# AN OUTLINE OF EUROPEAN ARCHITECTURE

By NIKOLAUS PEVSNER

NEW YORK CHARLES SCRIBNER'S SONS

## List of Plates

(AT THE END OF THE BOOK)

PLATE

- 1. Athens: The Parthenon, begun in 447 B.C.
- II. Rome: Basilica of Maxentius, c. A.D. 310-20.
- III. Ravenna: S. Apollinare Nuovo, early 6th century.
- IV. Ravenna: S. Vitale, completed in 547.
- v. Aachen: Cathedral (the chapel of Charlemagne's Palace), consecrated in 805.

VII. S. Maria de Naranco, c. 848.

- vui. Earl's Barton, Northamptonshire, 10th or early 11th century.
  - 1X. Castle Hedingham, Essex, 12th century.
  - x. Winchester Cathedral: North transept, c. 1080-90.
- x1. Durham Cathedral: The nave, early 12th century.
- xua. Jumièges: Abbey Church, begun c. 1040.
- xub. Toulouse: St. Sernin, the nave, early 12th century.
- xIII. Cluny: Abbey Church from the east, late 11th century.
- xIV. Toulouse: St. Sernin. Choir consecrated in 1096.
- xv. Àngoulême Cathedral, early 12th century.
- xvi. Périgueux: St. Front, c. 1125-50.

xVII. Vézelay: Church of the Magdalen, early 12th century.

xvIII. Autun: St. Lazare, early 12th century.

- XIX. St. Gilles, c. 1150.
- xx. Cologne: Holy Apostles, c. 1200.
- xx1. Worms Cathedral, c. 1175-1250.
- xxII. Milan: S. Ambrogio, 12th century.
- xxIII. Florence: S. Miniato al Monte, 11th century and later.

xxIv. St. Denis: Choir ambulatory, 1140-44.

xxv. Laon Cathedral: Nave, last quarter of the 12th century.

xxvi. Paris: Notre Dame, nave, designed c. 1185.

- xxvII. Amiens Cathedral: Nave, begun in 1220.
- xxvm. Rheims Cathedral: The west front, begun c. 1225.

### LIST OF PLATES

PLATE

xxix. Rheims Cathedral: From the north, begun in 1211.

xxx. Lincoln Cathedral, chiefly 1192-1280.

XXXIa. Lincoln Cathedral: The choir, begun in 1192.

xxx1b. Lincoln Cathedral: The nave, roofed in 1233.

XXXII. Lincoln Cathedral: The Angel Choir, begun in 1256.

xxxIII. Salisbury Cathedral: Chapter-house, c. 1275.

xxxIV. Southwell Minster: Capital from the chapter-house, late 13th century.

xxxv. Bristol Cathedral: Choir aisle, 1298-1332.

xxxvI. Ely Cathedral: From the Lady Chapel, 1321–49.

xxxvII. Gloucester Cathedral: The choir, 1337-77.

xxxvIII. Gloucester Cathedral: The vault of the choir.

xxxix. Penshurst Place, Kent, begun c. 1341.

x1. Coventry: St. Michael's, 15th century.

- XLI. Swaffham, Norfolk: Timber roof, 1454 or later.
- XLII. Cambridge: King's College Chapel, begun 1446.
- XLIII. Valladolid: St. Paul's, c. 1490–1515. Designed by Simón de Colonia.
- xLIV. Nuremberg: St. Lawrence, choir, 1445-72.
- XLV. Strassburg Cathedral: Portal of St. Lawrence, 1495.
- XLVI. Florence Cathedral, begun 1296.
- XLVII. Filippo Brunelleschi: Sto. Spirito, Florence, begun 1435.
- XLVIII. Filippo Brunelleschi: Foundling Hospital, Florence, begun 1419.
  - XLIX. Luciano Laurana (?): Courtyard of the Ducal Palace, Urbino, c. 1470-75.
    - L. Leone Battista Alberti: S. Francesco, Rimini, begun 1446.
    - 11. Leone Battista Alberti: Palazzo Rucellai, Florence, 1446-51.

