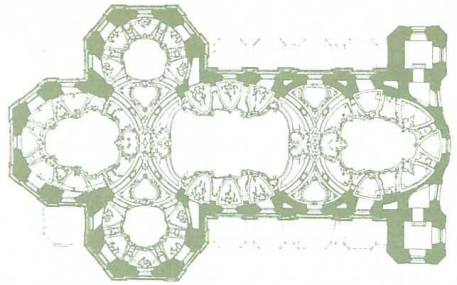
Baroque & Rococo

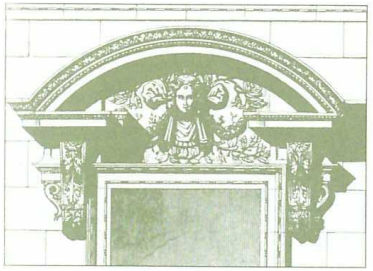
The baroque style developed in the early 17th century, and was characterised by a grand elaboration of detail and space. Architects took Classical motifs and recombined them to create a sense of drama. The Giant Order was characteristic, and new motifs like the broken pediment appeared. The baroque is particularly associated with the great Roman Catholic churches of the Counter-Reformation and with European palace architecture. Rococo is a softer, less formal version that developed in early 18th-century Paris. Most commonly associated with interior decoration, it was characterised by light, playful ornament using scallop shells, C-curves and scrolls.

Curving façade
Francesco Borromini was one of the most important baroque architects. His church of S. Carlo alle Quattro Fontane, in Rome (1665–7), uses alternating convex and concave surfaces to articulate the façade, which projects forward in the centre. The curving motif is further articulated by the oval cartouche and by the broken ogee pediment.

Monumental motifs
Key baroque motifs include giant Orders of pilasters to unify storeys, broken pediments and exaggerated keystones above the windows. All of these motifs can be seen in the design of Greenwich Hospital, London (*c.*1695). The wall surfaces are further elaborated with rustication. The overall effect is grand and monumental, yet varied.

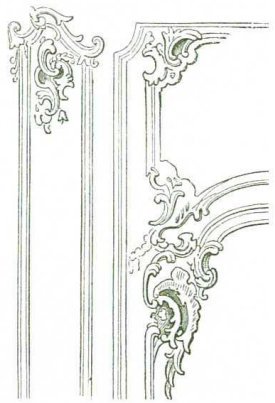


Curved plan forms
The use of rounded shapes was not only limited to elevations. Baroque and rococo architects also exploited curves for plan forms, such as the intersecting ovals and circles used by J. B. Neumann for the church of Vierzehnheiligen, in Germany (1742–72). These shapes were repeated in curving vaults.



Curved pediment
Both curved and broken pediments are characteristic baroque motifs, where architects took a Classical form and expanded its decorative possibilities. This Parisian example has a curved broken-based pediment on consoles with floral mouldings; it is further enriched with a central female bust set amid floral swags.

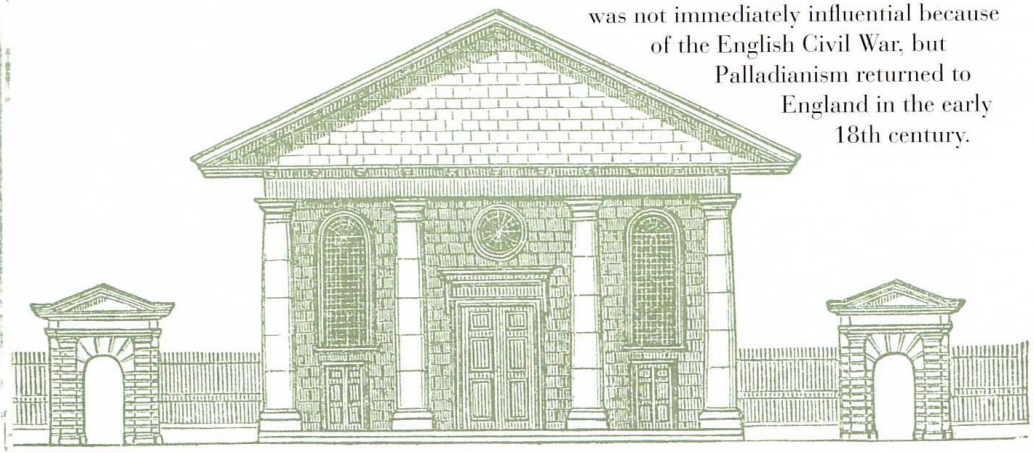
Rococo ornament
C-shaped curves were typical of rococo ornament, and were often used in combination with scrolls, shells and swags. Ornament was not limited to architectural elements such as windows and doors, but spread over walls, ceilings and other surfaces. This French panelling is representative of a widely used type.

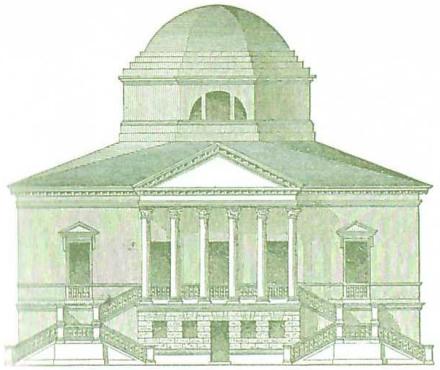


Palladian

The 16th-century Italian architect Andrea Palladio (1508–80) had a huge impact on later architecture, especially in the 18th and early 19th centuries. His buildings are characterised by the use of a pedimented temple front, symmetrical planning and the so-called Palladian or Serlian window. Palladio's work was brought to a wider audience through books of his designs. The first English Palladian architect was Inigo Jones (1573–1652), but it was the amateur architect Lord Burlington who made the style fashionable in the early 18th century. Palladianism was common in England and the United States.

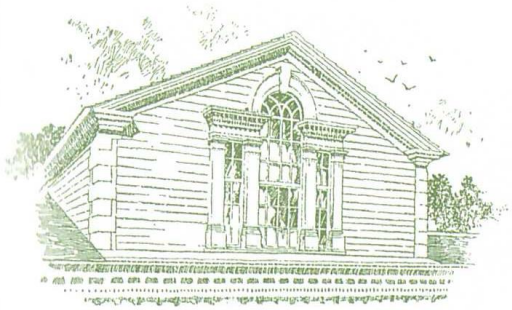
Porticoed church
A typical Palladian arrangement has a central structure with a porticoed temple front flanked by two smaller pavilions, as at Inigo Jones's St. Paul's in Covent Garden, London (1631). Jones's work was not immediately influential because of the English Civil War, but Palladianism returned to England in the early 18th century.





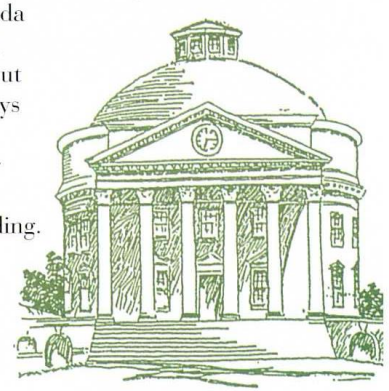
Temple façade atop a podium
Raised up on a podium, a classic example of Palladianism, Lord Burlington's Chiswick House, London (begun 1725), was one of the most influential Palladian buildings. The front (seen here) has a temple façade and a half-round Diocletian window in the dome. The complex stairs add drama and movement to the façade.

Coffered rotunda
The exterior of a pure Palladian building is clean-lined, with the emphasis placed on proportion and key details, but the interior decoration is in a richer Roman style. The central domed rotunda at Chiswick House, London, was coffered, with elaborate door, window and picture surrounds to designs that were recommended by Palladio.



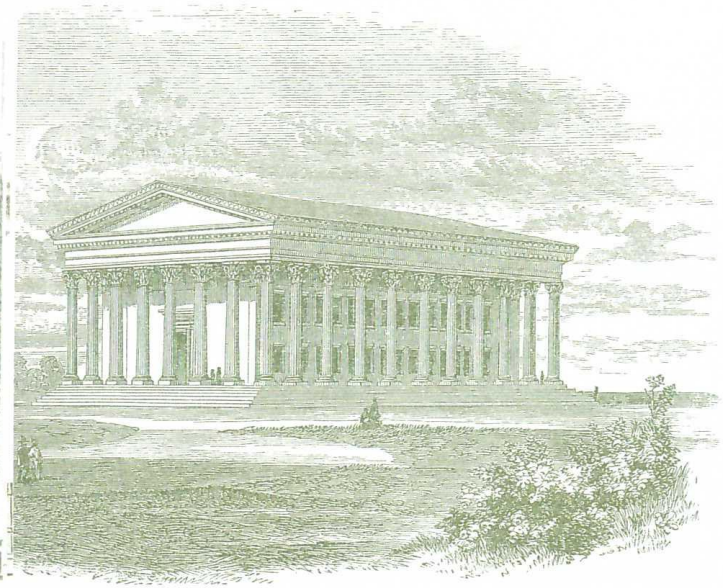
Dormer window
Palladianism was influential in colonial America. Here, for instance, a classic Palladian window with its central arched light breaking through an entablature above two lower flanking lights is used in a weatherboard-clad dormer window. The rusticated quoins and heavy cornice are also made in timber, not stone.

Temple-fronted rotunda
Another classic Palladian building is Thomas Jefferson's University of Virginia rotunda in Charlottesville. The central temple front has Corinthian columns, apses create a symmetrical oval plan, and the central rotunda is articulated by a dome, but the two storeys of windows make it clear that this is a modern building.

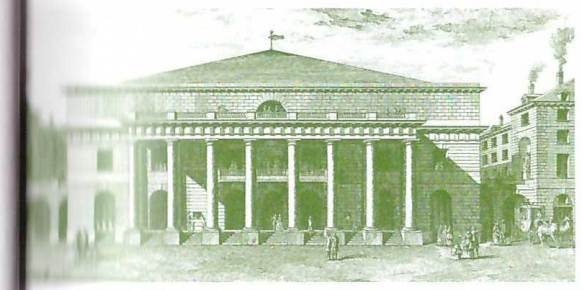


Neoclassical

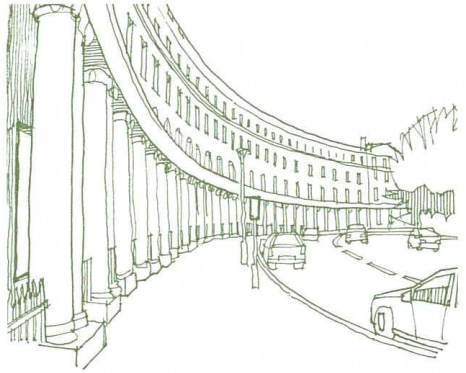
The Enlightenment of the mid-18th century brought with it a new emphasis on the scientific study of the past, and people began to look more closely at the ruins of ancient Greece and Rome. Books of engravings taken directly from antique models were made more widely available, leading to a revival of Classical, especially Greek, styles, based very closely on antique models. Greek Revival neoclassical architecture was particularly popular in France and in the United States, where it was often called the Federal style, because its simplicity was seen as a suitably republican antidote to the decadence and overelaboration of imperial Roman architecture and its derivatives, like the baroque and rococo styles.



