

analysing

# ARCHITECTURE

the universal language of place-making

FIFTH EDITION



SIMON UNWIN

ROUTLEDGE

# analysing ARCHITECTURE

## the universal language of place-making

FIFTH EDITION, REVISED AND WITH NEW CHAPTERS

**'Probably the best introductory book on architecture.'**

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

**'A truly amazing book on how to analyze a building. A must read for all young architects.'**

Fatema, *Goodreads.com*

Many people find it difficult learning to do architecture. Initially it can be like asking your brain to do something for which it has no frame of reference. Generally speaking, pre-university education does not prepare the creative mind for the peculiar challenges of architecture. I have known intelligent people – A-grade students in literary or science subjects, unused to academic difficulty – whose confidence has been knocked when faced with the challenges of architecture. Back in the 1990s, I wrote this book to help and, through subsequent editions, revised and expanded it to make it better. This is the fifth edition, complete with new chapters and a subtitle which is explained in the Introduction.

The theory of architecture the book presents remains the same. Even so, in response to comments gleaned from a survey of users conducted by my publisher, I continue to try to express it more clearly and thoroughly.

There are a few significant changes. The Case Studies at the end of previous editions have been omitted and much of the material contained in them redistributed amongst earlier chapters. Alternative and more thorough case studies can be found in the sister book *Twenty-Five Buildings Every Architect Should Understand* (2017). The Case Studies have been replaced by a completely rewritten chapter on 'How Analysis Can Help Design', moved from its position early in the book and placed at the end, where references can be made back to examples in earlier chapters. The chapter on 'Temples and Cottages' has been moved near the end too, for similar reasons.

In addition, four extra chapters have been added under the banner 'Themes in Spatial Organisation': on 'Axis', 'Grid', 'Datum Place' and 'Hidden'. Other themes relating to *Analysing Architecture* can be found, treated at greater length, in the separate volumes of the *Analysing Architecture Notebook* series (see back cover).

Simon Unwin, July 2020

*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. *Analysing Architecture's* international relevance is indicated by its translation into various languages and its adoption for architecture courses around the world. Now retired, Simon Unwin continues to teach at The Welsh School of Architecture in Cardiff, UK.*

## Some reviews of *analysing ARCHITECTURE* (previous editions):

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

Professor Roger Stonehouse, Manchester School of Architecture

***'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

***'Unwin chooses to look at the underlying elements of architecture rather than, as is more usual, at the famous names, styles, movements and chronology of the genre. This rejection of the conventional art-historical approach can lead to interesting conclusions... It is all presented cogently and convincingly through the medium of Unwin's own drawings.'***

Hugh Pearman, *The Sunday Times*

***'In clear, precise diagrams and thoughtful text, author Simon Unwin offers an engaging methodology for the study of architecture and aesthetic systems. Time-tested buildings from classical temples to traditional Japanese homes and early modernist masterpieces, are explored in this wide ranging, but focused study. Unwin demonstrates that while architectural styles change over time, the underlying principles that organize quality designs remain remarkably consistent. This book is a must for all architectural students interested in acquiring the visual skills needed to understand a wide variety of design methodologies.'***

Diane78 (New York), Amazon.com

***'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*

***'From the camp sites of primitive man to the sophisticated structures of the late twentieth century, architecture as an essential function of human activity is explained clearly, and illustrated with the author's own excellent drawings. Highly recommended as a well-organized and readable introduction.'***

medals@win-95.com, Amazon.com

***'This book establishes a systematic method in analyzing architecture. It explains how architectural elements are combined together to form designs that could relate an appropriate sense of 'place' specific to the programme as well as the environment surrounding it. The book is well illustrated with diagrams and examples. An extremely useful introductory guide for those who want to learn more about the basics of architecture.'***

nikana99@hotmail.com, Amazon.com

***'This book needs to be praised and appreciated... and provides an excellent overview of the subject. There are beautiful and clear line drawings throughout... and very substantial text that's TRYING TO TEACH YOU SOMETHING. A very sensitive and thorough treatment of a difficult and challenging subject, I highly recommend this and its companion piece An Architecture Notebook. Both are tremendous studio books, and will always have valuable insights to offer when you take them off the shelf.'***

Curt Dilger, Amazon.com

***'This was super helpful to me in first year! I still reference it the odd time when I'm looking for ideas for a precedent or when I'm looking for inspiration! It reduced everything back to the basics which can be helpful if you're stuck in a rut. I would recommend it to anyone in first or second year studying architecture!'***

Lara, Amazon.co.uk

***'Simon Unwin's book has been so influential on architectural education that it has attained the place of scripture... Enjoy this book for what it is supposed to be: an engaging read by a writer whose only purpose is to illuminate his subject, a task he achieves with aplomb.'***

Mr Simon McGuinness, Amazon.com

***'This is an excellent book, recommended to anyone seriously interested in architecture. Its starting point is Unwin's ability to draw well – to think through his hands, as it were. This is fundamental to architectural skill and Unwin has used it to "talk back to himself" and describe the architecture around him. He uses this skill to romp through a huge number and variety of buildings and architectural situations in order to describe architectural strategies. Unwin has at the heart of his book a definition and understanding of architecture that we thoroughly endorse: to be dealt with in terms of its conceptual organisation and intellectual structure. But he adds to this potentially dry definition an emotive overlay or parallel: architecture as the identification of place ("Place is to architecture as meaning is to language"). Thus he takes on the issue of why we value architecture.'***

[architecturelink.org.uk/GMoreSerious2.html](http://architecturelink.org.uk/GMoreSerious2.html)

**'Analysing Architecture should become an essential part of all architectural education and an informative guide to the powerful analytical tool of architectural drawing.'**

Howard Ray Lawrence, Pennsylvania State University

**'Excellent in every way – a core book, along with An Architecture Notebook.'**

Terry Robson, Teaching Fellow, University of Bath, UK

**'O livro nos dá instrumentos para melhor analisar obras de arquitetura. Quando aprendemos a destrinchar projetos, também aprendemos como desenvolver nossas próprias criações.'**

(*'The book gives us tools to analyze architectural works better. When we learn to untangle projects, we also learn how to develop our own creations.'*)

Larissa Tollstadius, Goodreads.com

**'I think this is an excellent book and I will continue to recommend it to my students.'**

Professor Donald Hanlon, University of Wisconsin-Milwaukee, US

**'Many of the architecture world's most promising students began their studies with this very book. Analysing Architecture by Simon Unwin is one of the finest introductions in print to architecture and its technique. While a book like this may not be an obvious choice for a fan of architecture, there is no better way of learning the ins and outs of architectural development than from a book like this. Even if you don't ever see yourself drawing up blueprints or hiring contractors (unless you're designing the master shed office!), this book can extend an understanding of architecture that only a studied professional could eclipse.'**

*thecoolist.com/architecture-books-10-must-read-books-for-the-amateur-archophile/* (January 2013)

**'A good overview of architecture for the layperson with a casual interest. Goes over the fundamentals of architecture, what it proposes to achieve, and some of the aesthetic considerations that architects must take into account. An unexpected insight I gained from this book, is how fundamental architecture is to humans. Architecture does not necessarily mean "buildings".'**

Arjun Ravichandran, Goodreads.com

**'As a professor who teaches first year architecture students, Simon Unwin's Analysing Architecture is required reading – a primary textbook for our students. 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

**'First, beautiful illustrations. It is hard to believe every single illustration was hand-drawn... I think this book might have helped me more if I had read it last year (barely beginning my architecture studies). But all is good. This book shed some light and helped expand my basic knowledge of architecture. It also offered a very poetic perspective of architecture in a simplified and tangible way. Mr Unwin, instead of talking vaguely about architecture, spoke quite simply and understandably through words and drawings. It is something to be commended on. I like the idea of architecture as identification of place. That is something I have contemplated but not really gotten into, it was a mere feeling and an idea, rather than a formalized thought. Mr Unwin created words for what I was trying to express.'**

Wei Cho, Goodreads.com

**'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

**'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

**'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.'**

TheGriffinReads, Goodreads.com

**Analysing Architecture Notebooks** (these Notebooks are supplements to the present volume)

*Metaphor: an exploration of the metaphorical dimensions and potential of architecture*

*Curve: possibilities and problems with deviating from the straight in architecture*

*Children as Place-Makers: the innate architect in all of us*

*Shadow: the architectural power of withholding light*

(Keep an eye on [routledge.com/Analysing-Architecture-Notebooks/book-series/AAN](http://routledge.com/Analysing-Architecture-Notebooks/book-series/AAN) for further additions to this series.)

**Other books by Simon Unwin**

*An Architecture Notebook: Wall*

*Doorway*

*Exercises in Architecture: Learning to Think as an Architect*

*Twenty-Five Buildings Every Architect Should Understand*

*The Ten Most Influential Buildings in History: Architecture's Archetypes*

**ebooks** (available for iPad from Apple Books)

*Skara Brae*

*The Entrance Notebook*

*Villa Le Lac*

*The Time Notebook*

*The Person Notebook*

**Simon Unwin's website is at [simonunwin.com](http://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 this site.)



[routledge.com/textbooks/9780415489287/](http://routledge.com/textbooks/9780415489287/)



analysing

# ARCHITECTURE

the universal language of place-making

FIFTH EDITION, REVISED AND WITH NEW CHAPTERS

Fifth edition published 2021  
by Routledge  
2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

and by Routledge  
52 Vanderbilt Avenue, New York, NY 10017

*Routledge is an imprint of the Taylor & Francis Group, an informa business*

© 2021 Simon Unwin

The right of Simon Unwin to be identified as author of this work has been asserted by him in accordance with sections 77 and 78 of the Copyright, Designs Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

*Trademark notice:* Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

*Publisher's Note*

This book has been prepared from camera-ready copy provided by the author.

First edition published by Routledge 1997  
Fourth edition published by Routledge 2014

*British Library Cataloguing-in-Publication Data*

A catalogue record for this book is available from the British Library

*Library of Congress Cataloging-in-Publication Data*

Names: Unwin, Simon, 1952- author.

Title: Analysing architecture : the universal language of place-making / Simon Unwin.

Description: 5. | Abingdon, Oxon ; New York : Routledge, 2021. | Includes bibliographical references and index.

Identifiers: LCCN 2020037811 (print) | LCCN 2020037812 (ebook) | ISBN 9780367523572 (hardback) | ISBN 9780367524432 (paperback) | ISBN 9781003058007 (ebook)

Subjects: LCSH: Architectural design. | Architectural design--Case studies.