LII. Raphael: Palazzo Vidoni Caffarelli, Rome, c. 1515-20.

LIII. Donato Bramante: The Tempietto of S. Pietro in Montorio, Rome, 1502.

LIV. Antonio da San Gallo: Palazzo Farnese, Rome, 1530-46.

LV. Baldassare Peruzzi: Palazzo Massimi alle Colonne, Rome, begun 1535.

xii

- IVI. Giulio Romano: His house at Mantua, c. 1544.
- LVII. Andrea Palladio: Palazzo Chiericati, Vicenza, begun in 1550.
- LVIII. Andrea Palladio: Villa Rotonda, outside Vicenza, begun c. 1567.
- LIX. Michelangelo: Anteroom to the Laurenziana Library, Florence, begun in 1526.
- 1x. Giorgio Vasari: The Uffizi Palace, Florence, begun in 1570.
- 1XI. Giacomo Vignola: Church of the Gesù, Rome, begun in 1568.
- LXII. Michelangelo: The dome of St. Peter's in Rome, designed in 1558-60.
- LXIII. St. Peter's in Rome: Aerial view.

PLATE

- LXIV. Francesco Borromini: S. Carlo alle Quattro Fontane, Rome, begun in 1633.
- LXV. Francesco Borromini: S. Carlo alle Quattro Fontane, Rome, the front, begun in 1667.
- 12XVI. Pietro da Cortona: S. Maria della Pace, Rome, begun in 1656.
- LXVII. Gianlorenzo Bernini: The Scala Regia in the Vatican Palace, Rome, c. 1660-70.
- LXVIII, Gianlorenzo Bernini: Altar of St. Teresa at S. Maria della Vittoria, Rome, 1646.
  - LXIX. Narciso Tomé: The Trasparente in Toledo Cathedral, completed in 1732.
  - LXX. Luis de Arévalo and F. Manuel Vasquez: Sacristy of the Charterhouse (Cartuja), Granada, 1727–64.
  - 1XXI. Cosmas Damian and Egid Quirin Asam: St. John Nepomuk, Munich, 1730-c. 1750.
- 1XXII. Johann Balthasar Neumann: Vierzehnheiligen, 1743-72.
- LXXIII. Jakob Prandtauer: The Monastery of Melk on the Danube, 1702-36.
- 1XXIV. Matthäus Daniel Pöpplemann: The Zwinger at Dresden, 1709–19.

LXXV LXXVI Johann Balthasar Neumann: Staircase in the Electoral a and b. Palace at Bruchsal, designed 1730.

xiii

#### LIST OF PLATES

- LXXVII. Johann Michael Feichtmayr: Stucco cartouche, Bruchsal, 1752.
- LXXVIII. Cambridge: King's College Chapel, southern lunette of the west side of the choir screen, 1532-36.
  - LXXIX. Blois: The Castle, wing of Francis I, 1515-c. 1525.
  - LXXX. Pierre Lescot: South-west pavilion in the Louvre Courtyard, Paris, 1546.
  - LXXXI. Burghley House, Northants: Centre pavilion in the courtyard, 1585.
- 1xxxII. Longleat, Wiltshire, begun in 1567.

PLATE

- LXXXIII. Inigo Jones: Queen's House, Greenwich, begun in 1616.
- LXXXIV. François Mansart: The Orléans wing of Blois Castle, 1635-38.
- LXXXV. Jacob van Campen: The Mauritshuis, The Hague, 1633-35.
- LXXXVI. Claude Perrault: The Louvre, Paris, east front, begun in 1665.
- LXXXVII. Jules Hardouin-Mansart: St. Louis des Invalides, Paris, 1675-1706.
- LXXXVIII. Sir Christopher Wren: St. Paul's Cathedral, London, 1675–1710.
- LXXXIX. Sir Christopher Wren: St. Stephens, Walbrook, London, 1672-78.
  - xc. Germain Boffrand: Salon du Prince in the Hôtel de Soubise, Paris, c. 1737.
  - xci. Sir John Vanbrugh: Blenheim Palace, near Oxford, begun in 1705.
  - XCII. Sir John Vanbrugh: Blenheim Palace, gate pavilion of the kitchen wing, 1708–09.
  - xciii. Blenheim Palace from the air.
  - xciv. John Wood the Elder: Prior Park, near Bath, begun in 1735.
  - xcv. John Wood the Younger: Royal Crescent, Bath, begun in 1767.
  - xcvi. Robert Adam: Kenwood, near London, The Library, 1767–69.

xiv

xcvII. Robert Adam: Syon House, the entrance screen, 1773.