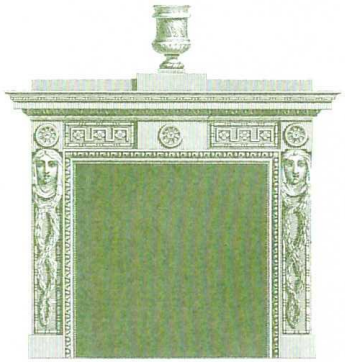
National style
Greek Revival was the pre-eminent style in early 19th-century America. Girard College school in Philadelphia (1833–48), designed by Thomas Walter, who also worked on the US Capitol, uses a temple form. A Corinthian portico completely encloses the *cella*-like inner building, which has windows, but the portico makes the interior dark.



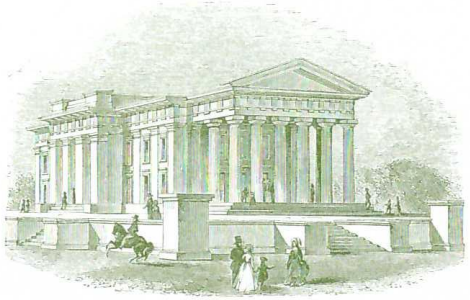
Combination features
The Comédie-Française theatre in Paris (1787–90) blended Greek, Roman and Renaissance elements to create a simple, elegant building. It has a projecting portico without a pediment, a common feature of early neoclassical buildings. The façade and openings are rusticated, and there is also a Diocletian window above the portico.



Unifying portico
This long row, or terrace, of London houses, Park Crescent, designed by John Nash and built in 1812–22, uses an enormous columnar portico to unify the composition and create a single whole whose sum is much greater than its individual parts. From a distance, it looks like one palatial building.



Neoclassical fireplace
Motifs derived from ancient models were as important in interior as in exterior design. This fireplace has egg-and-dart banding, Greek key (or meander) decoration, Classical draped female heads, garlands and a central urn, probably derived from patterns available as engravings and from newly discovered remains.

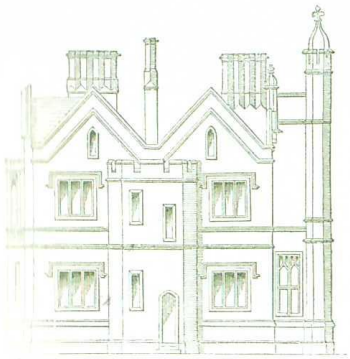


Greek Revival house
The Greek Revival style was popular for houses because key details, such as the pediment and portico, could easily be added. This house has a Doric hexastyle (six-columned) portico at the front and attached pilasters along the sides, but its sash windows clearly identify it as a 19th-century construction.

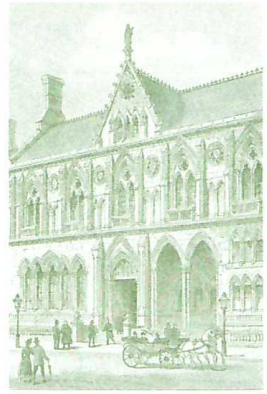
Gothic Revival

A revival of Gothic styles began in the late 18th century, initially only with the adoption of Gothic-style motifs such as tracery, but soon becoming full-scale copying of Gothic buildings, especially for churches. Gothic Revival houses were a prevalent style during 19th-century England. The Gothic Revival was part of a much larger movement that was known as the Picturesque, which also included landscape gardening. The Picturesque was characterised by irregularity and variety, creating a very dramatic appearance. Consequently, Gothic Revival architecture is also defined by deliberate irregularity, both to create a sense of the dramatic and to make the building look as if it developed naturally.

Sham Gothic
Made to look as if it might have been a medieval abbey, Fonthill Abbey house in Wiltshire was a key early Gothic Revival building, but its detailing was largely constructed of plaster and wood, not of the stone that was used during the Middle Ages. Unsurprisingly, its huge tower collapsed shortly after it was built.



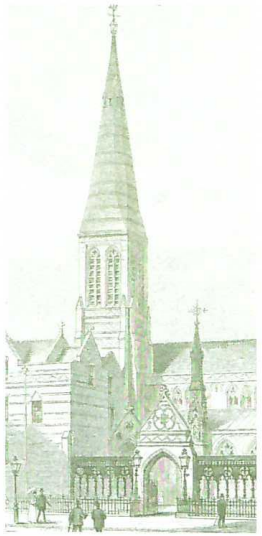
Gothic Revival house
The Gothic Revival style was very popular for houses such as this early 19th-century example. Key details that evoke the Gothic Revival style include pointed arches, crenellations, irregular chimneys, tracery windows and a turret. Most of the detailing here is derived from the late Gothic period, but earlier Gothic details were also common.



National pride
In England, the Gothic Revival was an important statement of national pride, intended to evoke a period of religious and civic greatness in the late Middle Ages. Thus many important 19th-century English civic buildings, including the main Law Courts, seen here, and the Houses of Parliament in London, were Gothic Revival in style.

Gothic Revival church
Gothic Revival was a significant style for churches in the 19th century and became associated with attempts to revive the perceived religious fervour of the Middle Ages. Gothic Revival churches, such as Grace Church in New York, often copied medieval forms quite closely, but their scale and elaboration make them unmistakably later.

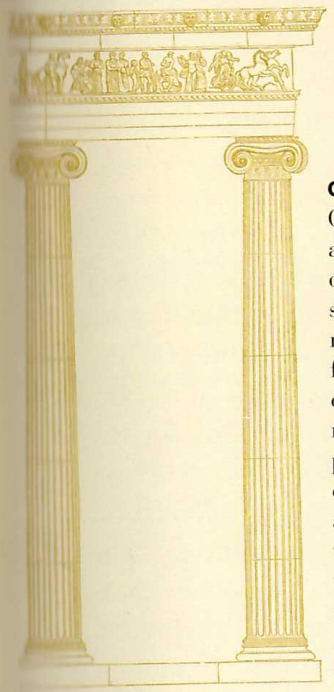
Urban adaptation
The church of All Saints, Margaret Street, London (1849–59), adapts Gothic Revival detailing to a difficult and cramped urban space. The tower is hugely tall to ensure that it can be seen high above other buildings, and the details are executed in brick and tile in order to withstand urban pollution and dirt.



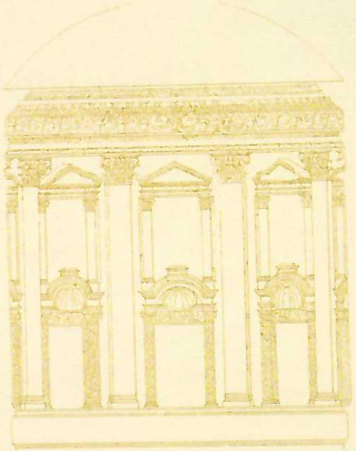
Introduction

A column is a vertical shaft. Columns are most frequently used in a row supporting a horizontal lintel (a colonnade) or with a series of arches (an arcade), but they may also be used on their own, perhaps to support a statue. They are often round, but may be square or polygonal. The transition between the column and the floor is usually aided by a base, and that with the wall above by a capital. Both bases and capitals help to spread the load, making the column more stable; they also provide a visual transition point between vertical and horizontal.

Commemorative column
The Romans used freestanding columns to commemorate great men and heroic deeds. Trajan's Column in Rome (*c.*112 CE) commemorates the Roman emperor's victory over the Dacians. The form reappeared during the neoclassical period for monuments like Nelson's Column in London and the July Column in Paris's Place de la Bastille.

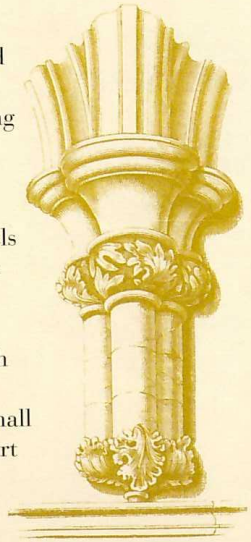


Column drums
Columns often look as if they are made of a single long stone, but in fact most are constructed from large segments or drums. A column made from just one piece of stone is called 'monolithic', and the French term *en délit* is also used for the small monolithic columns common in Gothic architecture.

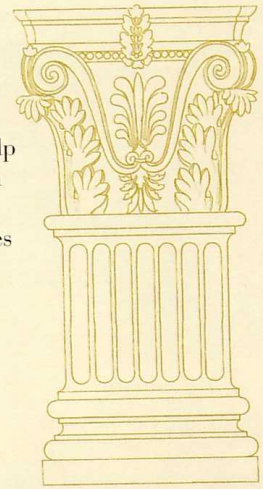


Pilaster
Pilasters are tall, flat strips with capitals and bases that are attached to the wall, giving the impression of columns, but performing no structural function. Here at the Temple of Bacchus at Baalbek in Lebanon (2nd century CE), they are used with an entablature, but they can also be used with arches.

Corbel
A capital that is fixed to the wall and used without an underlying column is known as a corbel. In the Romanesque and Gothic periods corbels were used to provide support for roofs, vaults, arches and statues. This Scottish corbel from Melrose Abbey supports a small colonnette that is part of a vault respond.

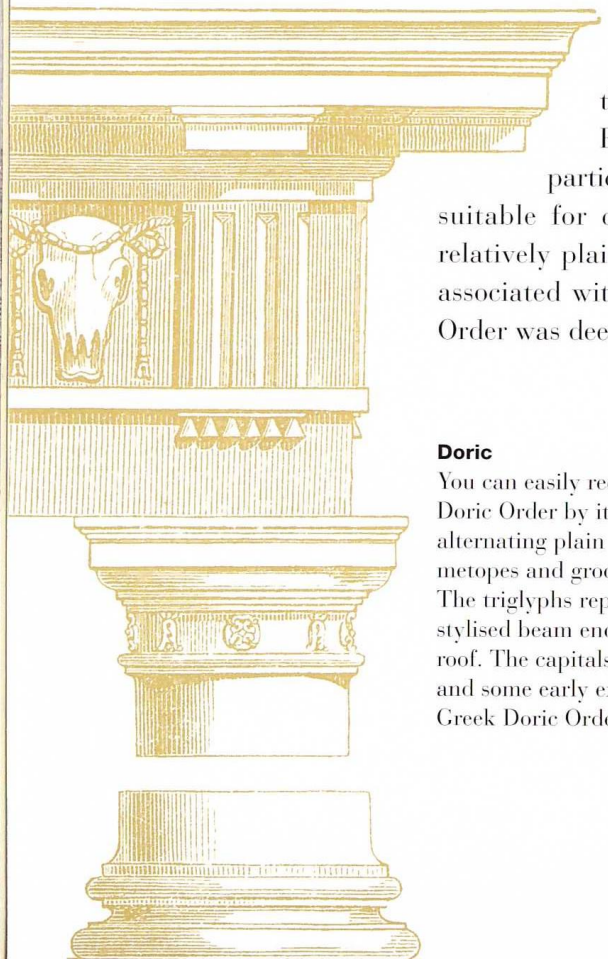


Volute
The projecting knobs on the upper corners of some capitals are called volutes, and help to make the transition between the pier and the wall above. Volutes were often carved as curling foliage, but more stylised shapes (including grotesque heads) were also used, as here on this Renaissance capital.