Classification: LCC NA2750 .U58 2021 (print) | LCC NA2750 (ebook) | DDC 729--dc23

LC record available at <https://lccn.loc.gov/2020037811>

LC ebook record available at <https://lccn.loc.gov/2020037812>

ISBN: 978-0-367-52357-2 (hbk)

ISBN: 978-0-367-52443-2 (pbk)

ISBN: 978-1-003-05800-7 (ebk)

Designed and typeset in Georgia and Arial  
by Simon Unwin

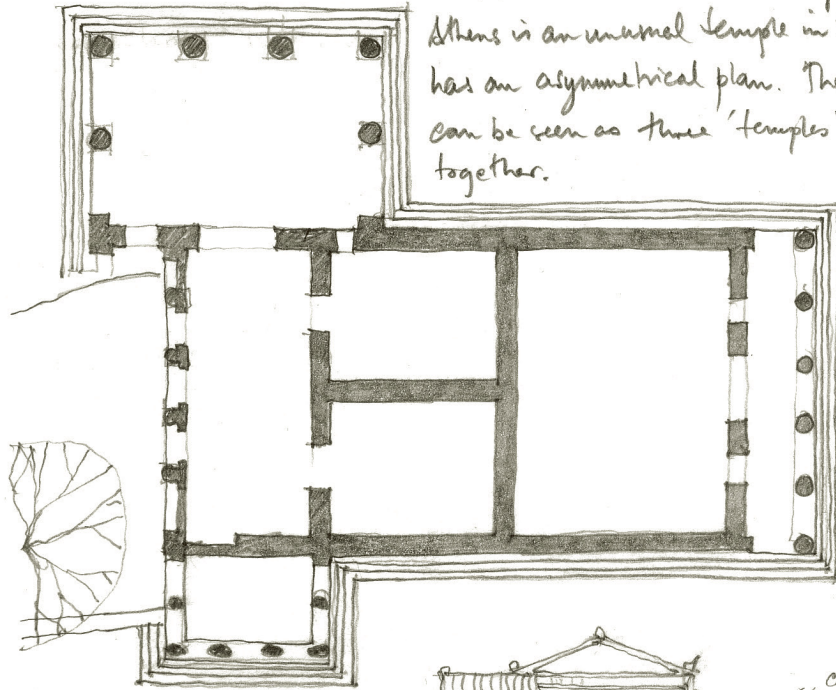
for Gill

and in memory of  
David McLees

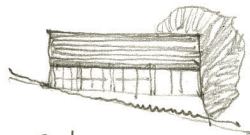
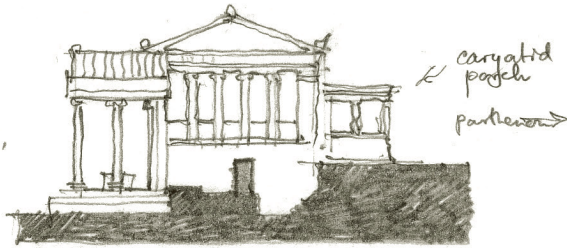
# TEMPLES AND COTTAGES

(7)

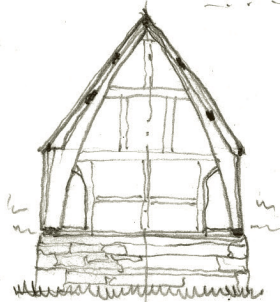
The Erechtheion on the Acropolis in Athens is an unusual temple in that it has an asymmetrical plan. Though it can be seen as three 'temples' stuck together.



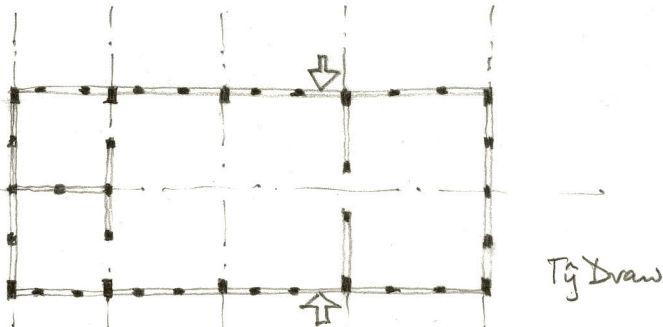
It is also unusual, as a temple, in that it responds to changing ground levels.



Side



X-section.



(Llanarmon Mynydd Mawr, Denbŷ)

Whereas an old Welsh Cruck-frame house may be as ordered as a 'temple'. It may even stand clear of the ground on a platform.

# CONTENTS

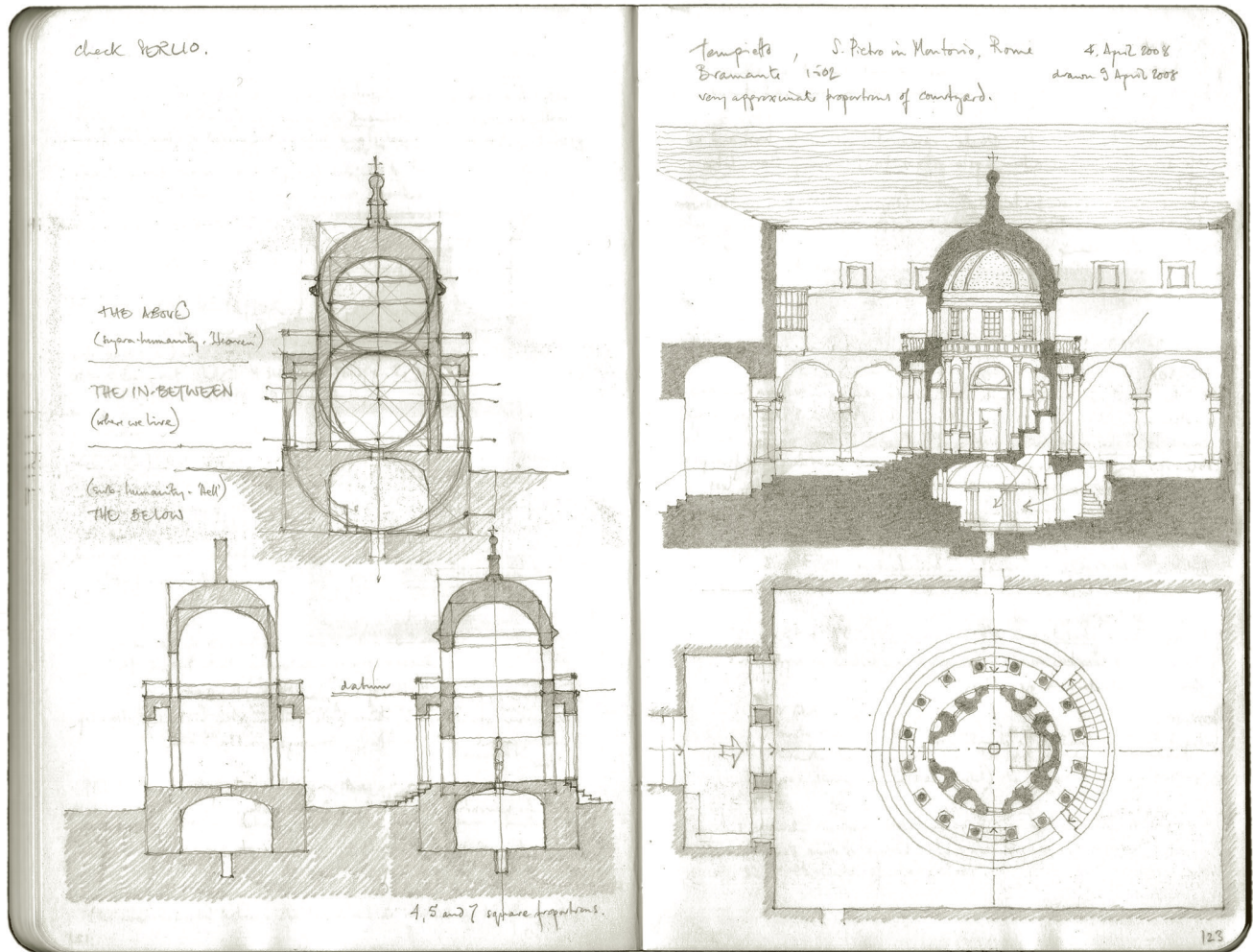
PREFACE TO THIS NEW EDITION	3
<b>INTRODUCTION</b>	5
<b>ARCHITECTURE AS INTELLECTUAL STRUCTURE AND IDENTIFICATION OF PLACE</b>	11
<b>BASIC ELEMENTS OF ARCHITECTURE</b>	21
<b>MODIFYING ELEMENTS OF ARCHITECTURE</b>	35
<b>ELEMENTS DOING MORE THAN ONE THING</b>	49
<b>USING THINGS THAT ARE THERE</b>	59
<b>PRIMITIVE PLACE TYPES</b>	71
<b>ARCHITECTURE AS MAKING FRAMES</b>	93
<b>GEOMETRIES OF BEING</b>	105
<b>IDEAL GEOMETRY</b>	137
<b>THEMES IN SPATIAL ORGANISATION</b>	
1 SPACE AND STRUCTURE	165
2 PARALLEL WALLS	179
3 AXIS	191
4 GRID	203
5 DATUM PLACE	213
6 STRATIFICATION	223
7 TRANSITION, HIERARCHY, HEART	233
8 IN-BETWEEN	241
9 INHABITED WALL	249
10 HIDDEN	257
11 REFUGE AND PROSPECT	267
<b>TEMPLES AND COTTAGES</b>	277
<b>HOW ANALYSIS CAN HELP DESIGN</b>	291
<b>POSTSCRIPT</b>	307
ACKNOWLEDGEMENTS	312
BIBLIOGRAPHY AND REFERENCES	313
INDEX	319



**Taylor & Francis**

Taylor & Francis Group

<http://taylorandfrancis.com>



analysing  
**ARCHITECTURE**  
the universal language of place-making

FIFTH EDITION, REVISED AND WITH NEW CHAPTERS

***'The search is what everyone would undertake if he were not stuck in the everydayness of his own life. To be aware of the possibility of the search is to be on to something. Not to be on to something is to be in despair.'***

Walker Percy – *The Moviegoer* (1961), quoted in Lawrence Weschler – *Seeing is Forgetting the Name of the Thing One Sees: a Life of Contemporary Artist Robert Irwin*, 1982.

***'But why think about that when all the golden lands ahead of you and all kinds of unforeseen events wait lurking to surprise you and make you glad you're alive to see?'***

Jack Kerouac – *On the Road* (1957), 2000.

# PREFACE TO THIS NEW EDITION

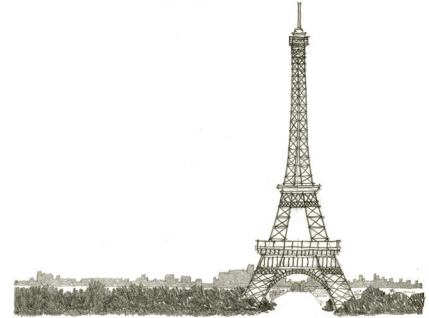
You will notice that I have given this fifth edition of *Analysing Architecture* a subtitle: *the universal language of place-making*. This needs a little explanation. Words can be treacherous. As Humpty Dumpty famously asserted, ‘When I use a word, it means just what I choose it to mean – neither more nor less.’\* I need to explain what I choose to mean by each of the significant words in my subtitle. More substantial explanations are provided in the early chapters, but here I feel I should suggest a few caveats, friendly warnings to you the reader not to impose on my words your meanings!

Let’s start at the end. ‘Making’ is an abbreviation for a number of activities, intellectual and physical. We think of ‘making’ as fashioning material into something. This sense of the word is of course important in architecture; after all, we build walls with bricks, etc. But here, ‘making’ can mean something more subtle: as when we ‘make’ (establish) a place merely by choice or occupation; as when we stand atop a rock or sit under a tree. Architecture is always consequent on this latter meaning, though obviously it also very often involves the former – we build where we recognise the opportunity.