PLATE

- xcvIII. Sir John Soane: Design for the architect's own house, Lincoln's Inn Fields, London, 1813.
  - xcix. Friedrich Gilly: Plan for a National Theatre, Berlin, 1798.
    - c. Sir Robert Smirke: The British Museum, London, 1823–47.
    - CI. Sir Charles Barry and A. W. N. Pugin: The Houses of Parliament, London, begun in 1835.
    - CII. Sir Charles Barry: The Reform Club, London, begun in 1837.
    - CIII. Charles Garnier: The Opera, Paris, 1861-74.
    - crv. Walter Gropius: Model Factory at the "Werkbund" Exhibition, Cologne, 1914.

### Foreword

A HISTORY of European architecture in two hundred pages can achieve its goal only if the reader is prepared to concede three things.

He must not expect to find a mention of every work and every architect of importance. If this had been attempted, the space available would have been filled with nothing but names of architects, names of buildings and dates. One building must be accepted as sufficient to illustrate one particular style or one particular point. This means that in the picture which the reader is going to see gradations are eliminated, and colour is set against colour. He may regard that as a disadvantage, but he will, it can be hoped, admit that the introduction of subtler differences would have doubled or trebled the bulk of the book. Thus the nave of Lincoln will be discussed but not the nave of Wells, and Sto. Spirito in Florence but not S. Lorenzo. Whether St. Michael's, Coventry, is really a more complete or suitable example of a Perpendicular parish church than Holy Trinity, Hull, the Palazzo Rucellai of the Italian Renaissance than the Palazzo Strozzi, is of course debatable. Unanimity cannot be achieved on matters of that kind. Yet, as architectural values can be appreciated only by describing and analysing buildings at some length, it was imperative to cut down their number and devote as much space as possible to those finally retained.

Besides this limitation, two more have proved necessary. It was out of the question to treat European architecture of all ages from Stonehenge to the 20th century, or the architecture of all the nations which make up Europe to-day. Neither would, however, be expected of a volume called European Architecture. The Greek temple, most readers probably feel, belongs to the civilisation of Antiquity, not to what we usually mean when we talk of European civilisation. It will also be agreed, though for quite different reasons, that the architecture of, say, Bulgaria need not be dealt with in these pages. The main reasons here are that Bulgaria in the past belonged to the Byzantine and then to the Russian orbit, and that her importance now is so marginal as to make her omission pardonable. So everything will be left out of this book that is only of marginal

interest in the development of European architecture, and everything that is not European or-as I thus propose using the term European-Western in character. For Western civilisation is a distinct unit, a biological unit, one is tempted to say. Not for racial reasons certainly-it is shallow materialism to assume that-but for cultural reasons. Which nations make up Western civilisation at any given moment, at what juncture a nation enters it, at what juncture a nation ceases to be of it-such questions are for the individual historian to decide. Nor can he expect his decision to be universally accepted. The cause of this uncertainty regarding historical categories is obvious enough. Though a civilisation may appear entirely clear in its essential characteristics when we think of its highest achievements, it seems blurred and hazy when we try to focus its exact outlines in time and space.

Ŀ.

Taking Western civilisation, it is certain that prehistory is not part of it, as the prehistory of every civilisation-the word expresses it—is a stage præ, i.e. before that civilisation itself is born. The birth of a civilisation coincides with the moment when a leading idea, a leitmotiv, emerges for the first time, the idea which will in the course of the centuries to follow gather strength, spread, mature, mellow, and ultimately-this is fate, and must be faced-abandon the civilisation whose soul it had been. When this happens, the civilisation dies, and another, somewhere else or from the same soil, grows up, starting out of its own prehistory into its own primitive dark age, and then developing its own essentially new ideology. Thus it was, to recall only the most familiar example, when the Roman Empire died, and Western civilisation was born out of prehistoric darkness, passed through its Merovingian infancy, and then took shape first under Charlemagne and finally during the reign of Otto the Great in the 10th century.