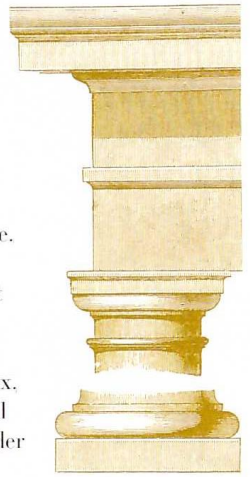


Classical Orders

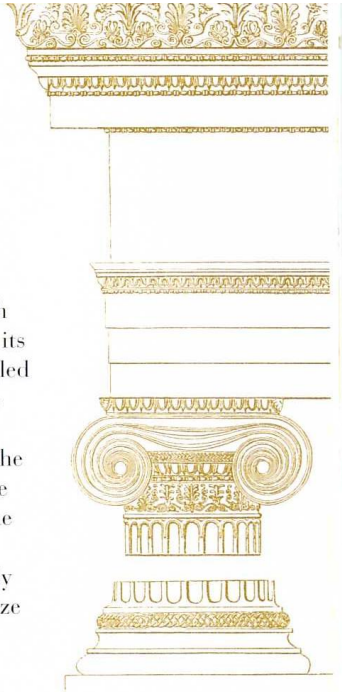
The design and proportion of columns in ancient Greece and Rome were governed by a set of rules known as the Orders. There are five main Orders: Doric, Tuscan, Ionic, Corinthian and Composite. The Orders were rediscovered during the Renaissance and were codified by Leon Battista Alberti in his 1452 treatise *De re aedificatoria* (*On the Art of Building*), one of the key theoretical texts of the Renaissance. Each Order was considered to have particular characteristics, making them suitable for certain types of buildings. The relatively plain Doric Order, for instance, was associated with strength, while the Corinthian Order was deemed to be particularly beautiful.



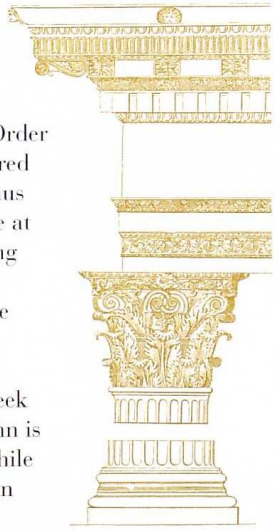
Doric
You can easily recognise the Doric Order by its frieze with alternating plain or sculpted metopes and grooved triglyphs. The triglyphs represent the stylised beam ends of a timber roof. The capitals are very simple, and some early examples of the Greek Doric Order have no base.



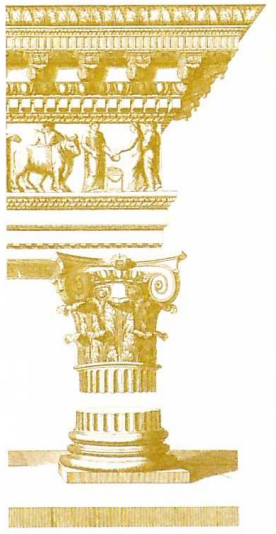
Tuscan
The Tuscan Order, a mainly Italian type, is not dissimilar to the Doric Order, but the frieze is plain and the capitals are a little more complex, with convex astragal mouldings. This Order was popular in the Renaissance, and a large-scale version of Tuscan is called the Gigantic Order.



Ionic
You can distinguish the Ionic Order by its characteristic scrolled capitals, which are said to look like a rolled-up pillow. The fronts and sides are different, unlike the other Orders. The columns are usually fluted, and the frieze may be plain or decorated with sculpted ornament.



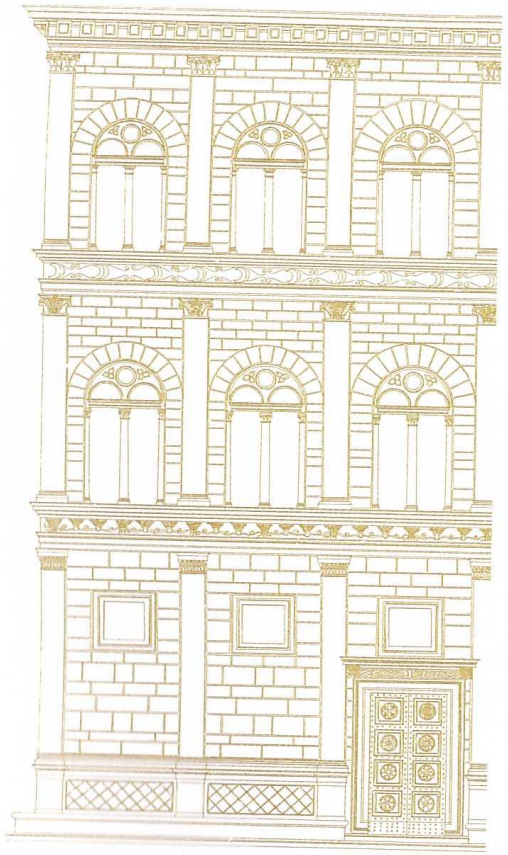
Corinthian
The Corinthian Order has capitals covered in rows of acanthus leaves, with those at the corners curling over to become volutes. There are both Greek and Roman versions: the shaft of a Greek Corinthian column is usually fluted, while that of the Roman version is plain.



Composite
The Composite Order is a particularly Roman invention, and it is the richest and most elaborate of the Orders. This Order is a cross between the Corinthian and the Ionic, with both acanthus leaves and scrolls. The frieze and entablature of this Order are also richly embellished with relief sculpture.

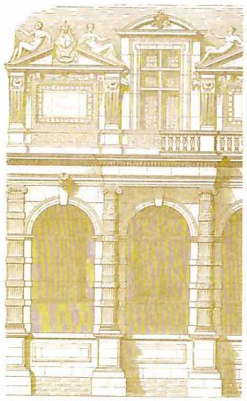
Renaissance & Baroque

A key aspect of the Renaissance was the revival of the strictly defined Classical Orders in place of more fanciful Gothic forms, which were not governed by any particular set of rules. The Tuscan and Corinthian Orders were especially popular in the Renaissance, as they were seen as most closely evoking the glories of ancient Rome. Italian Renaissance architects based designs on the ruins of ancient buildings, although they also designed some new variations on the Orders, especially the Corinthian Order, to suit their purposes. During the baroque and rococo periods, architects became more inventive, moving further away from older models to design new forms of capitals and columns.



Hierarchy of Orders
The different Orders were thought to have different visual properties, with the simple Doric and Tuscan Orders being particularly associated with strength and the Corinthian with beauty. The façade of the Rucellai Palace in Florence, for instance, has Doric pilasters on its lower storey and Corinthian pilasters above.

Renaissance pilaster
This Renaissance pilaster from a Venetian church is based on the Corinthian Order, but the traditional acanthus-leaf decoration is restricted to the corners of the capital, with a more naturalistic rose at the centre. The fluting on the pilaster has been replaced with foliage trails.



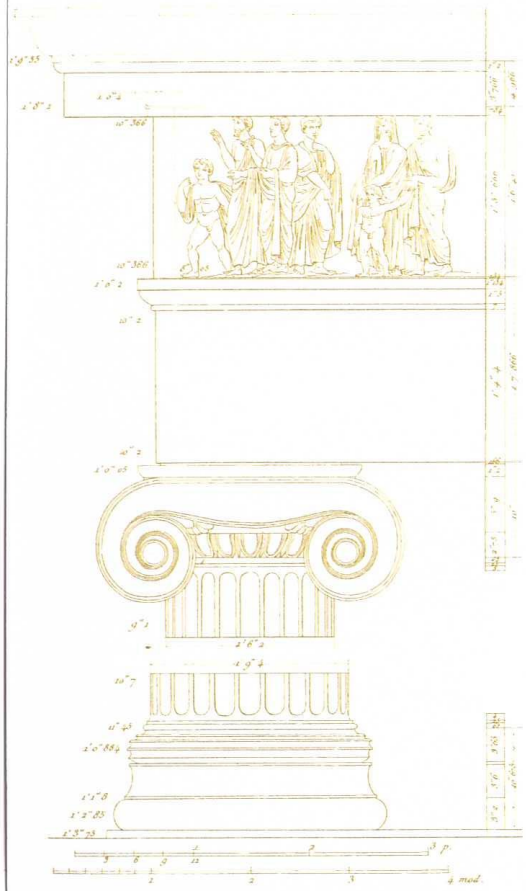
Banded column
Renaissance architects experimented with new forms that built on Classical ideas. One was the banded column, in which alternate blocks were larger and rusticated. Created by the French royal architect Philibert de l'Orme (*c.*1510–1570), banded columns were important in later Renaissance and baroque architecture.

Decorative column
Baroque architects used columns as decoration, as much as structural elements. The columns on the facade of the church of St Paul and St Louis in Paris, for instance, rest improbably on a pediment, but they add greatly to the very rich decorative effect, along with the elaborate surface ornament.

Rococo capital
Rococo architects designed new forms of capitals with light decoration that suited the delicacy of the rococo style. This capital, which is almost cylindrical in shape, has little to do with the Corinthian Order on which it is nominally based, but that does not detract from its decorative potential.

Revival Styles

In the mid-18th century scholars began studying ancient architecture in great detail, making careful drawings that were published and widely distributed. In particular, scholars such as James 'Athenian' Stuart (1713–88) and Nicholas Revett (1720–1804) brought Greek architecture to prominence, and their work was largely responsible for making accurate reproductions of ancient buildings widely available. Greek architecture was seen as having a purity that was lacking in later Roman buildings, and was also considered especially suitable for newly democratic countries such as the United States and France. Revival styles generally copied older models, but more recently architects have made interesting experiments with the columnar form, especially in relation to very tall buildings.