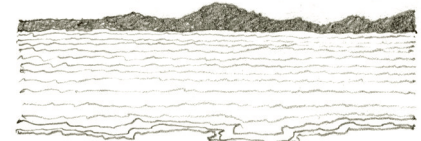
Next, ‘place’. Often when I speak of ‘place’ people infer that I mean Paris, London or Rome. That sense of the word is not irrelevant here but again my meaning is subtly different. It is more akin to that suggested in the old adage, ‘a place for everything and everything in its place’. I am at this moment sitting at my desk, the ‘place’ where I work. The Eiffel Tower may well represent, as a symbol, the place ‘Paris’ but it is also a ‘place’, a platform from which the wide city can be viewed; that place being supported by a massive steel structure. This meaning of ‘place’ speaks to our direct engagement with and inhabitation of the physical world in which we find ourselves. And it is essential to my explanation of the next word (working backwards through my subtitle), ‘language’.

I am often frustrated that there does not seem to be a word for what I want to say. My use of the word ‘language’ is a compromise.\*\* I suggest later in this book that ‘place is to architecture as meaning is to language’: i.e. where ‘meaning’ is what we might call the essential burden of language, ‘place’ is the essential burden of architecture. The essential burden of a house is that it is a ‘place’ where someone lives, and contains all the complex of places that people inhabit as frames for their domestic existence. This simple truth has profound ramifications. It means that architecture possesses all the potential for making sense of the world that language has, if not more. But where language carries its with words, architecture carries its with topography, materials, the arrangement of elements, spatial organisation...

The word ‘universal’ is perhaps the least problematic. It is widely accepted as a synonym for common, applicable everywhere. At this point you might protest that architecture is *not* the same everywhere: Chinese architecture differs from Greek; Classical from Gothic; timber from concrete... And of course that is true in terms of appearances, materials used, construction techniques etc. This might seem a fatal challenge to the claim implicit in my subtitle. But I maintain it is not. For those different architectures, and the many I did not mention, can all be seen to share a common ‘language’ – a ‘metalanguage’ – that underlies their differences in culture, style, construction. One might describe it as (continuing the linguistic metaphor) the grammar, the syntax,\*\*\* the organisational strategies etc., that those superficially disparate architectures share.



*We see Paris as a place. We see London, Rome, Cardiff, Tokyo, New York, Beijing, Delhi... the Sahara desert, the Lake District, the Nullarbor Plain, the Andes... as places too.*



*In a different sense, we see a rock on the beach as a place to sit. Architecture originates in this more immediate sense of place; the sense in which we occupy and engage directly with our surroundings.*

*The Eiffel Tower is a place in this latter sense too. As an object it may be a symbol of the French capital but its topmost platform is an elevated place from which we can survey the whole city.*

---

\* Lewis Carroll – *Through the Looking Glass* (1896).

\*\* In architectural literature there are many instances of what are termed ‘linguistic analogies’. In this book I do not use the word ‘language’ to suggest an analogy.

\*\*\* There is a recognised field of architectural analysis called ‘space syntax’. In this book I am not using the word in the same way.

The ways I do use ‘language’ (or ‘metalanguage’) and ‘syntax’ are explained in the text.

That metalanguage of architecture – the universal language of place-making – is the subject of this book. Everyone understands it. We all know how to interpret and interact with a circle drawn on the ground, with walls and doorways, with windows, stairs, furniture, table settings, street organisations, office and schoolroom layouts... Generally we all have a sense of when somewhere is private or public, though sometimes the signs may be difficult to read. We can all read the identity of places and respond accordingly. Either intuitively or through learning as we grow up, we know how to interpret the physical world around us and to situate ourselves in it.

Everyone uses the universal language of place-making too. But only to a degree. On the beach for example, we are all capable of making a place for ourselves, even with as little as a towel, or maybe with an arrangement of windbreaks and parasols. To be able to use, to ‘speak’, the language fluently and ‘say’ sophisticated things with it – i.e. to be professional architects – we have to consider it consciously, deliberately assimilate its potential so that we can employ it effectively in the service of others. To be a professional architect you need to build on your rudimentary grasp of architecture’s metalanguage. That is what this book will help you do.

Even though the professional practice of architecture demands mastery of many fields of knowledge: constructional, environmental, scientific, legal, cultural, spiritual..., it is this universal language of place-making that lies at its conceptual core. There are specialist consultants that can help with all the other fields of knowledge, but this one belongs to the architect. And anyone who ‘speaks’ the ‘universal language of place-making’ is an architect, whether or not they have the professional qualifications (even though, if they don’t, they are not allowed – in Britain at least – to use that title).

Maybe Humpty Dumpty’s comment on the fickleness of words has become something of a cliché. The same is probably true of the adage ‘a place for everything...’. Well another possible cliché is L.P. Hartley’s observation that ‘the past is a foreign country: they do things differently there’.\* I am certainly aware that the present culture in education, as well as the wider profession of architecture, is very different from when I first wrote *Analysing Architecture* back in the 1990s. I have tried to be mindful of some of the changes by trying even harder to be clear and helpful in what I include and how I describe it.

The principle revisions I have made in this edition are: amendments to the Introduction; fresh examples in most chapters; a completely re-conceived chapter on ‘How Analysis Can Help Design’ (now at the end of the book); repositioning of the chapter ‘Temples and Cottages’; new chapters on ‘Axis’, ‘Grid’, ‘Datum Place’ and ‘Hidden’; and, to make space for these changes, redistribution of content from the Case Studies amongst earlier chapters. Elsewhere, apart from a general change of format (again to make space for the additional chapters), I have updated and redrawn some of the illustrations and kept an eye out for possible clarifications in the text.

Simon Unwin, September 2020

*Over two thousand years ago the Roman architect Vitruvius wrote that an architect should be...*

*‘... educated, skilful with the pencil, instructed in geometry, know much history, have followed the philosophers with attention, understand music, have some knowledge of medicine, know the opinions of the jurists, and be acquainted with astronomy and the theory of the heavens.’\**

*Even so, being in command of the universal language of architecture – which Vitruvius does not mention – is actually the core defining skill, the essential skill, the sine qua non of being an architect.*

---

\* Vitruvius, trans. Hickey-Morgan – *The Ten Books on Architecture* (1stC BCE), 1960.

\*\* L.P. Hartley – *The Go-Between* (1953), 2004.

Architecture is all around us. It frames our lives. By architecture we make sense of the world. So let's try to make sense of it. Let's find architecture's architecture so you can start to experiment with it.



# INTRODUCTION

***'Modern builders need a classification of architectural factors irrespective of time and country, a classification by essential variation... In architecture more than anywhere we are the slaves of names and categories, and so long as the whole field of past architectural experiment is presented to us accidentally only under historical schedules, designing architecture is likely to be conceived as scholarship rather than as the adaptation of its accumulated powers to immediate needs.'***

W.R. Lethaby – *Architecture*, 1911.

***'The most important assignment of life: to begin each day afresh, as if it were the first day – and yet to assemble and have at one's disposal the entire past with all its results and forgotten lessons.'***

Georg Simmel – *Posthumous Fragments and Essays* (1923), quoted in Fritz Neumeier – *The Artless Word: Mies van der Rohe on the Building Art*, 1991.

***'Our profession is an old language and it has a grammar. And about this people don't know anything. So how is it they can do a building if they do not know the grammar? In the primary school you have a thing like an "A". Perhaps then you have "apple". A long time later you try to write a love letter. I think you have learned the language ten or eleven years until this moment. For me it's the same. It's very important that you give yourself time to learn this profession from the beginning.'***

Peter Märkli, quoted by Beatrice Galilee – 'Interview with Zurich-based architect Peter Märkli', in *IconEye: Icon Magazine Online*, May 2008, available at: [iconeye.com/component/k2/item/3453-peter-maerkli](http://iconeye.com/component/k2/item/3453-peter-maerkli) (December 2019).

# INTRODUCTION

**autodidact**, *ô' tō-di-dakt*, *n.* a self-taught person.  
—*adj.* **autodidact' ic**. [Gr. *autos*, self, *didaktos*,  
taught.]

Chambers Twentieth Century Dictionary.

To be an architect you have to be an autodidact. All architects are: it keeps architecture alive, always changing: sometimes in subtle ways, sometimes dramatically. Every architect – you included – evolves their own way of doing architecture. Some try to create an original design methodology but, generally speaking, the most adept find their fluency by studying the work of others. Being an autodidact does not mean that you are on your own. There is, as W.R. Lethaby (opposite) says, ‘the whole field of past architectural experiment’ to learn from. The more deeply you study it the more ideas and strategies for design emerge, and the more profound your own architecture becomes. Underlying historical and regional variations in appearance and construction, there is a universal language of architecture – a ‘metalanguage’. By providing a conceptual framework of themes by which you can study examples, this book offers a foundation on which you can build your understanding of the metalanguage of architecture and develop your fluency.

Look in the notebooks of any great architect and you will see a magpie acquiring ideas from wherever they may be found, playing with them and making them their own. For some years I have used a notebook to analyse works of architecture. I find this exercise useful as an architect and it helps focus my teaching. My simple premise is that our capacity for doing architecture can be developed by studying how it has been done by others. In this way we become aware of what Lethaby called its ‘accumulated powers’ and, by looking at how other architects have used them, see how they might be exploited and developed in our own design. It is in this way too that we can begin to ‘know’ what Peter Märkli (opposite) calls the ‘old language’ and the ‘grammar’ of architecture.

## THE FORM OF THIS BOOK

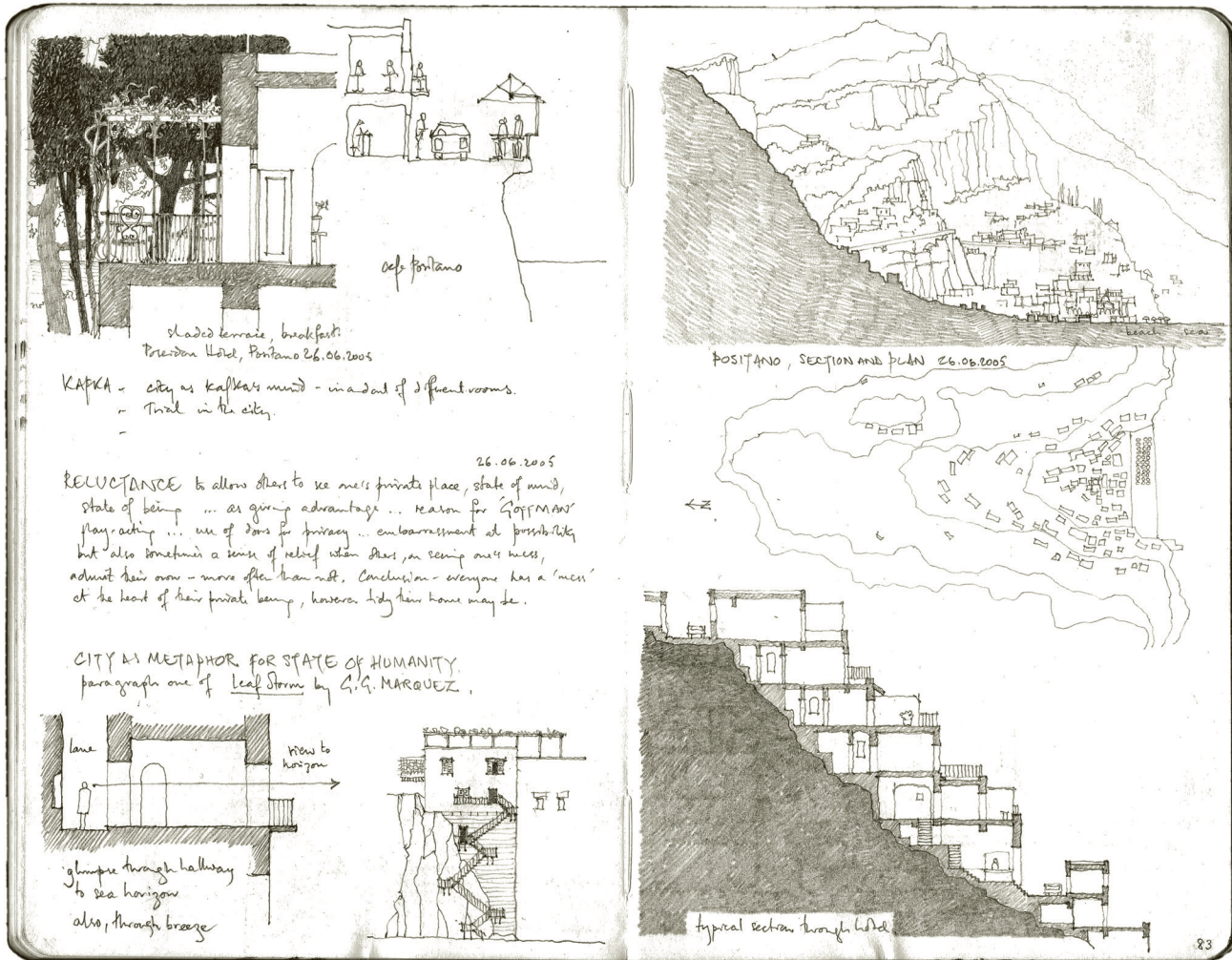
The following chapters offer a theory of the universal language of architecture. They illustrate themes that have emerged in my notebooks. I cannot claim that the theory offered is complete. It might be described as the ‘rudiments of architecture’ (in the same sense that music students are offered the ‘rudiments of music’ as a foundation for an understanding that will stand them in good stead as performers and composers). The following chapters illustrate architecture’s elements, their