Now, besides prehistory and Antiquity, nearly all that belongs to the first thousand years A.D. has had to be left out, because the events of that age, centred in the Eastern Mediterranean-i.e. the orientalisation of the Roman Empire, early Christianity, early Talmudism early Mohammedanism and the Byzantine Empire, with its successor civilisations in the Balkans and Russia-make up a separate civilisation of its own, of a character fundamentally different from the Greek and Roman as well as the Western.

So these three omissions-all omissions in time-will, it is to be hoped, be considered justifiable. As for limitations in space, a few

xvii

#### FOREWORD

words will suffice. Whoever makes up his mind to write a short history of European architecture, or art, or philosophy, or drama, or agriculture, must decide in which part of Europe at any time those things happened which seem to him to express most intensely the vital will and vital feelings of Europe. It is for this reason that, e.g. Germany is not mentioned for her 16th-century but for her 18thcentury buildings, that Spain's rôle in Western Mohammedan architecture is left out, but her rôle in Western Christian architecture considered, that buildings in the Netherlands are only touched upon, and Scandinavian buildings not mentioned at all. The only positive bias towards the work of one nation which has been permitted (and needs no special apology) is towards British examples, where they could be introduced without obscuring the issue, instead of examples from abroad. The issue, to say it once more, is Western architecture as an expression of Western civilisation, described historically in its growth from the 9th to the 19th century.

Most of the drawings in the text of this edition were specially drawn by Miss Margaret Tallet. The index is the work of Pamela Reekie; the author wishes cordially to thank her for having given up so much of her limited spare time to its compilation. He also wishes to place on record his gratitude to Margaret Whinney and Anthony Blunt for reading the text of the whole book in typescript and improving it in many ways.

### LONDON, 1948

The present edition is virtually a reprint of its predecessor. In spite of this I have been able to include many minor amendments and two larger ones, the one referring to the paragraphs on Gothic construction which were decidedly inadequate, the other to staircases of the sixteenth and seventeenth centuries.

N. P.

### Introduction

BICYCLE SHED is a building; Lincoln Cathedral is a piece of architecture. Nearly everything that encloses space on a scale sufficient for a human being to move in, is a building; the term architecture applies only to buildings designed with a view to æsthetic appeal. Now æsthetic sensations may be caused by a building in three different ways. First, they may be produced by the treatment of walls, proportions of windows, the relation of wall-space to window-space, of one story to another, of ornamentation such as the tracery of a 14th-century window, or the leaf and fruit garlands of a Wren porch. Secondly, the treatment of the exterior of a building as a whole is æsthetically significant, its contrasts of block against block, the effect of a pitched or a flat roof or a dome, the rhythm of projections and recessions. Thirdly, there is the effect on our senses of the treatment of the interior, the sequence of rooms, the widening out of a nave at the crossing, the stately movement of a baroque staircase. The first of these three ways is two-dimensional; it is the painter's way. The second is three-dimensional, and as it treats the building as volume, as a plastic unit, it is the sculptor's way. The third is three-dimensional too, but it concerns space; it is the architect's own way more than the others. What distinguishes architecture from painting and sculpture is its spatial quality. In this, and only in this, no other artist can emulate the architect. Thus the history of architecture is primarily a history of man shaping space, and the historian must keep spatial problems always in the foreground. This is why no book on architecture, however popular its presentation may be, can be successful without ground plans.

But architecture, though primarily spatial, is not exclusively spatial. In every building, besides enclosing space, the architect models volume and plans surface, i.e. designs an exterior and sets out individual walls. That means that the good architect requires the sculptor's and the painter's modes of vision in addition to his own spatial imagination. Thus architecture is the most comprehensive of all visual arts and has a right to claim superiority over the others.

This æsthetic superiority is, moreover, supplemented by a social superiority. Neither sculpture nor painting, although both are

### INTRODUCTION

rooted in elementary creative and imitative instincts, surround us to the same extent as architecture, act upon us so incessantly and so ubiquitously. We can avoid intercourse with what people call the Fine Arts, but we cannot escape buildings and the subtle but penetrating effects of their character, noble or mean, restrained or ostentatious, genuine or meretricious. An age without painting is conceivable, though no believer in the life-enhancing function of art would want it. An age without easel-pictures can be conceived without any difficulty, and, thinking of the predominance of easelpictures in the 19th century, might be regarded as a consummation devoutly to be wished. An age without architecture is impossible as long as human beings populate this world.