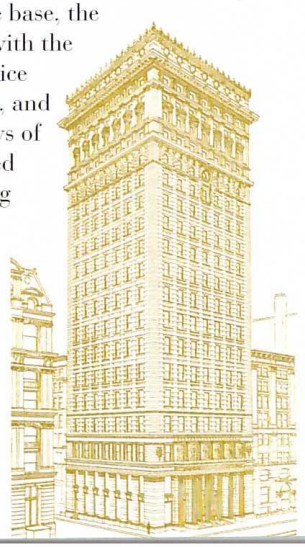


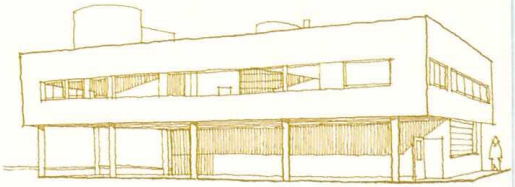
Antiquarian study, Ionic Order
Publications from the 18th-century provided great detail about real examples, such as this Ionic Order from Ilissus, Greece. This enabled architects to copy older models precisely, leading to a new emphasis on historical accuracy and to an expanded repertoire of forms, as previously unknown buildings were discovered and drawn.

Baseless Doric
The Greek Doric Order, which has no base and has heavier columns than the Roman type, was a great revelation to 18th-century architects and scholars. It was seen to represent a pure Classicism, untainted by the supposed decadence of Rome, and was an important feature of Greek Revival-style buildings like the Ohio State Capitol, USA.

Britannic Order
In the neoclassical period the discovery of variations on the Orders led 18th-century architects to experiment with designing new Orders. The Britannic Order, seen here, includes the British royal lion and unicorn, while the US Capitol in Washington, DC was adorned with a 'corncob' Order, which has ears of corn in place of acanthus leaves.

Skyscraper column
Early skyscrapers, like the American Surety Building in New York (1894–6), were designed to resemble enormous freestanding columns. The lower storeys represented the base, the upper storeys with the projecting cornice was the capital, and the vertical rows of windows formed a kind of fluting on the 'shaft'.

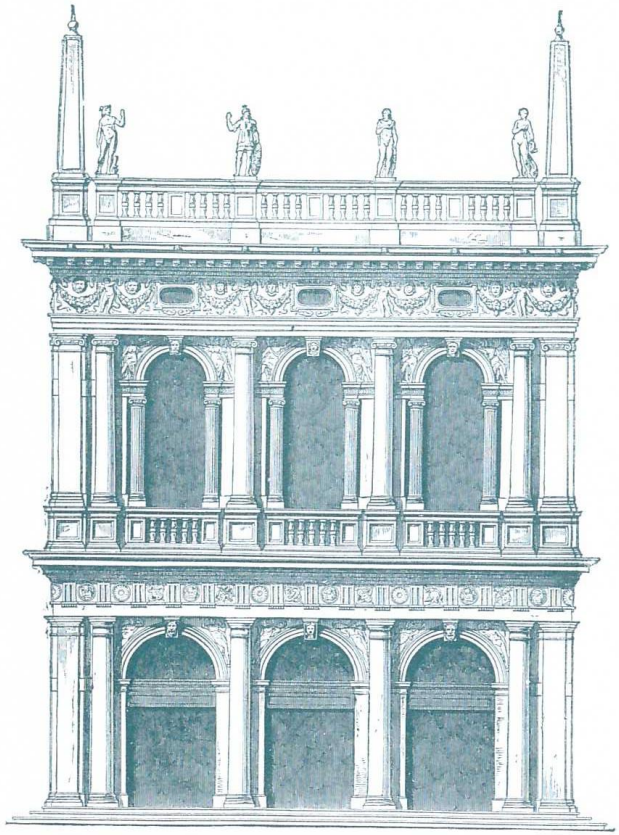




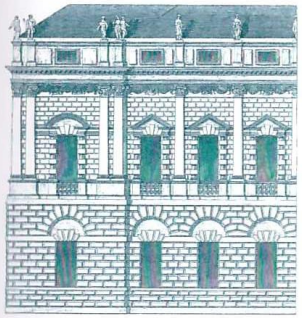
Pipe column
In the 20th century, Modernist architects abandoned bases and capitals in favour of plain columns that clearly expressed their function with no superfluous ornamentation. Nonetheless, columns remained useful for support and to give rhythm to the façade, as here at Le Corbusier's Villa Savoye, Poissy, France, of 1929–31. Similar concrete-covered or concrete-filled pipe columns are often used to support basements.

Renaissance & Baroque

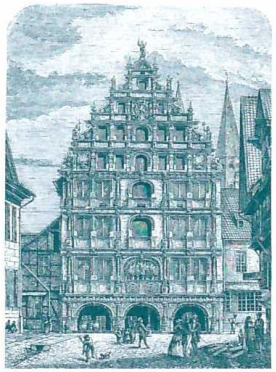
Beginning in 15th-century Italy and slowly spreading northwards, the Renaissance brought with it a revival of interest in the architecture of ancient Rome, and Gothic forms (notably the pointed arch) were abandoned. Instead, architects revived the round arch and the entablature carried on pilasters. In contrast to the original Roman models, however, greater emphasis was placed on the arch itself, and both arches and arcades were occasionally used on their own, without a surrounding entablature. New forms of the arch, including arches without capitals, rusticated arches and arches supported on an entablature, were also developed.



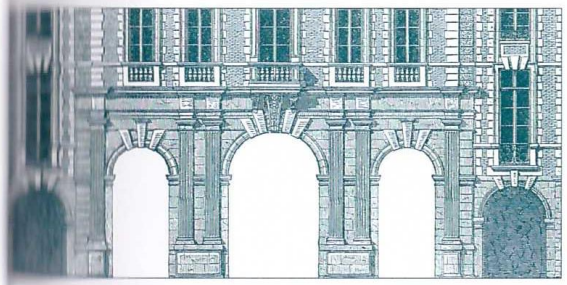
Arches and entablature
The Roman motif of a round arch set under an entablature supported on pilasters was also a hallmark of Renaissance architecture. Here, on the Old Library of St Mark's, Venice, begun in 1537, the two layers of entablature provide a strongly rectilinear frame that dominates the arches.



Rusticated arch
Arches formed from rusticated blocks without clearly defined capitals were another hallmark of Renaissance architecture. The lower storey of this 16th-century Italian villa designed by Andrea Palladio has only the barest suggestion of an arcade, with rusticated arches and heavy rusticated piers between the windows.



Depressed arch
Gothic and Renaissance were less clearly differentiated in northern Europe than in Italy. For instance, the open lower storey of the Braunschweig Cloth Hall in Germany combined very depressed arches similar to late Gothic Tudor arches with a Renaissance entablature and pilasters. Similar arches were used in the upper storeys.

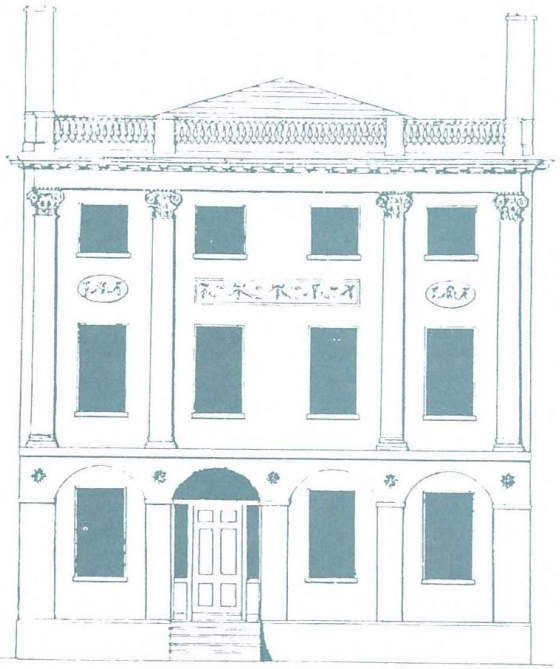


Blocked keystone
Blocked keystones, so named because the individual blocks are so clearly delineated, were a fashionable Renaissance motif. The entrances into the 17th-century Place Royale in Paris have three round-headed arches with very prominent keystones that extend well beyond the mouldings around the arch.

Loggia
A loggia is a long covered space with an open arcade along one side, which may be part of the building or separate. A particularly Italian form, loggias were also used in other countries in order to evoke Italian architecture. Here, at the Ospedale Grande, Milan (begun 1456), there are two levels of loggias, one situated above the other.

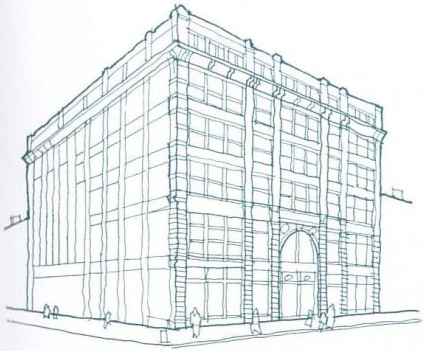
Revival Styles

Architects working in the various 18th- and 19th-century revival styles all made use of arches and entablatures as necessary to convey an impression of their chosen style. As a consequence, an entablature supported on a colonnade became a kind of shorthand for the (neo)Classical style, and pointed arches could similarly be used to imply the Gothic Revival. There were also some attempts in the 19th century to develop new styles, one of the most interesting of which was the *Rundbogenstil*, or round-arched style. Drawing on aspects of all the round-arched styles, it made much of their decorative possibilities.

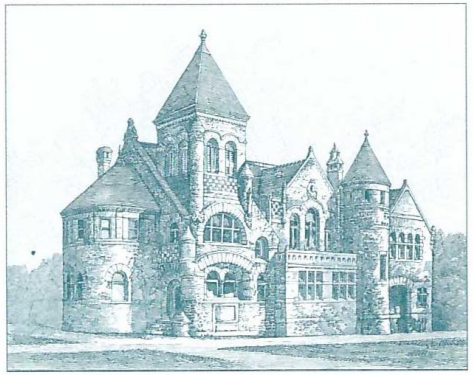


Neoclassical house
The entablature supported by a colonnade was an intrinsic decorative feature of neoclassical architecture. In this early 19th-century American house, the roof cornice is treated like an entablature with four decorative pilasters supporting it. The lower storey is articulated with an arcade linking the windows and off-centre door.

Gothic Revival style
The small pointed-arched windows and door, and the use of tracery, give this early 19th-century house a Gothic Revival flavour, which is further enhanced by the pointed gables, irregular chimneys and crenellated staircase turret at the front, and by the tall turret at the side.

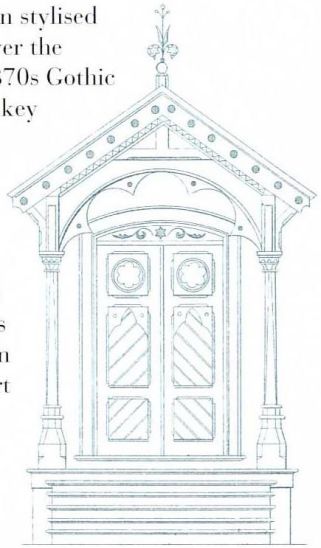


Triumphal arch
Bloomingdale's department store in New York, opened in 1886, uses the motif of a Roman triumphal arch for its entrance. Spanning the lower two storeys of the façade, the central arch and narrower vertical panels – like the massive side sections of a triumphal arch – are defined by heavy rusticated pilasters.