powers, the conditions that affect it and attitudes that might be adopted in doing it. The themes of those chapters can be used as a basis for your analyses of the works of architecture you encounter, and as prompts for your own attempts at design. In both ways the theory provided here will help you develop your fluency in the language of architecture. What you say with it is up to you.

After this Introduction, the first chapter offers a working definition of architecture, as ‘Intellectual Structure and Identification of Place’. These are put forward as the primary objective and burden of architecture. Realisation that the fundamental motivations of architecture are to provide intellectual structure and to identify place is the key to becoming an architect. By the means of architecture we structure places. Places mediate between content and context, engaging both. These realisations underpin everything that follows.

Subsequent chapters illustrate: ‘Basic...’ and ‘Modifying Elements of Architecture’; considerations that may be taken into account when doing it; and some common strategies for organising space. Each chapter deals with a specific theme; some deal with a number of sub-themes under a more general heading. The themes and sub-themes are like analytical filters or frames of reference. Each focuses on a particular aspect of the complexity of architecture: ‘Elements Doing More Than One Thing’; ‘Using Things That Are There’; ‘Primitive Place Types’; ‘Architecture as Making Frames’; ‘Geometries of Being’; ‘Ideal Geometry’. After that there are eleven chapters exploring some of the fundamental strategies in organising space: relations between ‘Space and Structure’; ‘Parallel Walls’; the powers of the ‘Axis’ and the ‘Grid’; uses of the ‘Datum Place’; ‘Stratification’; ‘Transition, Hierarchy, Heart’; being ‘In-Between’; the ‘Inhabited Wall’; places that are ‘Hidden’; and ‘Refuge and Prospect’. The penultimate chapter ‘Temples and Cottages’ discusses the conditioning power exerted by the attitudes architects adopt to the world, other people, history, materials etc..

In all the chapters there is an intimate connection between text and drawings. Some of the drawings are diagrams of particular elements or ideas but many are of examples that illustrate the themes being discussed. Examples are usually presented in plan or section, where their underlying ideas and conceptual strategies are often most clearly evident. Plans and sections tend to be the abstractions through which architects design. They are often also the most appropriate medium for analysis. Examples have been taken from many different times, cultures, climates and regions of the world. I have provided references to periodicals, other



*In your notebook you can record places you visit...*

books and websites where more information and photographs of the examples may be found. Examples are dealt with as illustrating what might be termed the universal language of architecture rather than the orthodox stylistic classifications of architectural history – ‘Classical’, ‘Gothic’, ‘Modern’, ‘Queen Anne’, ‘Arts and Crafts’, ‘Postmodern’ and so on. The examples in this book are grouped according to their underlying ideas and strategies rather than by style or period. Thus an ancient Greek temple might be discussed alongside a Gothic cathedral or a twentieth-century Finnish cemetery chapel because all employ the ‘Parallel Wall’ strategy; a twenty-first century library might be discussed alongside a Victorian Gothic tower because both illustrate ‘Stratification’; a mud-house found in India might be compared with an icon from the 1920s because they share a ‘Space and Structure’ strategy. The universal language of place-making underpins all architecture.

Some works have been selected as appropriate examples in more than one chapter, illustrating a different theme in each. Any work of architecture may be examined through

any or all of the analytical filters, though this will not produce interesting revelations in all instances.

Analysing creative work is different from analysing natural phenomena (a geological formation, a region’s flora, the workings of the digestive tract of a rabbit...). In analysing works of architecture, which are products of creative minds, you have to be sensible to the intellectual agenda inherent in the examples studied and be prepared to find and acknowledge ideas and strategies that may be original or used in new ways.

Through time architects have invented, discovered and experimented with new ideas: there was once a time, in the very distant past, when that ubiquitous architectural element, the wall, had not yet been invented; there is evidence (in archaeological remains) of the gradual discovery of and experimentation with the powers of the axis in organising space; and so on. The metalanguage of architecture (just like the language we speak and write) has evolved over thousands of years and will continue to develop in the future.

"The entrance lobby is minimal, and if not to be drawn into the Studio, directly to the right, one continues, stepping in to be confronted by the main space, immediately to be made aware of the diagonal sweep from hearth and fireplace on the left (west) into, to expanding passage on the right. This is in fact the 'fault line' of the whole apparatus. You must either get off, stepping down to be received at the hearth; go sharp right into the dining space; or move through to the patio and garden beyond."

Michael Speer - 'In the presence of absence', in  
 ACR, v. 2, autumn 1996, p. 30

PLAN

SPRING HOUSE  
 by Charles CORNFORD 1965  
 from John WILSON  
 from Lynn STONEHOUSE - *The British Library at St Pancras, Spm, London 2004*

"Architecture implies the creation of interior both outside and inside."  
 Van Eyck - 'Dorsloop' section of Team 10 Primer, AD, Dec 1962  
 compare + contrast with Deane's house.

INSIDE

SECTION

MONTESSORI SCHOOL, Delft.  
 by Herman HERTZBERGER; 1960

HAARLEMMEER HOUTUINEN  
 Housing, Amsterdam 1978  
 Herman HERTZBERGER

ENTRANCE AS PLACE

173

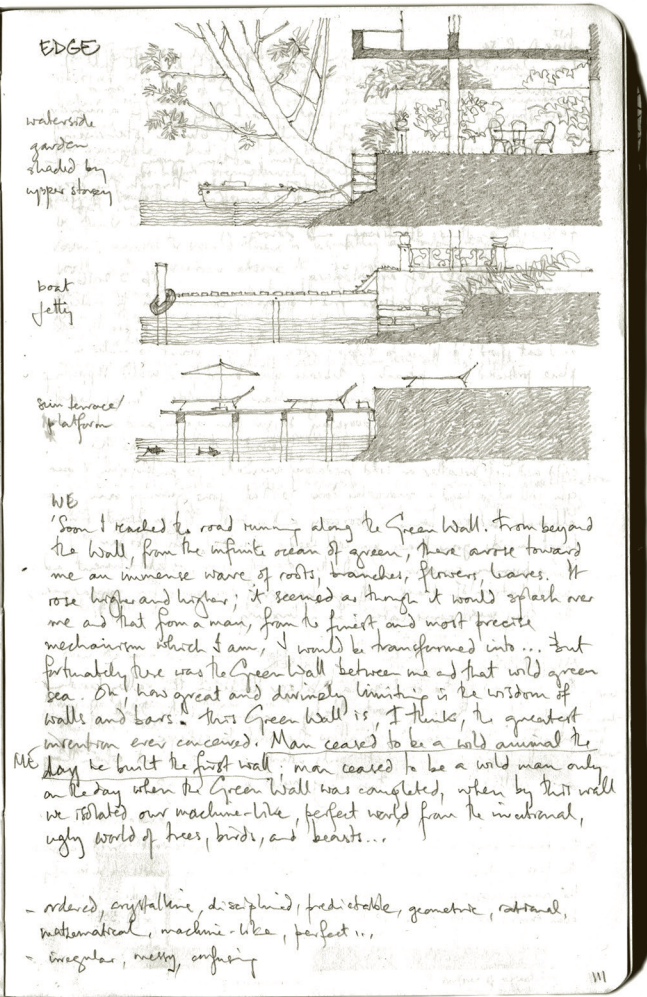
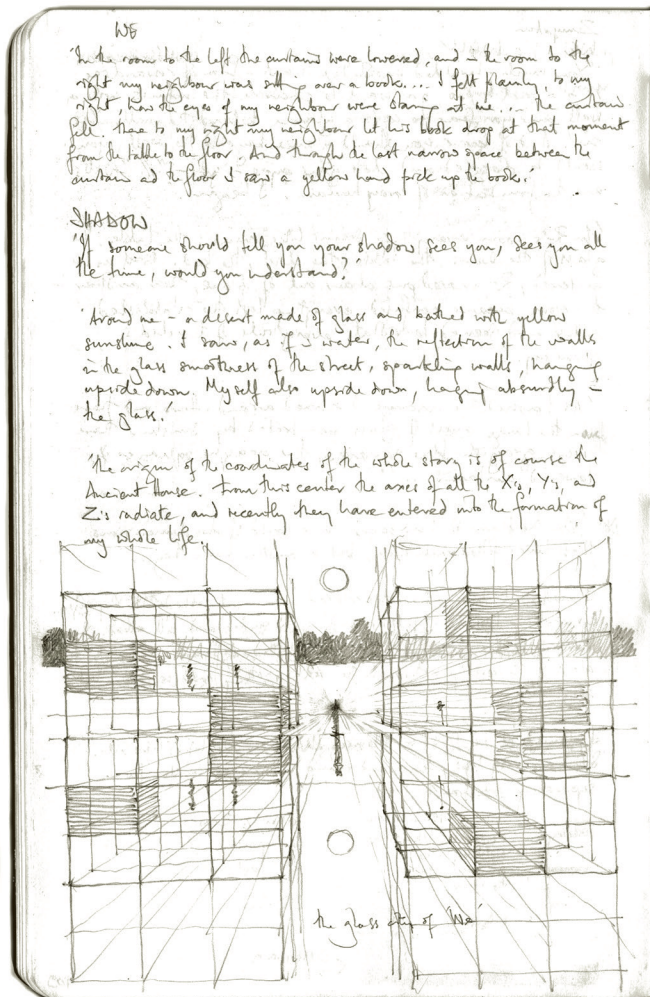
... and study works you find in books and journals.