The very fact that in the 19th century easel-painting flourished at the expense of wall-painting and ultimately of architecture, proves into what a diseased state the arts (and Western civilisation) had fallen. The very fact that the Fine Arts to-day seem to be recovering their architectural character makes one look into the future with some hope. For architecture did rule when Greek art and when mediæval art grew and were at their best; Raphael and Michelangelo still conceived in terms of balance between architecture and painting. Titian did not, Rembrandt did not, nor did Velasquez. Very high æsthetic achievements are possible in easel-painting, but they are achievements torn out of the common ground of life. The 19th century and, even more forcibly, some of the most recent tendencies in the fine arts have shown up the dangers of the take-it-or-leave-it attitude of the independent, self-sufficient painter. Salvation can only come from architecture as the art most closely bound up with the necessities of life, with immediate use and functional and structural fundamentals.

That does not, however, mean that architectural evolution is caused by function and construction. A style in art belongs to the world of mind, not the world of matter. New purposes may result in new types of building, but the architect's job is to make such new types both æsthetically and functionally satisfactory—and not all ages have considered, as ours does, functional soundness indispensable for æsthetic enjoyment. The position is similar with regard to materials. New materials may make new forms possible, and even call for new forms. Hence it is quite justifiable, if so many works on architecture (especially in England) have emphasised their importance. If in this book they have deliberately been kept in the back-

XX

ground, the reason is that materials can become architecturally effective only when the architect instils into them an æsthetic meaning. Architecture is not the product of materials and purposes—nor by the way of social conditions—but of the changing spirits of changing ages. It is the spirit of an age that pervades its social life, its religion, its scholarship and its arts. The Gothic style was not created because somebody invented rib-vaulting. The Gothic spirit existed and expressed itself in rib-vaults, as has been proved and will be mentioned again later, before the constructional possibilities of the rib had been discovered. The Modern Movement did not come into being because steel-frame and reinforced-concrete construction had been worked out—they were worked out because a new spirit required them.

Thus the following chapters will treat the history of European architecture as a history of expression, and primarily of spatial expression.

## Contents

	FOREWORD	xvi
:	INTRODUCTION	xix
CHAP	TER	
I	TWILIGHT AND DAWN FROM THE 6TH TO THE 10TH CEN- TURY	I
п	THE ROMANESQUE STYLE C. 1000-C. 1200	15
ш	THE EARLY AND CLASSIC GOTHIC STYLE C. 1150-C. 1250	31
IV	THE LATE GOTHIC STYLE c. 1250-c. 1500	56
v	RENAISSANCE AND MANNERISM C. 1420–C. 1600	77
VI	THE BAROQUE IN THE ROMAN CATHOLIC COUNTRIES c. 1600-c. 1760	120
VII	BRITAIN AND FRANCE FROM THE 16TH TO THE 18TH CENTURY	147
7111	ROMANTIC MOVEMENT, HISTORICISM AND MODERN MOVE- MENT FROM 1760 TO THE PRESENT DAY	188
	APPENDIX I BIBLIOGRAPHY	217
	APPENDIX 2 SOME TECHNICAL TERMS EXPLAINED	223
	APPENDIX 3 AMERICAN POSTSCRIPT	22 <u>7</u>
	INDEX	235