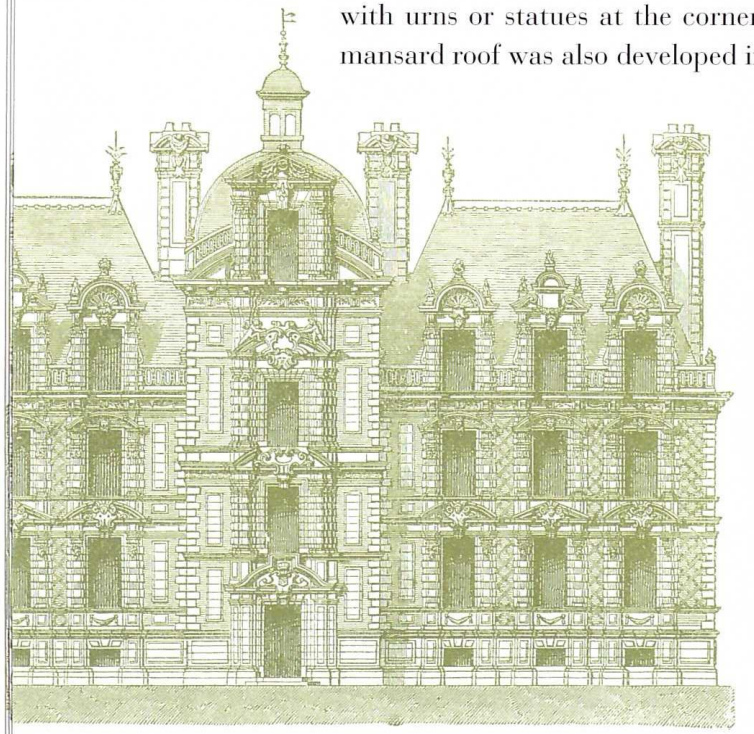
Rundbogenstil
The *Rundbogenstil* (round-arched style) was an eclectic 19th-century revival style. Always built in masonry, like this church in Ann Arbor, Michigan, USA, it combines elements from many round-arched styles including early Christian, Romanesque and Renaissance, and is characterised by heavy arches and chunky rustication.

Gothic Revival porch
The cusped arch on stylised Gothic columns over the entrance to this 1870s Gothic Revival porch is a key stylistic signal. Its details are mirrored in the decorative arches and roundels on the door itself, but the detailing seems applied rather than a fundamental part of the structure.

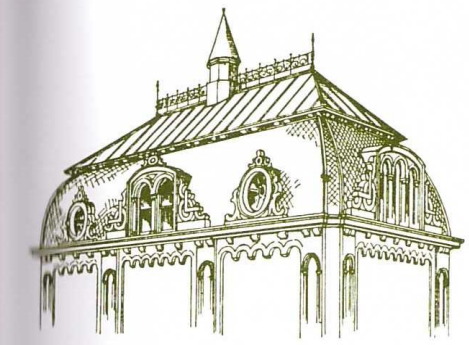


Baroque & Rococo

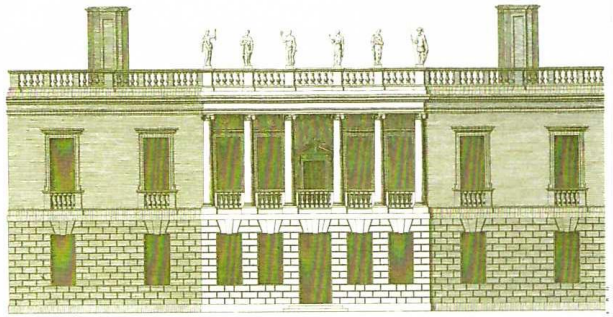
In many ways the roof design of the baroque period carried on the styles of the Renaissance, notably the use of hipped roofs and heavy cornices or parapets to create a rectilinear silhouette. Shaped gables became less popular, and there was reduced regional variation, although French baroque architects continued to favour very high, steeply pitched roofs rather than the flatter roofs fashionable in Italy, England and elsewhere. The greater emphasis on ornament in the baroque led to the development of elaborate balustrades used as parapets, often further ornamented with urns or statues at the corners. The double-pitched mansard roof was also developed in this period.



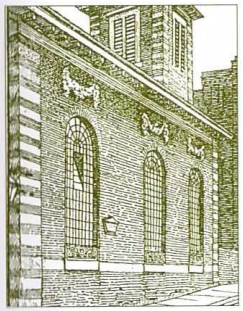
Steeply pitched roof
The mid-17th-century Château de Beaumensil has the very steeply pitched roofs with prominent dormer windows that continued to characterise French domestic architecture throughout the baroque and rococo periods. The sloping roofline combined with the lower walls gives the building a light and decorative appearance.



Mansard roof
The mansard roof, which is associated with the 17th-century French architect François Mansart, has a double slope on each face. The lower slope is fairly straight, often almost vertical, while the upper section is much flatter. The lower section usually has dormers, thus creating an extra storey in the roof.

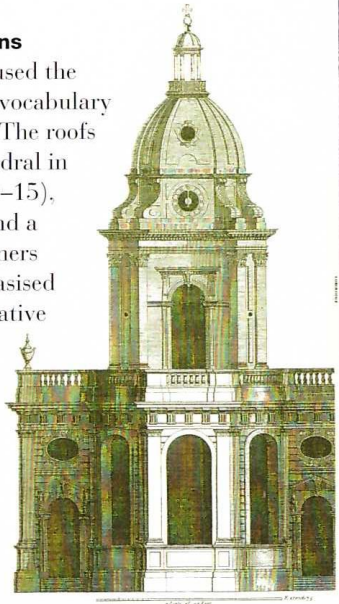


Balustraded parapet
The roofs of the Queen's House in Greenwich, London, of 1615–37, are entirely concealed behind a balustraded parapet. The balusters are in the vase shape then also becoming fashionable for staircases, and, like a Gothic openwork parapet, they help to lighten the impact of the parapet against the sky.



Cornice
Decorative cornices were used to adorn the junction of roof and wall. As well as decorating the projecting eaves, the cornice, like this one on the church of St Benet, London (1683), designed by Sir Christopher Wren, also forms an important visual termination to the wall.

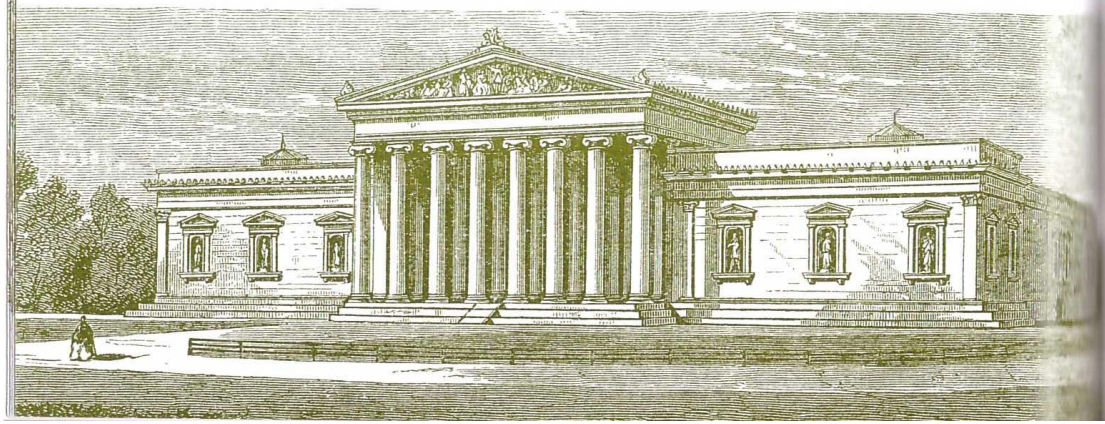
Balustrade with urns
Baroque churches used the same architectural vocabulary as other buildings. The roofs of St Philip's Cathedral in Birmingham (1709–15), are concealed behind a balustrade, the corners of which are emphasised by the use of decorative urns. There is also a heavy cornice at the base of the dome.

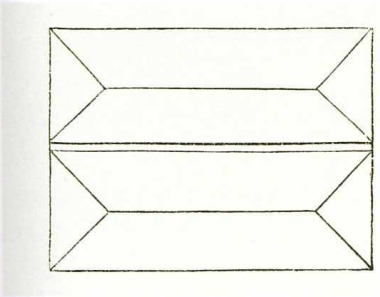


Neoclassical

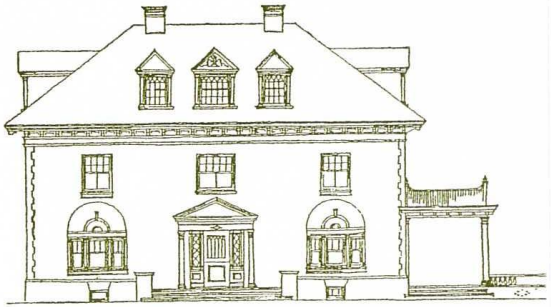
The neoclassical period was marked by a revival of ancient forms based on close observation of original buildings, and the porticoed temple became very popular for public buildings and even for houses. As had been the case in the Roman period, it was often combined with a larger, flat roof structure, although pure Greek temple forms were also used. Palladian architects put particular emphasis on hipped roofs, often combining them with a cupola or a central roof light enclosed in a balustrade, and hipped roofs became a key feature of domestic architecture. Substantial cornices with modillions, or console brackets, were another important part of neoclassical architecture.

Greek-style pitched roof
The Glyptothek (Greek for 'sculpture gallery') in Munich (1816–30) was one of the earliest purpose-built museums. It combines a central temple form, complete with pedimented Ionic portico and pitched roof of Greek form, with two lower wings based on Italian Renaissance precedents with low roofs hidden behind parapets.

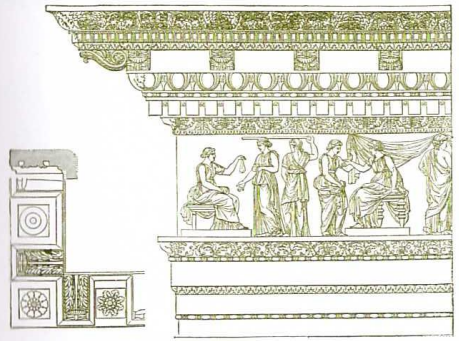




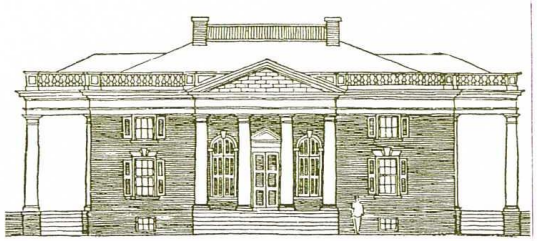
Valley roof
In order to create low roofs that still had sufficient pitch to drain off the rain, architects often used M-roofs or valley roofs. An M-roof has two adjacent low roofs that are separated by a central valley or gutter, and consequently is easy to disguise behind a parapet.



