are explained in detail in the earlier book. Those that may need explanation are:

'identification of place' – the realisation that architecture, distinct from other art forms, begins with the desire or need to establish a place or places in the world;

'basic elements' – wall, floor, roof, defined area of ground, pit, platform, doorway, window...; i.e. the basic elements of the 'language' of architecture;

'modifying elements' – light, temperature, scale, ventilation, texture, time...; i.e. elements that come into play once a work of architecture is built, and which modify experience of it;

'framing' – the realisation that architecture relates to activities and objects (even moods) by framing them; and that by doing so helps to make sense of and for them;

'using things that are there' – the idea that architecture (except in astronaut's space) never exists in a vacuum and that it therefore can exploit elements of its surroundings, such as a tree or elevated ground, an existing wall or the reflection of light off a lake;

'elements doing more than one thing' – the way a wall might be both a barrier and a pathway, as in the case of the curtain wall of a castle; the way that a window might offer views both outwards and inwards;

'primitive place types' – place types, usually with their own accepted names, timelessly part of human inhabitation of the world, e.g. bed, altar, hearth, pulpit...;

'temples and cottages' – a complex dimension of attitudes architects adopt towards aspects of the world (site, materials, climate, people, history, the future...) ranging, roughly speaking, from those of control to those of acceptance or responsiveness;

'geometries of being' – geometry that is innate to materials, the ways in which they are made and constructed,

to human form and movement...;

'ideal geometry' – geometry that is imposed onto materials, the ways in which they are made, onto human form and movement...; i.e. perfect squares, circles, rectangles with particular mathematical proportions, computer-generated formulae...;

'stratification' – the organisation of buildings in the vertical dimension, the differing relationships between different levels of a building and the ground;

'space and structure' – the various relationships between structural order and spatial organisation;

'parallel walls' – spatial organisation based in the use of parallel, and usually load-bearing, walls;

'transition, hierarchy, heart' – the progressive zoning of the spatial organisation of a building, e.g. between public and private, sacred and secular, etc.;

'the in-between' – architecture is often (if not always) concerned with separating (differentiating) an inside from the general outside; places that are neither fully inside nor fully outside are in-between;

'inhabited wall' – walls that are so thick that spaces can be excavated within their thickness;

'refuge and prospect' – the relationship between small places of concealment or retirement and their views over the surroundings or an arena.

Other terminology is, I hope, self-explanatory but if explanation is sought it may be found in *Analysing Architecture* (fourth edition, 2014).

Simon Unwin, June 2014

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Many other relevant texts are included in the bibliography of *Analysing Architecture*.



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