## List of Illustrations

FIGURES	IN	TEXT
---------	----	------

T Ravenna S Anallinara Nicarra andre Gl	PAGE
1. Ravenna: S. Apollinare Nuovo, early 6th century 2. Pompeii: Basilica, c. 100 B.C.	3
2. Pompeli. Dasinca, c. 100 B.C.	4
3. Rome: Palace of the Flavian Emperors, late 1st century A.D.	5
4. Rome: "Basilica" of Porta Maggiore, 1st century A.D.	5
5. Ravenna: S. Vitale, completed 547	7
6. Ingelheim: Charlemagne's Palace, early 9th century	9
7. Fulda: Abbey Church, begun 802	10
8. Centula: Abbey Church, 790-99 (reconstruction)	12
9. S. Juan de Baños, dedicated 661	13
10. Bradford-on-Avon: An Anglo-Saxon church plan	14
11. Tours: St. Martin's, begun shortly after 997	16
12. Cluny: Abbey Church, as begun c. 960	16
13. Hildesheim: St. Michael's, begun shortly after 1000	17
14. Block capital : St. Michael's, Hildesheim, 11th century	20
15. Decorated block capital from the crypt of Canterbury	
Cathedral, early 12th century	22
16. Hildesheim: St. Michael's, begun shortly after 1000	23
17. Fluted capital : Winchester Cathedral, 11th century	29
18. Debased Corinthian capital from St. Stephen's, Nevers,	29
late 11th century	29
19. Capital from Vézelay, c. 1120: Revived interest in Antiquity	-
20. Crocket capital from Laon, c. 1175: Early Gothic resilience	29 20
21. St. Denis: Abbey Church, consecrated 1144	29
22. Pair of wrestlers, a Cistercian church plan and the plan of	31
the Cathedral of Cambrai. From Villard de Honne-	
court's textbook, c. 1235	
23. Another Cistercian plan, and a disciple on the Mount of	34
Olives	~
	36
24. One of the radiating east chapels of Rheims Cathedral	37
25. Elevation of the nave of Noyon Cathedral, designed c. 1150	38
26. Elevation of the nave of Laon Cathedral, designed c. 1170	38
27. Probable original elevation of the nave of Notre Dame	
in Paris, designed c. 1170	39
28. Paris: Notre Dame, begun c. 1163	<b>4</b> I
vii	

### LIST OF ILLUSTRATIONS

	PAGE
29. Nave of Chartres Cathedral, designed c. 1195	43
30. Nave of Rheims Cathedral, designed c. 1211	44
31. Elevation of the nave of Amiens Cathedral, begun 1220	<b>45</b>
32. Salisbury Cathedral, begun 1220	52
33. Nave of Salisbury Cathedral, designed c. 1220	54
34. Harlech Castle, chiefly 1286–90	55
35. Selby Abbey, east window, c. 1325	57
36. Juan Gil de Hontañon: Salamanca Cathedral, begun 1512	64
37. Guillermo Boffiy: Gerona Cathedral, begun 1417	65
38. Cothay Manor, Somerset, late 15th century	68
39. St. Nicholas, King's Lynn, Norfolk, 1414–19	71
40. Rouen: St. Maclou, begun 1434	73
41. Tomar, window of Chapter-house, c. 1520	76
42. Filippo Brunelleschi: Sto. Spirito, Florence, begun 1435	80
43 and 44. Filippo Brunelleschi: S. Maria degli Angeli,	
Florence, begun 1434	82
45. Temple of Minerva Medica, Rome, c. A.D. 250. Michel-	
ozzo's Rotunda at the east end of the SS. Annunziata,	
Florence, begun 1444	83
46. Projected Sforza Chapel, Milan. Plan reconstructed from	•
Sperandio's medal, c. 1460	85
47. Antonio Filarete: Projected Chapel for the Hospital,	
Milan. Reconstructed from the original drawing, c. 1455	85
48. Antonio Filarete: Church for Zagalia. Reconstructed	
from the original drawing, c. 1455–60	85
49. Michelozzo: Palazzo Medici, Florence, begun 1444	89
50. Leone Battista Alberti: S. Andrea, Mantua, begun 1470	91
51. Leone Battista Alberti: S. Sebastiano, Mantua, begun 1460	92
52. Giorgio Spavento: S. Salvatore, Venice, begun 1506	93
53. The Chancery Palace (Palazzo della Cancelleria) in Rome,	
1486–98	94
54. Leonardo da Vinci: Design for a church	95
55. Leonardo da Vinci: Sketch for a church	96
56. Donato Bramante: Original plan for St. Peter's in Rome,	
1506	98
57. Antonio da San Gallo: Palazzo Farnese, Rome, begun 1530	102
58. Andrea Palladio: Villa Trissino at Meledo, c. 1560	107
59. Giorgio Vasari, Giacomo Vignola and Bartolommeo	
Ammanati: The Villa of Pope Julius III, Rome, begun	
1552	III