Hipped roof
This 18th-century American house has a hipped roof, angled on all four sides, with three small dormers across the front and larger dormers at the sides. The eaves project and are supported on a modillion cornice, and the two chimney stacks form punctuation marks across the ridge.



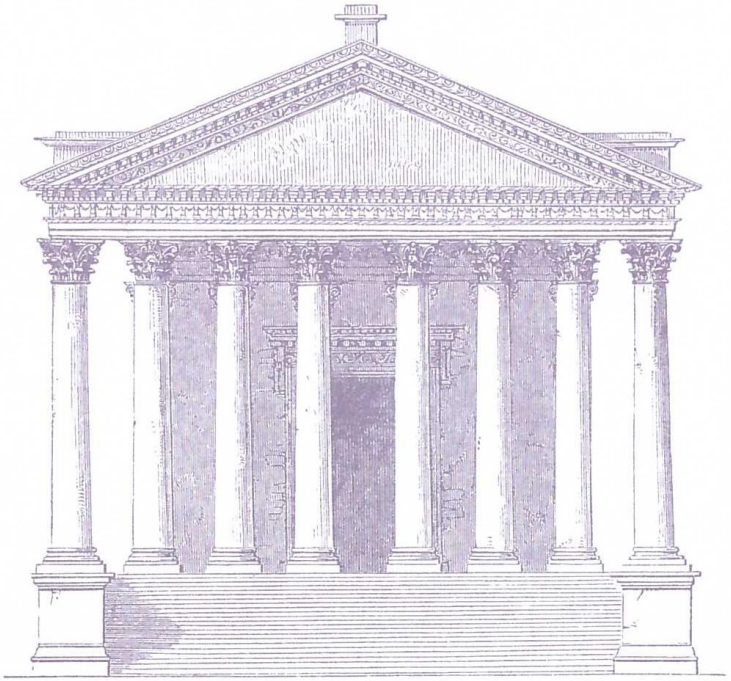
Modillion cornice
Modillions are essentially scroll-shaped console brackets used horizontally rather than vertically, and like consoles, they appear to support the roof above. The flat spaces between the modillions were often ornamented, as here, with rosettes. This cornice also has additional egg-and-dart, pearl beading and dentil mouldings.



Balustraded roof light
This design for an early 19th-century house in Virginia has a central balustraded roof light on top of a hipped roof, which illuminates the core interior space over the stairwell. At the sides, the roof and its balustrade both project outwards over the side porticoes, in a similar style to a Greek temple.

Greek & Roman

The door was not a conspicuous feature of either Greek or Roman buildings because it normally stood behind a large portico, but it was still emphasised with a certain amount of ornament. The usual form of a door opening had inward-tapering sides, probably as a result of the need to give the stone lintel added support at its ends, although doorways became straighter-sided during the Roman period as builders became more confident. The opening was encircled by a moulded surround, often ornamented with motifs such as rosettes, and was topped by a projecting cornice supported on console brackets.

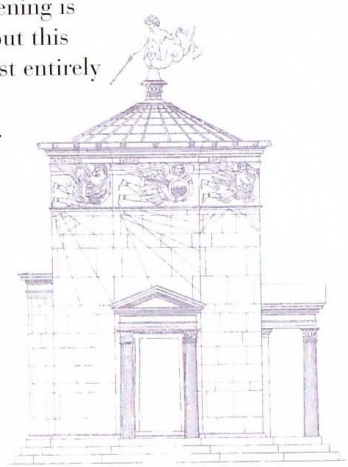


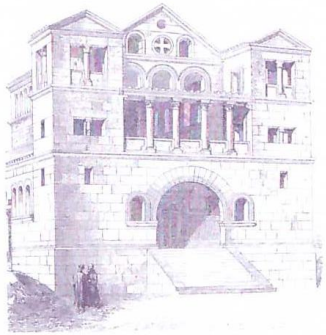
Partially hidden doorway
In both Greek and Roman temples, much of the worship took place not inside the building but on the steps outside. As a consequence, the door into the inner chamber, or *cella*, was almost hidden behind the columns of the portico, as here at the Temple of Bacchus at Baalbek in Lebanon.

Etruscan doorway
The Etruscans lived near Rome in the 8th–4th centuries BCE. The most characteristic feature of Etruscan architecture is the doorway with sharply tapering sides and an overhanging lintel, sometimes represented, as here in an Etruscan tomb at Castel d'Asso, by a carved surround. It probably derived from Egyptian models.

Double doors
This reconstruction of the Erechtheum, situated on the north side of the Acropolis in Athens, shows it with a pair of large double doors. The surround is a simple band of rosettes, but this is topped by a more elaborate projecting cornice supported on a pair of console brackets, and the sides of the frame tilt inward slightly.

Tower door
The door to the Tower of the Winds in Athens (1st century BCE) has a pediment that is supported on a pair of fluted columns with modified Corinthian capitals. The inner opening is still angled, but this angle is almost entirely disguised by the surround.

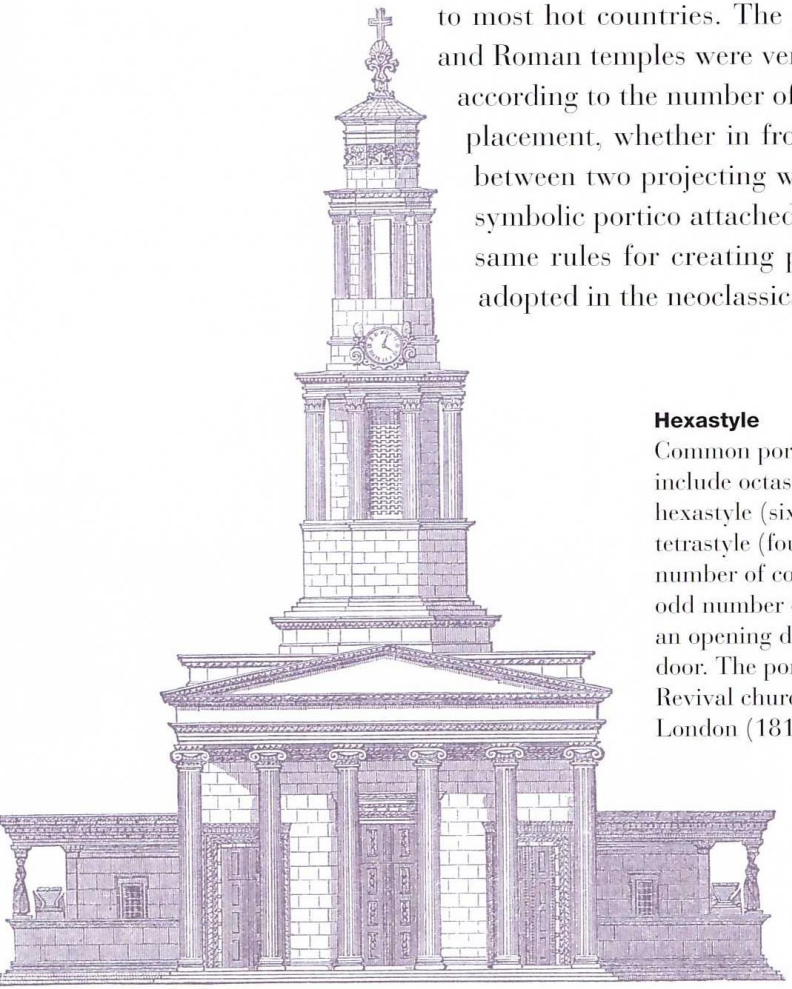




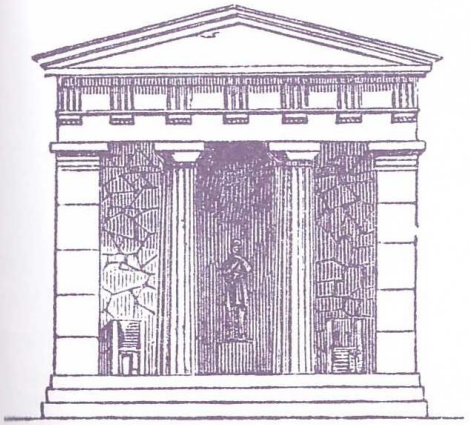
Arched doorway
The entrance into the early Christian (5th century CE) church at Turmanin, Syria, borrows the form of the Roman triumphal arch, with a central arched opening flanked by two smaller arches. Inside the porch, or *narthex*, the actual door has a moulded surround with a heavy cornice.

Portico

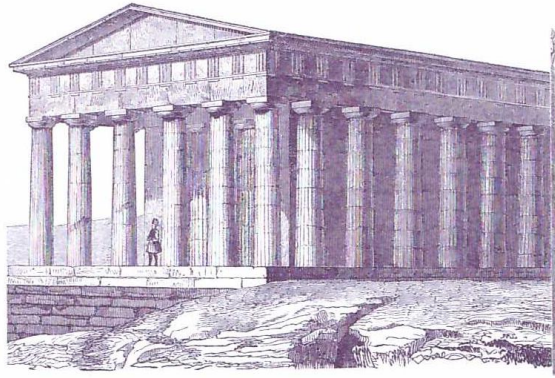
A portico is a covered walkway in front of or around a building. It may also have a gable above it. The concept of surrounding a building with a covered space that is open on one or more sides is extremely ancient and is common to most hot countries. The porticoes of Greek and Roman temples were very precisely defined according to the number of columns and their placement, whether in front of the building, between two projecting walls, or purely as a symbolic portico attached to the façade. The same rules for creating porticoes were also adopted in the neoclassical period.



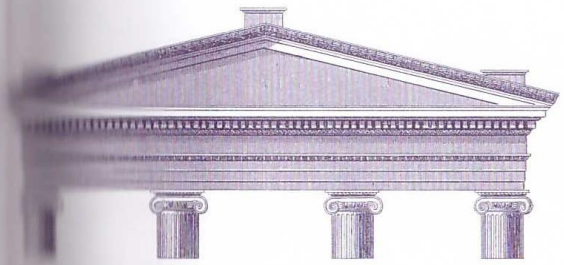
Hexastyle
Common portico arrangements include octastyle (eight columns), hexastyle (six columns) and tetrastyle (four columns). The even number of columns creates an odd number of openings, allowing an opening directly into a central door. The portico of the Greek Revival church of St Pancras, London (1819–22), is hexastyle.