THE POETIC POTENTIAL OF ARCHITECTURE

The poetic potential of architecture is, I think, evident throughout this book. If poetry is a condensation of experience of life, then architecture is an exercise in (non-verbal) poetry, essentially. But it can be seen that some architecture achieves more: it seems to provide a transcendent poetry, a level of meaning and significance that overlays the immediate presentation of place and which is to be interpreted, as a complement to sensual perception and experience, for appreciation by the intellect and sensibility. Sometimes this poetry is susceptible to analysis; sometimes it defies analysis and remains ineffable. The overall aim of the exercise is to explore architecture without prejudice and to allow the framework for analysis to expand as more themes are identified. I started by wanting to understand how architecture works so I could do it myself and help others come to their own understanding of how it might be done. Through this, transcendent poetry perhaps becomes more attainable.

I am open to as many dimensions of architecture as present themselves to me. I am not interested in restrictive, partial or prescriptive definitions of architecture nor in promulgating a manifesto for how it *should* be done. I do not want to get entangled in semantics or etymology, nor to distort my understanding of the subject by inappropriate use of metaphor. So I work teleologically, from achieved examples. I study examples that are generally accepted as 'works of architecture' (as well as some that are not usually considered as such but which may possess some claim to be so) and distil from them the underlying ideas and strategies they manifest and often share. This is (for you as well as me) an open-ended exploration that goes hand-in-hand with design.

All is presented as a stimulus for you to try analysing examples for yourself, and to play, in your own design, with the ideas and strategies you find. What you discover for yourself – by searching, recording, analysing, reflecting, experimenting – can be more consequential than what you are told or read in this or any other book.



Architecture is everywhere. It gives sense to our world. We conceive, construct and inhabit it. It organises our use of space. We modify it as circumstances change. As architects, it is in our minds; and being in our minds, it makes us architects. It is on the populated beach and in our rooms, houses, cities, gardens... It is drawn on the ground and on sheets of paper. It is modelled in computer software and displayed on screens. It is in the pages of journals and novels. It is in the imaginations of writers describing the worlds their narratives inhabit.\* It is in movies\*\* and computer games. It is in our dreams.\*\*\* Even when unrealised in physical material, it is still architecture.

Wherever you encounter it, the architecture of others is a quarry from which you can mine ideas. There are rich seams there. When you encounter precious ore, extract it; record and reflect on it in your notebook. It might help you with a current project or you might not use it right away; you might come back to it in a decade or more. But by recording and reflecting on it you have introduced it into your growing repertoire of ideas – the precious and essential ore from which architecture is smelted. A notebook is a crucible of creativity. It is a repository, a quiet room for reflection, a forum for argument, a laboratory for experiment, a playground for adventure...

\* See for example: Marilyn R. Chandler – *Dwelling in the Text*, 1991; Ellen Eve Frank – *Literary Architecture*, 1979.

\*\* See for example: Juhani Pallasmaa – *The Architecture of Image*, 2001; François Penz – *Cinematic Aided Design*, 2018.

Above, for example, are a couple of pages from one of my notebooks.\*\*\*\* They include passages from Yevgeny Zemyatin's 1921 novel *We* describing the glass city in which the story is set. On the left hand page is my attempt to visualize that verbally described city. (I made a more refined version of this sketch for page 168 of *Metaphor in the Analysing Architecture Notebook* series. It could also be the basis for developing a design.)

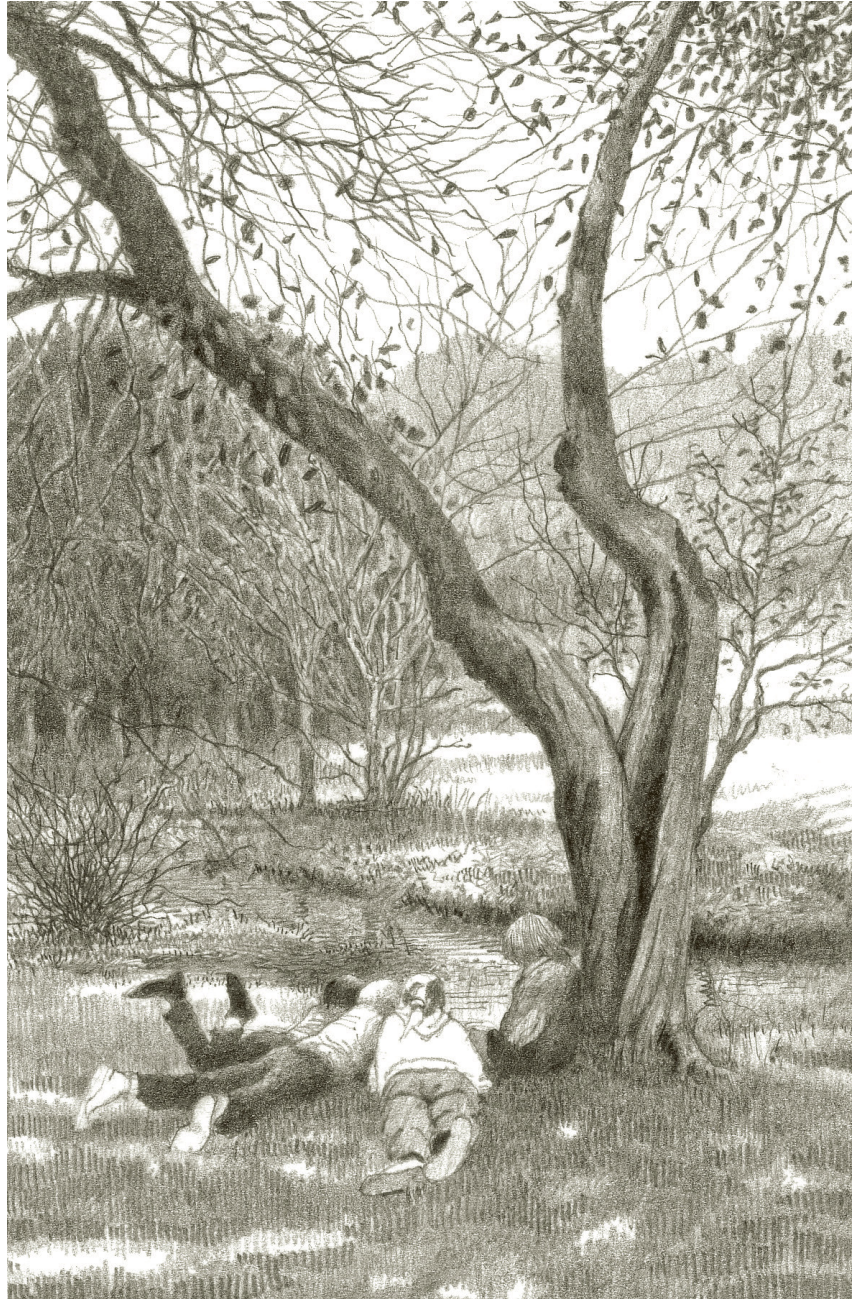
I was reading *We* whilst staying in a hotel on the banks of a lake in Italy. During that stay I was struck by the variety of ways buildings and gardens interacted with the edge of the lake, and began to sketch examples (upper part of right page). They extend my repertoire of how to treat edges between land and water.

The notebook on page 8 shows sketches, mainly in section, of architectural instances I found interesting whilst staying in Positano in southern Italy. The spread open on page 9 explores buildings – by Colin St. John Wilson and Herman Hertzberger – by redrawing their plans and sections from published sources. There is no better way of understanding the underlying architecture of buildings than by redrawing their plans and sections. Doing so gives you insights that even visiting the actual buildings does not. Though that does not mean you should miss a chance to visit a building if you can; but do draw its plans and sections too!

\*\*\* See for example C.G. Jung – *Memories, Dreams and Reflections* (1963), in which the psychiatrist recalls a dream that became the basis for a house he designed and built for himself. See page 123–5 of the *Metaphor Notebook*.)

\*\*\*\* Some of my complete and unedited notebooks can be downloaded as pdfs from my website: [simonunwin.com](http://simonunwin.com).

Children under a tree have committed an act of architecture. In the most primitive way, they have made an architectural decision by choosing it as a place to sit. This is architecture at its most rudimentary. It is the spark from which built and more sophisticated architecture develops.



# ARCHITECTURE AS INTELLECTUAL STRUCTURE AND IDENTIFICATION OF PLACE

***‘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), 1999.

***‘ “Oblige me by telling me where I am.” “That’s impossible. You know nothing about whereness. The only way to come to know where you are is to begin to make yourself at home.” ’***

George MacDonald – *Lilith* (1895), 1969.

***‘The marking of ground, rather than the primitive hut, is the primordial tectonic act.’***

Vittorio Gregotti – ‘Address to the Architectural League, New York, October 1982’, in *Section A*, Volume 1, Number 1, February/March 1983.

***‘What is architecture? Shall I join Vitruvius in defining it as the art of building? Indeed, no, for there is a flagrant error in this definition. Vitruvius mistakes the effect for the cause. In order to execute, it is first necessary to conceive. Our earliest ancestors built their huts only when they had a picture of them in their minds. It is this product of the mind, this process of creation, that constitutes architecture and which can consequently be defined as the art of designing and bringing to perfection any building whatsoever.’***

Étienne-Louis Boullée (18thC), quoted in Helen Rosenau – *Boullée and Visionary Architecture*, 1976.

***‘The principal proposition underlying our work is that the first purpose of architecture is territorial, that the architect sets out the perceptual stimuli with which the observer creates an image of “place”. The architect particularizes. He selects an appropriate temperature range and builds devices for maintaining it, controls the intensity and direction of light, discriminates specialized activity patterns, organizes movement and subjects the building process to a clarifying pattern. By directing all these factors to a controlling image, he builds the opportunity for people to know where they are – in space, in time and in the order of things. He gives them something to be in.’***

Donlyn Lyndon – ‘Sea Ranch: the Process of Design’, in John Donat, ed. – *World Architecture* 2, 1965.

***‘Architecture has its own realm. It has a special physical relationship with life. I do not think of it primarily as either a message or a symbol, but as an envelope and background for life which goes on in and around it, a sensitive container for the rhythm of footsteps on the floor, for the concentration of work, for the silence of sleep.’***

Peter Zumthor – ‘A way of looking at things’ (1988), in *Thinking Architecture*, 1998.

***‘The set is the geometry of the eventual play, so that a wrong set makes many scenes impossible to play, and even destroys many possibilities for the actors.’***

Peter Brook – *The Empty Space*, 1968.

***‘Places have memory because they host parts of the borrowed souls of humans... Yet they also have a body... a sufficiently homogeneous shape to confer on them an identity.’***

Joaquim Espaiol, trans. Black – ‘Place’, in Daniela Colafranceschi, ed. – *Landscape Series: Landscape + 100 Words to Inhabit It*, 2007.

***‘A soufflé isn’t a soufflé; a soufflé is a recipe.’***  
(Architecture isn’t architecture; architecture is a recipe.)

The fictional character Ellie Oswald, quoted by her daughter Clara in the BBC series *Dr Who*.

# ARCHITECTURE AS INTELLECTUAL STRUCTURE AND IDENTIFICATION OF PLACE

**B**efore we can get on to looking at the elements and some of the conceptual strategies of architecture in detail, it is necessary to lay out some ground work with regard to the nature of architecture and its purpose. Before we can get on to the *how*, we need to look briefly at the *what* and *why*: *what is architecture* and *why do we do it?*

Despite the huge literature on architecture, its definition and purpose have never been settled. These are issues about which there is a great deal of confusion and debate, which is strange considering that architecture as a human activity is literally older than the Pyramids. The question ‘what is one doing when one is doing architecture?’ appears simple, but it is not an easy one to answer.