viii

### LIST OF ILLUSTRATIONS

	PAGE
60. Michelangelo Buonarroti: Plan for the completion of St. Peter's in Rome, 1546	
61. Giacomo Vignola: Church of Jesus (Gesù), Rome, begun	115
1568	117
62. Giacomo Vignola's design for the front of the Gesù	118
63. Carlo Maderna (and Gianlorenzo Bernini ?): Palazzo Barbarini Pomo hogun 2628	
Barberini, Rome, begun 1628	122
64. Giacomo Vignola: S. Anna dei Palafrenieri, Rome, begun c. 1570	707
	124
65. Carlo Rainaldi: S. Agnese, Rome, begun 1652 66. Gianlorenzo Bernini: S. Andrea al Quirinale, Rome,	125
begun 1678	125
67. Francesco Borromini: S. Carlo alle Quattro Fontane, begun 1633. Front, 1667	126
68. Martino Lunghi the Younger: SS. Vincenzo ed Ana-	
stasio, Rome, 1650	127
69. Gianlorenzo Bernini: The Royal Staircase (Scala Regia)	
in the Vatican Palace, Rome, c. 1665	128
70. Narciso Tomé: "Trasparente" in the cathedral of Toledo,	
completed 1732	132
71, 72 and 73. Balthasar Neumann: Vierzehnheiligen in	
Franconia, begun 1743. Section (not showing the west	
towers), plan on ground-floor level, plan of vaults	138
74. Plan for rebuilding monastery of Weingarten, 1723	140
75. Enrique de Egas: Staircase in the Holy Cross Hospital,	
Toledo, 1504–14	142
76. Bruchsal, Episcopal Palace. The central staircase by	
Balthasar Neumann, 1732	145
.77. Pietro Torrigiani: Tomb of Henry VII at Westminster	
Abbey, designed in 1512	147
78. Hampton Court: Great Hall, detail from the hammer-	
beam roof, 1533. Probably by James Needham	151
79. Salamanca: Portal of the University, c. 1525-30	153
80. Cornelis Floris: Antwerp Town Hall, 1561-65	154
81. Typical Flemish and Dutch strapwork ornament of the later 16th century (from the Rhineland County Hall,	
Leiden, 1596–98)	155
82. Jacques Lemercier: Church of the Sorbonne, Paris,	
1635-42	163

### LIST OF ILLUSTRATIONS

Pa I quie I quan Church of the Callbon des Quetre Nations	PAGE
83. Louis Levau: Church of the Collège des Quatre Nations (now Institut de France), Paris, 1661	163
	-
84 and 85. Louis Levau: Vaux-le-Vicomte, begun 1657	164
86. Jules Hardouin-Mansart: St. Louis des Invalides, Paris	169
87. Sir Christopher Wren: St. Paul's Cathedral, London,	
1675–1710	171
88. Sir Christopher Wren: St. Stephens, Walbrook,	
London, 1672–87	172
89. Versailles: The garden front by Jules Hardouin-Mansart,	
1676–88, the gardens by André le Nôtre, begun 1667	174
90. Louis Levau: Hôtel Lambert, Paris, about 1645	175
91. The two chief types of Baroque staircases	177
92. Jean Courtonne: Hôtel de Matignon, Paris, begun	
1722	178
93. Fenton House, Hampstead, London, 1693	180
94. Sir John Vanbrugh: Blenheim Palace, begun 1705	182
95. Garden Seat from P. Decker's Gothic Architecture De-	
corated, 1759	193
96. Claude Nicolas Ledoux: One of the city gates of Paris,	
designed between 1784 and 1789	196
97. Carl Friedrich Schinkel: The Old Museum (Altes	190
Museum), Berlin, 1822–30	201
98. Robert Norman Shaw: Stores and Inn at the Bedford Park	201
Garden Suburb, Chiswick, 1878	208
99. Charles F. Annesley Voysey: House at Colwall, Malvern,	200
1803	209
1095 100. Charles Holden: Arnos Grove Station, of the London	209
Underground, 1932	213
Figures A to E illustrating technical terms 224-	-226

х

此为试读,需要完整PDF请访问: www.ertongbook.com