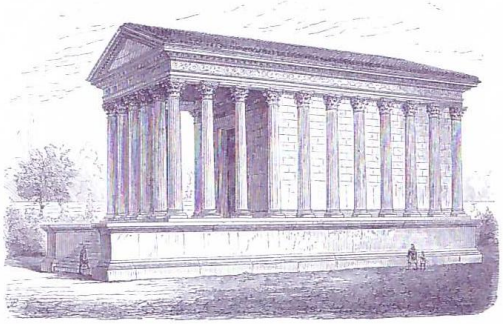
In antis
A portico *in antis* is enclosed between two short projecting wall stubs (*antae*), which end in square projecting pilasters that finish off the portico. This portico at the small temple at Rhamnus in Greece is distyle, with only two columns, but more could be used.



Peristyle
A colonnade that entirely encloses the building within, behind a screen of freestanding columns, is called a peristyle. The peristyle of the Hephaesteum in Athens is peripteral because it has a single row of columns; a double row of columns is called dipteral.



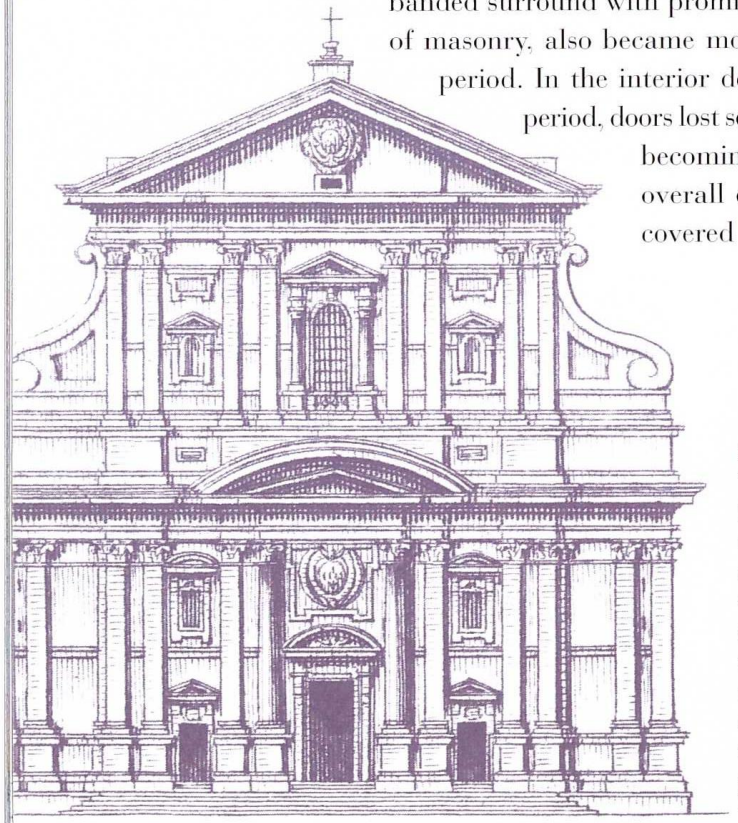
Pediment
The pediment is a key element of the portico. Supported on an entablature above the portico columns, it represents the gable end of the pitched roof ornamented with a moulding on all three sides. Pedimented porticoes were often used on their own in later periods as a large-scale ornament.



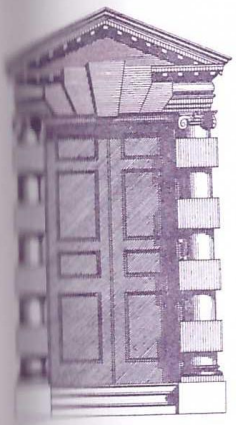
Engaged portico
Along the sides of the 1st-century CE Roman Maison Carrée in Nîmes, France, the columns are fixed to the sides of the inner *cella* building, creating a so-called engaged portico. Those at the front, however, project beyond the building, creating a prostyle (projecting) portico there.

Baroque & Rococo

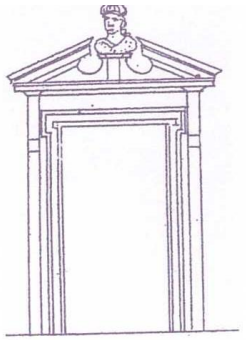
Along with windows, doors were one of the most important decorative aspects of baroque and rococo architecture. The most common aspect of door decoration in this period was a pediment. This could be rounded or pointed, and could have additional elaboration with a so-called broken (or divided) base or apex, often itself ornamented with sculpture. New types of door surrounds, notably the banded surround with prominent alternating blocks of masonry, also became more popular during this period. In the interior decoration of the rococo period, doors lost some of their prominence, becoming only one aspect of an overall decorative scheme that covered all interior surfaces.



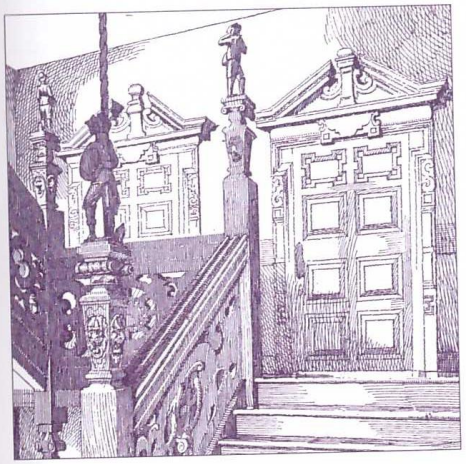
Baroque doorway
The Church of the Gesù in Rome (begun 1568) was an early example of a baroque design that was widely copied later. The three doors, one each for the nave and side aisles, are treated as only one element of a complex two-storeyed façade using curved and pointed pediments and two levels of pilasters.



Blocked surround
Blocked columns, which have every other block made larger and square, were a common baroque device to add interest and variety to an opening. Here, blocked columns are used on a doorway that also has a prominent keystone that is 'dropped' below the edge of the opening.

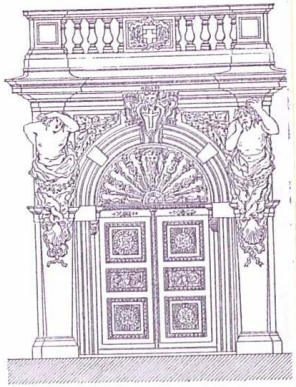


Broken pediment
Broken pediments enabled architectural variety and elaboration. Here, an interior door surround from the Banqueting House in London, designed by Inigo Jones (1573–1652), has an eared architrave. Above that there is a broken-apex pediment supported on brackets, with a female bust in the centre of the pediment.



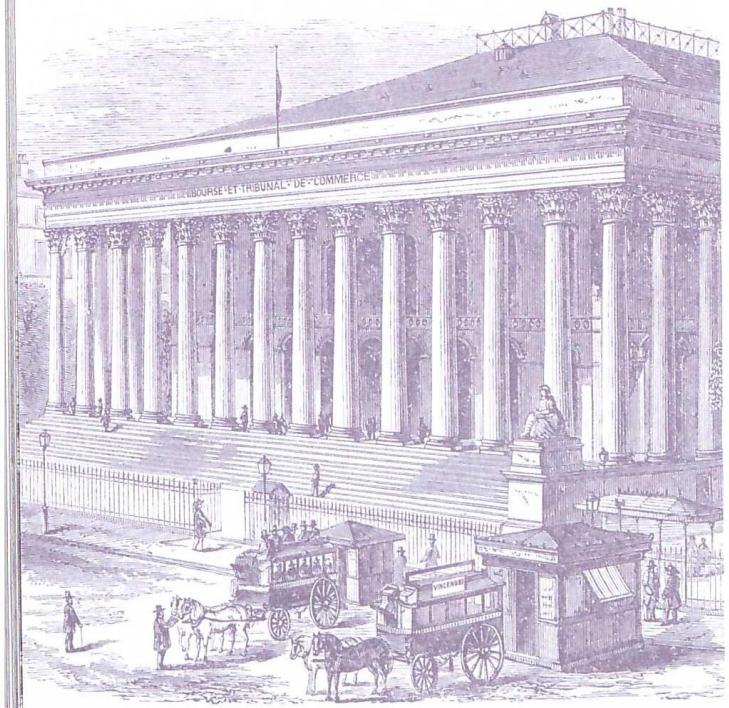
Eared architrave and panels
At Cromwell House in London, a broken pediment with a central finial gives a rich finish to the mid-17th-century door. The eight panels diminish in size towards the top. The uppermost panels and the architrave have ears, and there is strapwork on the architrave.

Atlantes
Late baroque and rococo doors combined a wide variety of ornamental details to create lavish entrances, like this one into a projecting porch. Atlantes support the balcony over the porch, and are joined by other mythological figures, panelled double doors linked by a fanlight, and a variety of shells and drapery.

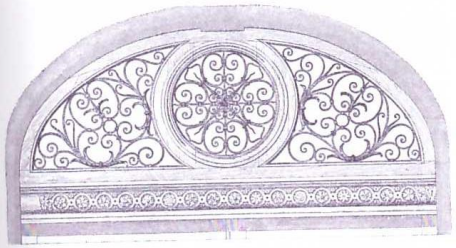


Neoclassical

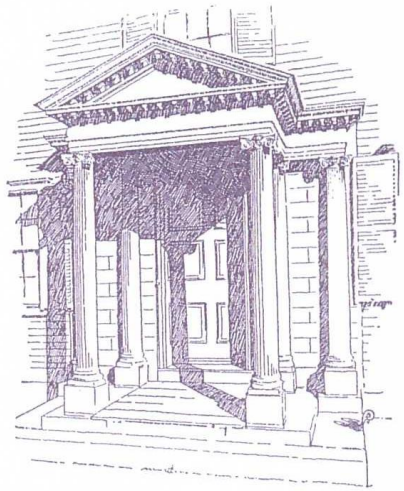
The key aspect of neoclassical door design was the use of a pedimented porch, either in the form of a full-scale portico or as a smaller and simpler porch over the door alone. Complete with columns, these porches often made use of elaborate modillion cornices and other bold ornament. Neoclassical doors were usually panelled, with a six-panelled arrangement being the most common, and were often surrounded with glazed openings, including fanlights above the door and sidelights next to it. Interiors also made use of panelled doors, but these often had complex decoration in plaster and other delicate materials.



Corinthian portico
As well as recalling the glories of the ancient world, an enormous portico gives a building a sense of grandeur and monumentality in a crowded urban setting. The early 19th-century Bourse in Paris has a Corinthian portico across its full width. The actual entrance doors are hidden behind the portico.

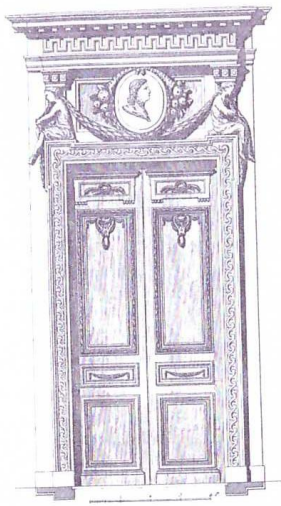


Fanlight
An arched window over a door is called a transom light or fanlight, a name relating to the radiating design often used in such windows. This French neoclassical example has a central roundel under an arched head and elaborate ironwork, but simpler radiating designs were also common.