Various ways of framing an answer to this question seem to have contributed to the confusion. Some of these relate to comparison of architecture with other forms of art. Is architecture merely sculpture – the three-dimensional composition of forms in space? Is it the application of aesthetic considerations to the form of buildings – the art of making buildings beautiful? Is it the decoration of buildings? Is it the introduction of poetic meaning into buildings? Is it the ordering of buildings according to some intellectual system – Classicism, Functionalism, Postmodernism?

One might answer ‘yes’ to all these questions, but none seems to constitute the rudimentary explanation of architecture that we need. All of them seem to allude to a special characteristic or a superstructural concern; but they all seem to miss a central point that one suspects should be more obvious. What is needed for the purposes of this book is a much more basic and accessible understanding of the nature of architecture, one that allows those who engage in it to know what they are doing.

Perhaps the broadest definition of architecture is that often found in dictionaries: ‘architecture is the design of buildings’. We cannot contradict this definition but it does not help very much either; in a way it actually diminishes the conception of architecture by limiting it to the design of buildings. Although it is not necessary to do so, we tend to think of *a building* as an object (like a vase or a cigarette lighter); but architecture involves rather more than the design of objects.

A more useful way of understanding architecture can be gleaned, ironically, from the way the word is used in regard to other art forms, music in particular. In musicology the

‘architecture’ of a symphony can be said to be the conceptual organisation of its parts into a whole, its intellectual structure. It is strange that the word is rarely used in this sense with regard to architecture itself. In this book this is adopted as the root definition of architecture. Here, the architecture of a building, a group of buildings, a city, a garden... is considered to be its conceptual organisation, its intellectual structure. This is a definition of architecture that is applicable to all kinds of examples, from simple rustic buildings, through grand public edifices, to formal urban settings.

Though this is a useful way of understanding architecture as an activity, it does not address the question of purpose – the *why* of architecture. This appears to be another difficult big question, but again there is an answer at the rudimentary level that is useful in establishing something of what we are striving to achieve when we are doing architecture. In looking for this answer, simply suggesting that the purpose of architecture is ‘to design buildings’ is again an unsatisfactory dead end; partly because one suspects that architecture involves rather more than that, and partly because it merely transfers the problem of understanding from the word ‘architecture’ to the word ‘building’. The route to an answer lies in forgetting altogether, for the moment, about the word ‘building’, and thinking about how architecture begins in the distant primeval past (and as it still does in the eternal present).

## IDENTIFICATION OF PLACE

Imagine a prehistoric family making its way through a landscape unaffected by human activity. They decide to stop, and as the evening draws on they light a fire. By doing so, whether they intend to stay there permanently or just for one night, they have established a *place*. The fireplace is for the time being the centre of their lives. As they go about the business of living they make more places, subsidiary to the fire: a place to store fuel; a place to sit; a place to sleep; perhaps they surround these places with a fence; perhaps they shelter their sleeping place with a canopy of leaves. From their choice of the site onwards they have begun the evolution of the house; they have begun to organise the world around them into places they use for a variety of purposes. They have begun to do architecture.

The idea that identification of place lies at the generative core of architecture can be explored and illustrated further. In doing this you can think of architecture, not as



*The architectural actions of a prehistoric family making its dwelling place can be replicated and updated in a beach camp. The fire is the focus and also a place to cook. A windbreak shields the fire from too much breeze and, as a screen, begins to give some privacy. There is a place where the fuel for the fire is kept and the back of the car acts as a food store. There are places to sit and, if you were to stay overnight, you would need a bed. These are the basic places of a house; they come before walls and a roof.*

*(This place came about when, many years ago, I suggested to a small group of first year students that they cook some sausages while I went for a walk along the beach. When I came back I was able to enjoy not only the sausages but also telling them that in making this place they had engaged their innate capacity for architecture. They were its architects.)*

a language, but as being like one. Place is to architecture, it might be suggested, as meaning is to language. Meaning is the essential burden of language; place the essential burden of architecture. Learning to do architecture can seem to be like learning to use language. Like language, architecture has its patterns and arrangements in different combinations and compositions as circumstances suggest. Significantly, architecture relates directly to the things we do; it changes and evolves as new or reinterpreted ways of identifying places are invented or refined.

Perhaps most important, thinking of architecture as identification of place accommodates the idea that architecture is participated in by more than the individual. In any one example (a building for instance) there will be places proposed by the designer and places created by adoption by the users (these may or may not match). Unlike a painting or a sculpture, which may be said to be the intellectual property of one mind, architecture depends upon contributions from many. The idea of architecture as identification of place asserts the indispensable part played in architecture by the user as well as the designer. And for the designer who will listen, it suggests that places proposed should accord with places used, even if it takes time for this to happen.

So-called traditional architecture is full of places that through familiarity and use accord well with users' perceptions and expectations. The illustration on the opposite page shows the interior of a Welsh farmhouse\* (the upper floor has been cut through to show some of the upstairs room). The places that are evident can be compared directly with those in the beach camp depicted on this page. The fire remains the

focus and a place to cook, though there is now also an oven – the small arched opening in the side wall of the fireplace. The 'cupboard' to the left of the picture is actually a box-bed. There is another bed upstairs, positioned to enjoy the warm air rising from the fire. Under that bed there is a place for storing and curing meat. There is a settle to the right of the fire (and a mat for the cat). In this example, unlike the beach camp, all these places are accommodated within a container – the walls and roof of the house as a whole (which itself, seen from the outside, becomes an identifier of place in a different way). Although nobody is shown in the drawing, every one of the places mentioned is perceived in terms of how it relates to use, occupation, meaning. You project people, or yourself, into the room, under the blankets of the bed, cooking on the fire, chatting by the fireside. Such places are not abstractions such as you find in other arts; they are an enmeshed part of the real world. At its rudimentary level architecture deals not in abstractions but with life as it is lived, and its fundamental power is to identify place, individually and in composed relationships.

Without place architecture is nothing. We relate to the world through the mediation of place. Situating ourselves is a fundamental consequence of our existence. Simply to be is to be in a specific place at a specific time. We are constantly placing ourselves: we have a sense of where we are and of other places around us; we weigh up where we might go next. We feel comfortable when we are settled in a place: in bed; in

\* Reference for Welsh farmhouses:  
Royal Commission on Ancient and Historical Monuments in Wales –  
*Glamorgan: Farmhouses and Cottages*, 1988.



Just by living in the world we make places. Beginning with this existential place-making, architecture identifies and establishes them to help us make sense of and situate ourselves in our surroundings. Architecture gives places form.

*The inside of this Welsh farmhouse can be compared with the beach camp on the opposite page. The places of the beach camp have been transposed into a container, which is the house itself. Although such images can feed our romantic ideas of the past, the architecture itself was, before it became anything else, a direct product of life.*

an armchair; at home. We feel uncomfortable when we find ourselves in the wrong place (at the wrong time): in a field during a thunderstorm; embarrassingly exposed at some social event; lost in an unfamiliar city. In our lives we either establish places for ourselves or have them established for us. We are constantly playing the game of situating ourselves in relation to things, to people, to forces of nature. Whether simple or complex, places accommodate us, the things we do, and our possessions. They provide the frames in which we exist and act. When they work, they make sense of the world for us; or we make sense of the world, in a physical and psychological sense, through them. Those who organise the world (or a part of it) into places for others have a profound responsibility.

CONDITIONS OF ARCHITECTURE

In trying to understand the powers of architecture you must also be aware of the conditions within which they are applied. Though its limits cannot be set, and should perhaps always be under review, architecture is not a free art of the mind. Discounting for the moment those fantasy architectural projects that are designed as conceptual or polemic statements never intended to be realised, the processes of architecture

are applied in (or on) a real world with real characteristics: gravity, the ground and the sky, solid and space, weather, the progress of time, and so on. Works of architecture are constructed with real materials that have their own innate characteristics and capabilities.

Architecture is operated by and for people, who have needs and desires, beliefs and aspirations; who have aesthetic sensibilities that are affected by warmth, touch, odour, sound, as well as by visual stimuli; who do things and whose activities have practical requirements; who see meaning and significance in the world around them.

Such is no more than a reminder of the simple and basic conditions under which we all live and with which architecture must contend or harmonise. There are, however, other general themes that condition the operation of architecture. Just as the languages of the world have their common characteristics – a vocabulary, grammatical structures, etc. – so too architecture has its elements, patterns and structures (both physical and intellectual).

Though not as open to flights of imagination as other arts, architecture has fewer limits. Painting does not have to take gravity into account; music is mainly aural. Architecture is, however, not constrained by the limits of a frame; nor is

it confined to one sense. Since ancient times architecture has been considered the mother of the arts; it is the art that provides places for other arts to become. While music, painting and sculpture exist in a way separate from life, in a transcendent special zone, architecture incorporates life. People and their activities are indispensable ingredients of architecture, not merely as spectators to be entertained but as contributors and participants. Painters, sculptors, composers of music may complain about how their viewers or audience never see or hear their art in quite the same way as it was conceived, or that it is interpreted or displayed in ways that affect its innate character. But they do have control over the essence of their work and that essence is, in a way, hermetically sealed within the object: the musical score, the covers of a book or the picture frame. By contrast even the essence of architecture is penetrated by the people whose activities it accommodates.

Architecture has also been compared with film-making – an art form that incorporates people, place and action through time. But even in film the director is in control of the essence of the art object through the control of plot, sets, camera angles, script etc., which is not the case in architecture.

Furthermore, the realisation of works of architecture is usually dependent on patronage. The products of architecture – whether buildings, landscapes, cities – usually require substantial financial resources. The work that is achieved tends to be that wanted by those with access to or control over the resources needed to support its realisation. They decide what is built and often influence its form.

The conditions under which you can engage in architecture are complex, perhaps more so than for any other art form. There are the physical conditions imposed by the natural world and its forces: space and solid, time, gravity, weather, light... There are the conditions imposed by those who will use the products of architecture and by those paying for them. There are also the more fickle political conditions provided by the interactions of human beings individually and in society. Architecture is a political field, in which there are no incontrovertible rights and, arguably, many wrongs. The world can be conceptually organised in infinitely diverse ways. And just as there are many religions and many political philosophies, there are many divergent ways architecture is used. The organisation and disposition of places is so important to the ways people live and interact with each other that it has in the course of history become less and less a matter of *laissez faire*, more and more subject to political control.

People make places (or have places made for them) in which to do the things they do in their lives – places to eat, to sleep, to shop, to worship, to argue, to learn, to store things



*We make sense of our surroundings by organising them into places. Places mediate between us and the world. We recognise a chair as a place to sit...*

and so on and on. The way people organise their places is related to their beliefs and their aspirations, their world view. As world views vary, so does architecture: at the personal level; at the social and cultural level; and between different sub-cultures within a society.

Which use of architecture prevails in any situation is usually a matter of power – political, financial or that of assertion, argument, persuasion. Launching design into conditions like these is an adventure only to be undertaken by the brave-hearted.

#### A DEFINITION OF 'PLACE'

As quoted on page 12, in his 1982 address to the Architectural League in New York, the architect Vittorio Gregotti said: 'The marking of the ground, rather than the primitive hut, is the primordial tectonic act.' But architecture begins before even that; it begins with a mind's motivation to make that mark, with its desire to identify a place.

'Place' is a word which, like many other words, has variable meanings. Often in architectural discussion it is used

in the sense suggested by the sentence, ‘New York (or wherever else) is a place; it has a particular character, which consists in the heights of buildings, the scale and layout of the streets, the materials used for building, the shapes and detail of doors and windows, etc.’ (with the consequential implication that new architecture might in some way relate to that ingrained character – its *genius loci*). The word is used in a different, more rudimentary, way in this book. This use may be defined in the following steps:

- Imagine you are in an open landscape. With no more than a look you select a specific spot on the land. You have, in that look, established, if only in your mind, a place.

*Place is where the mind touches the world.*

- Maybe you see that place as a potential spot to settle, if only to rest for a moment. Maybe you associate that place with a particular experience – passing from the sunshine of an open field into the shade of a forest – or with a particular event – being startled by a snake – or perhaps with a particular set of emotions – a feeling of peace and safety.
- You decide to change that place, maybe just by occupying it, or by clearing bracken or stones to define an area of ground. Then you build a wall around that ground, or a circle of stones, or a small house or temple.

*A place is established by a configuration of architectural elements that seems (to the mind informed by its senses) to accommodate, or offer the possibility of accommodation to, a person, a presence, an object, an activity, a mood, a spirit, a god.*

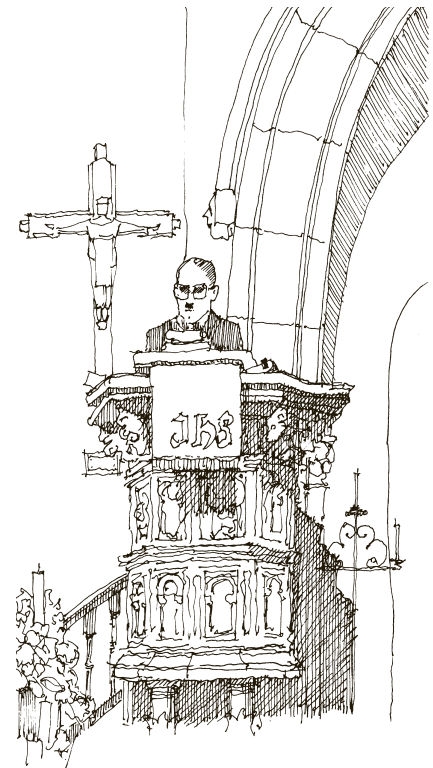
- As you stand inside it, the boundary of your ground – the wall, the circle of stones, your house – defines you in your place; or, in the case of a small temple, defines the spirit or god in its place.

*Places mediate between life and the wider world – its surroundings – by framing and protecting.*

- Even outside it, you know where you are by reference to your place.  
*Through identifying places, and by organising them, you make sense of the world you inhabit.*
- Places set the spatial matrix of the life they accommodate; they orchestrate our experience of the world and manage our relationships with other people, our environment, our gods.
- By all this, you change the world (or parts of it at least).

These steps define a way of understanding ‘place’ that is about more than visual character. It is about ‘place’ as a consequence, an inescapable consequence, of being in the world. Architecture conceived and experienced as identification of place manages our being in the world. Places such as New York can be analysed and understood in this way too (as well as in terms of their apparent character) but it would involve deeper investigation of how life meshes with the space it occupies (in light and time), mediated by the architecture (spatial organisation) of its rooms and streets, squares and yards, skyscrapers, entrances and windows, steps and pavements (sidewalks), hearths, altars, tables, benches...

To realise the significance of place in our lives, you need only watch the news: to see the devastation caused to people’s physical and mental well-being when their homes are destroyed by war, terrorism, flood, fire, earthquake... It is good when places live, when they are used and have inhabitation and vitality. That is an architect’s aspiration. But they may also die, be killed, murdered even. And when they are, we mourn.



... a pulpit as a place to stand and preach...



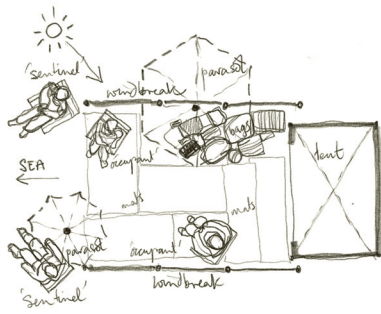
... some paving stones as a place to dance.

See also *Children as Place-Makers* (2019) in the Analysing Architecture Notebook series.

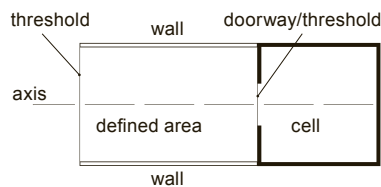
‘VOCABULARY’, ‘SYNTAX’, ‘MEANING’

The analogy between architecture and language can be helpful in understanding what it is to do architecture. In using language we take words (vocabulary), compose them according to particular arrangements (syntax) into sentences, and hopefully convey messages (meaning) to others. Something similar happens in doing architecture: the basic architectural elements (wall, roof, doorway...) listed in the next chapter constitute the equivalent of vocabulary; the ways in which they may be arranged, as illustrated in subsequent chapters, constitute the equivalent of syntax; and *place* (as defined above) is the equivalent of *meaning*. If you were to arrange two parallel windbreaks and a tent on a beach (see below), each wall and the tent are ‘words’; their arrangement in parallel with the tent doorway on axis constitutes the ‘syntax’ of the composition (a simple ‘sentence’); and the result – the occupiable/habitable space between the two walls and in front of the tent – is the identification of place, the ‘meaning’ (the message conveyed by the ‘sentence’).

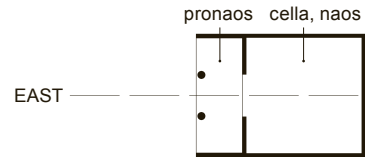
As with all analogies, it is important not to overstretch this comparison between language and architecture. Walls are not words, nor vice versa (except perhaps when we write ‘KEEP OUT’ by a gateway). It is enough to suggest (tentatively) that just as by our use of language (composing words according to syntax into sentences to convey meaning) we seek to communicate and make sense of the world verbally, by our use of architecture (composing walls and other elements in particular arrangements to identify places) we seek to situate ourselves in and make sense of the world spatially. It is not a step too far to suggest also that in both language and architecture we can be pragmatic but we can also aspire to philosophy and poetry.



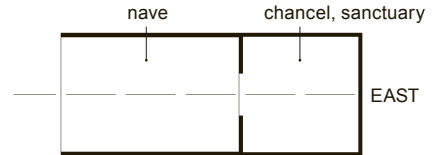
sketch



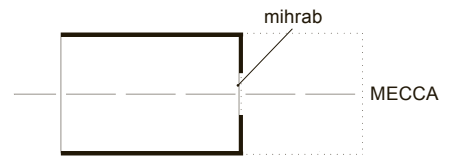
'syntax' notation (orientation – SEA)



temple (orientation – SUNRISE)



church (orientation – SUNRISE)



mosque (orientation – MECCA)

The underlying ‘syntax’ of this beach camp (left) begins with two parallel windbreaks and a tent. The two striped windbreaks – walls – identify a place: the forecourt at the tent’s entrance. This is then elaborated with parasols, chairs, mats... While the family is on the beach this is the family’s home. The syntax of this simple architectural ‘sentence’ (or a variant of it) is evident in examples right through history: from ancient burial chambers; through Egyptian, Greek, Roman, Buddhist... temples; to houses of many times and places.

Taking this beach camp as a case study... you might make a record of it by drawing its plan (far left). Estimating relative dimensions you would show the positions of the walls and the tent. You would also show the positions of the chairs and parasols as well as the area where the bags etc. have been stowed. But you would also want to understand the underlying ‘syntax’ of the composition of basic elements (near left) – its ‘parti’ – which is one of the classic architectural partis of all time. You can see variants of it in the generic plans of a Greek temple, a Christian church and an Islamic mosque (above).

The syntax – the parti, the idea – provides the intellectual structure for the design of a building. It is the architect’s stock in trade. That is what architects do. An architect’s task is to give intellectual structure to the identification of place.



section



plan

***'But what mattered where while everywhere was the same as nowhere! I had not yet, by doing something in it, made anywhere into a place! I was not yet alive; I was only dreaming I lived! I was but a consciousness with an outlook!'***

George MacDonald – *Lilith* (1895), 1969.

Architecture may be no more than a place in the natural landscape, chosen for the accommodation it offers for something we want to do: sit in the shade to rest and talk; conduct a ceremony; bury a dead friend.

***'A house of men or of priests is at home in natural surroundings; it adjusts itself to the lie of the land whether it be forest, plain or valley. Its existence is justified by the road which winds towards it from afar. It reigns over the fields, a shelter for man and beast. It is made in the image of the law established thousands of years ago, namely, that a man comes to a place, tills the land and builds a shelter for himself, his wife, his children, his men and his domestic animals... Every human settlement has its origins in a choice. We follow the direction of a path... and are led to a certain spot which is part of the whole environment. There we say, "This is where it shall be. We will enclose a portion of this space between walls, organize our lives inside them and, confining ourselves to this area, we will spend each day cultivating and maintaining this little space that we have taken from nature."'***

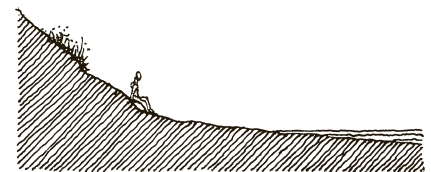
Fernand Pouillon, trans. Gillott – *The Stones of Le Thoronet* (1964), 1970.

A work of architecture may consist of little or no more than a natural topographical formation. The keys to a portion of landscape acquiring the label 'work of architecture' are: 1. that it has a form that lends itself to occupation and activity; 2. that it is recognised as such by a mind and adopted for that activity. By recognition and use it is identified as a place, and hence becomes a work of architecture.

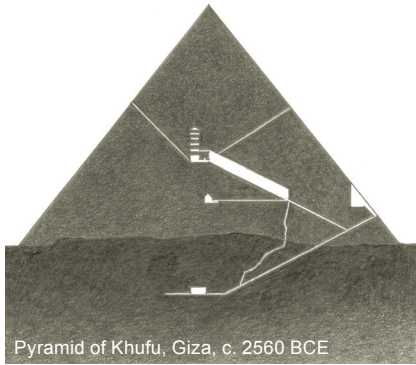
In Scotland there is a place called Dunino Den (left). It has been used for ritual through an unknown number of centuries, possibly thousands of years. It consists of a gorge cut into the rock by a river as it turns a bend. The floor of the gorge is relatively flat and shaded by a canopy of trees. At one end of this place walled by cliffs and roofed by trees is a promontory, like a pulpit in a church. Into the top surface of this a round basin (a) has been carved (who knows how long ago or whether it was carved by human hand or natural force) with what appears to be a worn incised footprint alongside. It resembles a place of baptism. Steps have been carved into the cliff alongside this pulpit, leading down to the river bank. It is an evocative place. You can imagine people congregating by the river to witness a ceremony or listen to a sermon delivered from the promontory.

A very large proportion of the fabric and arrangement of Dunino Den was provided by nature. Only the steps and probably the basin (and footprint?) were added by human decision and work of hand. But even so this distinctive piece of topography constitutes a work of architecture, mainly by reason of its having been recognised and adopted as a place.

Though we (in the twenty-first century) would probably find it difficult not to intervene more – changing the fabric and layout of a place like Dunino Den (see page 295 for ways we might do so) – indigenous characteristics and the formations of natural topography can still constitute a work of architecture.

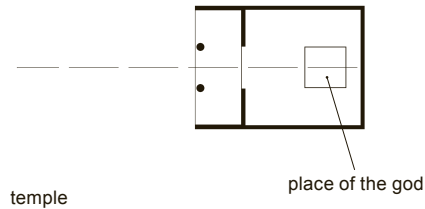


Architecture, however complex and subtle it may be in its more sophisticated forms, can begin with something as simple as sitting on a sand-dune looking out to sea. By doing so you establish a place. Even after you have moved on, the impression of your body persists in identifying the place as a seat, the place where you sat.

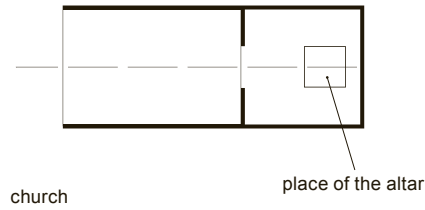


Pyramid of Khufu, Giza, c. 2560 BCE

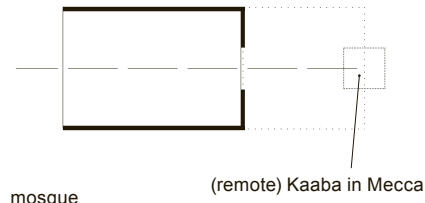
An ancient Egyptian pyramid identifies the place where the dead Pharaoh was supposed to lie for eternity inside his stone sarcophagus.



temple

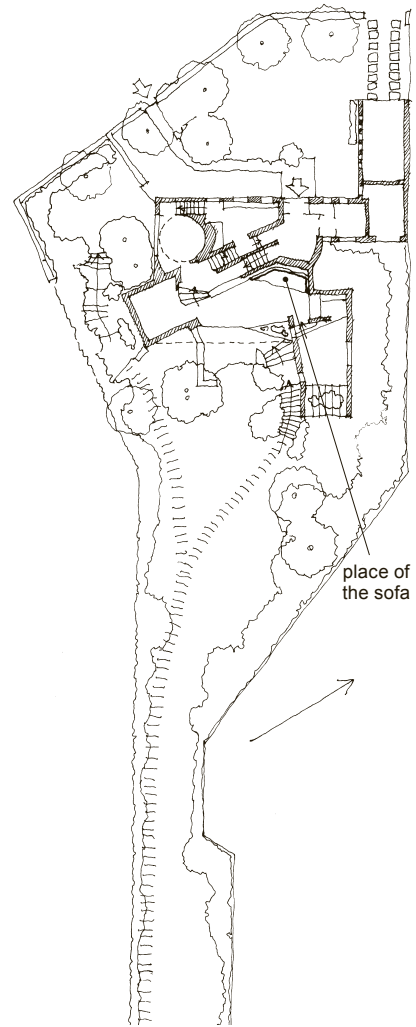


church



mosque

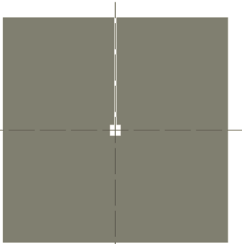
The temple, the church, the mosque... all frame and identify a place of religious significance – the statue of a god, an altar, a global sacred hub... The syntaxes of the Pyramid (left) and the Dome of the Rock (below) are different.



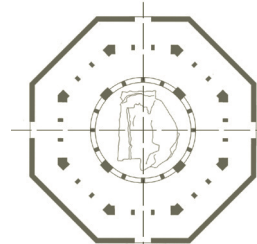
place of the sofa

Place identification is domestic too. Hans Scharoun began his design for the Moll House (above; 1936-37) by deciding where to place the sofa on the site. Notice that the syntax – the intellectual structure – of Scharoun's design is radically different from that giving form to the temple, church, mosque, pyramid and the Dome of the Rock; even though, like them, it concerns connection... with a view rather than a sacred entity.

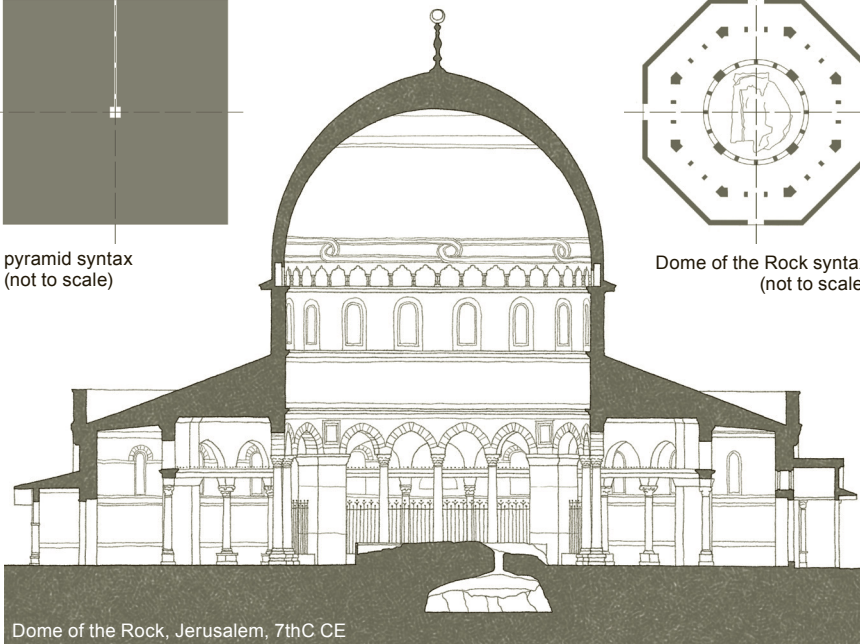
Architecture is used to identify many different kinds of place in many different ways. Ask yourself what places the buildings around you are identifying, and how. Set yourself to make a place, using whatever materials you have available.



pyramid syntax (not to scale)



Dome of the Rock syntax (not to scale)



Dome of the Rock, Jerusalem, 7thC CE

The Dome of the Rock in Jerusalem frames and identifies the place of the Foundation Stone, said to be: where God created the world (and the first human); where Abraham offered his son in sacrifice; and where the Prophet Muhammad began his Night Journey. It is also said that the cries of souls awaiting Judgement Day may be heard in the cave inside the rock. It is the Holy of Holies... and the place where God is most present. The dome identifies a place that is important to three of the world's major religions.

A place is a living entity (even when it houses a dead Pharaoh). A living place has meaning, is used, relates to others... Making places is a privilege and a responsibility.

A place is usually identified by a composition of basic elements: defined area of ground; wall; platform; columns; roof; doorway; pathway. In this example they are combined into the form of a porch marking and protecting the entrance into a house. Basic elements are the conceptual components of architecture. (This is a porch at Kelmscott Manor in Oxfordshire, country residence of William Morris between the 1870s and 90s.)



# BASIC ELEMENTS OF ARCHITECTURE

***'Clearing-away brings forth the free, the openness for man's settling and dwelling. When thought in its own special character, clearing-away is the release of places toward which the fate of dwelling man turns in the preserve of the home or in the brokenness of homelessness or in complete indifference to the two... clearing-away brings forth locality preparing for dwelling.'***

Martin Heidegger – 'Art and Space', in Leach, ed. – *Rethinking Architecture*, 1997.

***'The original cult-plan is thus the Etruscan templum, a sacred area merely staked off on the ground by the augurs with an impassable boundary and a propitious entrance on the East side. A "templum" was created where a rite was to be performed or where the representative of the state authority, senate or army, happened to be. It existed only for the duration of its use, and the spell was then removed.'***

Oswald Spengler, trans. Atkinson – *The Decline of the West* (1918), 1934.

***'I came to a clearing in a forest by a riverbank... far enough from any trail that it seemed unlikely I would encounter anyone while I was there. I gathered some loose branches and stones and arranged them in a circle of about 10 metres in diameter, and then I walked into the circle and did not leave it until the same time the following day... I had to find exactly the right spot: not too damp; flat enough to pitch a tent once night began to fall; sheltered from the elements, but not so sheltered as to obscure the view of the river and the far bank. I had to mark out the circle, of course. I had to gather flat stones and sticks and bits of branches, and arrange them around a beech tree I had chosen as the central feature of my location.'***

Mark O'Connell – 'The Secret Level: How I stopped time by sitting doing nothing in a forest for 24 hours', in *The Guardian* (Journal section) 24.01.20.

***'Steps, spaces. One has lost the meaning of this language... one feels nothing anymore... Who still feels anything of a wall, an opening?... We want to give meaning again to things.'***

Mies van der Rohe, quoted in Neumeyer, trans. Jarzombek – *The Artless Word: Mies van der Rohe on the Building Art* (1986), 1991.

# BASIC ELEMENTS OF ARCHITECTURE

Now that we have a working definition of architecture and an understanding of its fundamental purpose – *intellectual structuring* and *identification of place* respectively – we can look at the basic elements available to an architect when composing a work of architecture. These are conceptual elements of architecture (used in the intellectual structuring of a place) and not to be confused with the physical materials of building – bricks and mortar, glass, timber, concrete etc. – from which they may be constructed. (For example, a wall is a basic element of architecture but it might be built of a variety of different materials – earth, stone, bricks, timber... – or be some other kind of barrier such as a moat, hedge or, in science fiction, a force field.) The basic elements of architecture should not be thought of as objects in themselves but in the ways they may be used (individually or in combination) to identify place; i.e. they should be considered primarily as instruments for place-making and in terms of the (space-organising) powers they offer.

The primary subjects of architecture are the *conditions* it operates in (i.e. the world around) and the *person* (right) who will inhabit it. The person (who is an architect too) represents people and life generically. The person is an ingredient as well as an agent of architecture.

The *a priori* conditions within which all (terrestrial) architecture operates include: the ground, which is the datum to which most products of architecture relate; space, which is the medium architecture organises; gravity, which holds things down; light, by which we see; and time (few if any examples of architecture can be experienced as a whole all at one time – discovery, approach, entry, exploration and memory are usually involved). To these *a priori* conditions can be added the more complex and changing ones of weather (climate), society and culture (other people, and perhaps gods) and growth and decay (effects of natural processes over time).

The person and conditions both contribute to architecture; together they constitute the content and the context of architecture. Generally speaking, architecture mediates between one and the other: between content and context; between the person and the conditions prevailing in the world around.

Within the conditions that prevail, and around the person (the life) to be accommodated, architects (i.e. people, us human beings) have, through history (but mostly long ago), developed a range (vocabulary, palette...) of elements for composing architecture. It cannot be asserted that the following list is complete but at the basic level the range of elements includes:

defined area of ground; boundary (1)

Defining an area of ground is an act of architecture. It establishes a place. A defined area may be a clearing in a forest or a towel laid out on the beach; it might be the pitch outlined for a football game, a judo mat or a garden lawn; it might be a city square or the legally defined parcel of land for a prospective building; conceivably it might even be an area of water. A defined area may be small – no more than the patch of ground on which you stand – or stretch to the horizon and beyond – a desert, the limits of a city, the territory of a country. It need not be rectangular in shape nor need it be level. It might be defined by a clear line or boundary – dividing inside from out – but it does not need to have a precise edge; it may blend gradually into its surroundings.



conditions and the person; context and content; architecture mediates between them



1 defined area of ground; boundary