Pedimented porch
This porch takes the form of a portico and reduces it to a smaller scale, with attached columns at the side to link it visually to the house, and steps up from ground level. Its details include Corinthian columns and a heavy modillion cornice. The door itself is six-panelled.

Delicate detailing
Interior decoration was often much more elaborate than external decoration, because delicate details survive better under cover. This interior neoclassical door has an eared architrave surmounted by a frieze with a central medallion bust and seated caryatids at the sides, which in turn supports a cornice bearing Greek key, or meander, design.

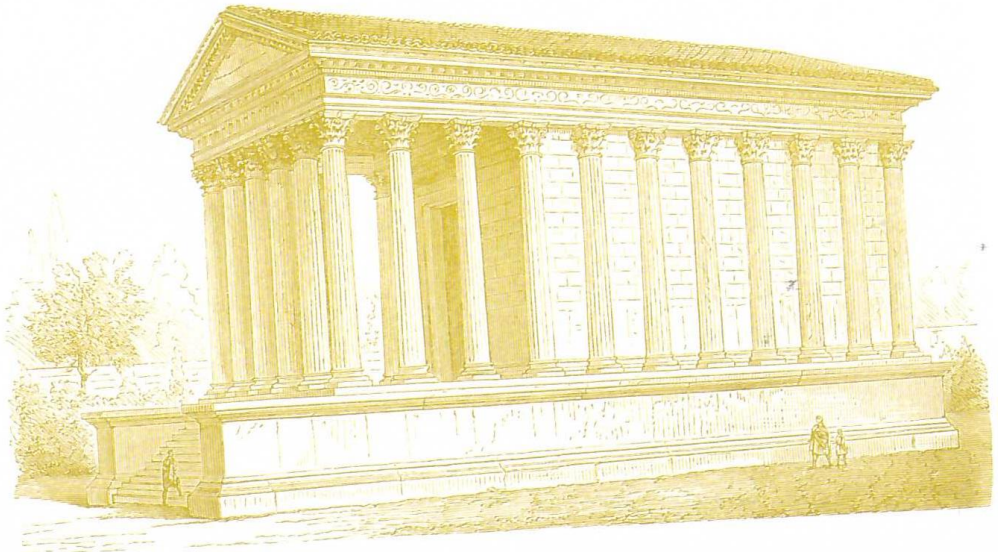


Sidelights
Narrow windows at the sides of a door opening are called sidelights. Here, in the 1814 Hunt–Morgan House, Lexington, Kentucky, USA, they are combined with a fanlight. The arrangement is related to a Palladian opening, but the fanlight is in fact wider than the arched upper section of a Palladian window.

Greek & Roman

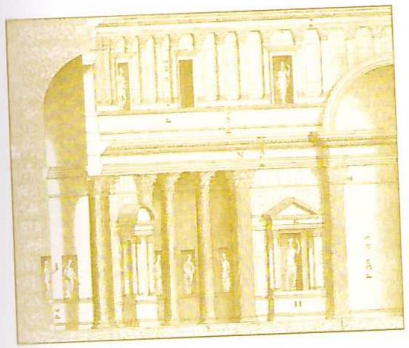
Like the buildings they are part of, Greek and Roman windows are generally constructed using a trabeated (post-and-lintel) system to create a rectangular opening. The surrounds are typically angled inwards to support the lintel better and provide an attractive shape. Some Classical buildings, such as temples, had few windows, but were decorated with niches instead. These could contain statues and were usually topped by a small pediment.

Windowless building
Most Greek and Roman temples, including the Maison Carrée in Nîmes, seen here, did not have any windows in the *cella*, or central shrine room. During the neoclassical period, adapting the temple form to buildings with windows was to prove problematic for architects.

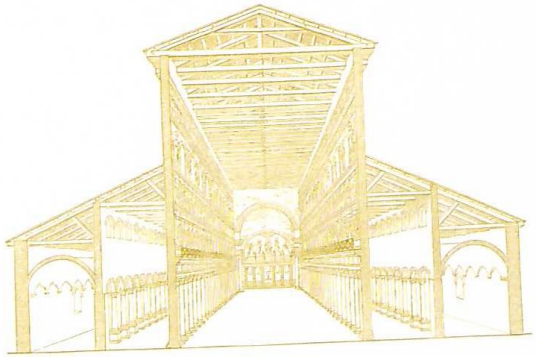


Vitruvian
Windows that are narrower at the top than at the bottom and have very simple surrounds with small, projecting ears at the top corners, as at the Erechtheum in Athens, are called Vitruvian windows. They became an important feature of neoclassical architecture.

Tivoli
This window from the Temple of Vesta at Tivoli in Rome (*c*.80 BCE), is similar to the windows of the Erechtheum, but has ears at the bottom as well as at the top. Revived by Andrea Palladio, this was an important shape in the Renaissance, baroque and neoclassical periods.



Niche
Instead of, or in addition to, windows, many Roman buildings had similarly shaped niches to hold statues, or merely as decoration. The niches in the Pantheon in Rome have alternating triangular and curved pediments on the lower level and simple cornices in the upper storey.

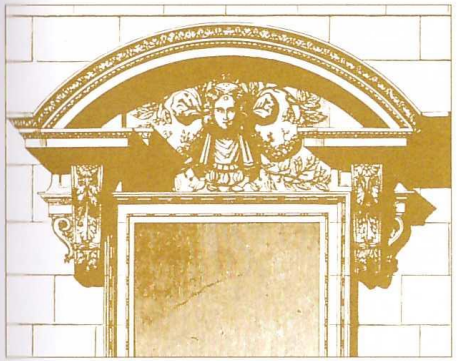


Improved lighting
Christianity placed great emphasis on the faithful being able to see during services, and so early Christian churches were better lit than older temples had been. Old St Peter's in Rome had windows in the apse, aisle windows, and high-level clerestory windows to bring light into the central nave.

Baroque & Rococo

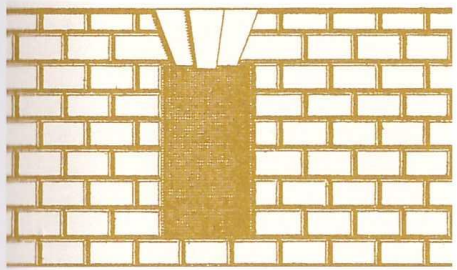
Baroque windows, as with other aspects of baroque architecture, built on the foundations of the Renaissance, but were made much more elaborate, with variations in shape, notably the use of curves. Pediments were the dominant motif of baroque windows, with new types and forms of pediment being developed, including broken-apex and broken-base forms. During the late baroque and rococo periods, pediments often became extremely elaborate. New window shapes, such as the oval *oeil-de-boeuf* (bull's eye), were also developed, as were new types of surrounds, including those utilising rustication, banded masonry and giant keystones.

Baroque combinations
The variety and inventiveness that are characteristic of the late baroque period are seen here in the windows of the Kollegienkirche in Salzburg, Austria. The main apse and tower windows have a mix of rounded heads with prominent keystones and complex pediments, and there are oval windows in the clerestories of the nave and dome.

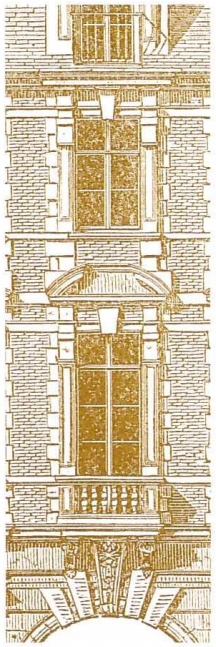


Broken-base pediment
This window head from the 16th-century Hôtel de Vogüé in Dijon, France, has a broken-base pediment, where the lower part of the pediment is divided. Here it is further elaborated with a female bust between garlands, giving a rich and elaborate effect.

Oeil-de-boeuf
Oval or round windows were popular in the baroque period, and are commonly called *oeil-de-boeuf*, or bull's-eye, windows. Often enclosed in an ornate surround, they were most often used for gables, dormers and roofs, where the unusual shape provided added visual interest in the upper part of the building.



Dropped keystone
This window has three oversized keystones whose lower edges hang below the upper edge of the surround, an arrangement called a 'dropped keystone'. A common baroque feature, they provide added emphasis to the window head and are used here with a surround of prominently rusticated blocks.

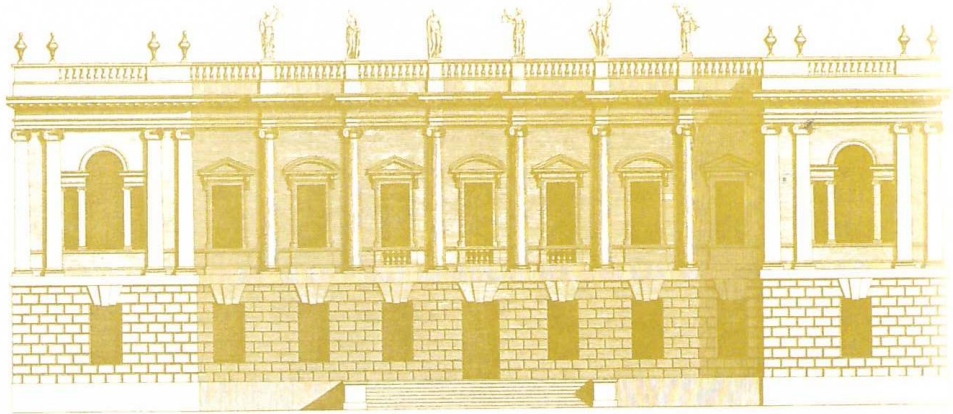


French window
French windows are full-length casements that open all the way to floor level, enabling one to walk through them like doors onto a terrace or balcony. Derived from French Renaissance and baroque buildings such as the Place Royale in Paris, they are now widely used for more ordinary houses.

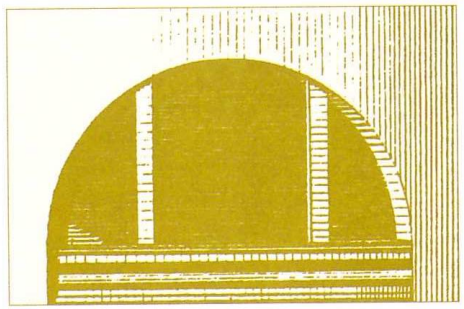
Palladian

The work of the 16th-century Italian Renaissance architect Andrea Palladio was extremely influential during the 18th century through publications of his work, and nowhere was this more evident than in the design of windows. Window styles first widely used by Palladio in his designs came to be key motifs of 18th- and 19th-century neoclassical architecture. The Palladian window, which bears his name, has a central round-arched opening flanked by two smaller, rectangular openings whose entablatures support the central arch. Palladio also made use of the so-called Diocletian window, a semicircular opening that was popular for high-level structures like gables and clerestories.

Multiple Palladian forms
The early 18th-century Burlington House in London makes use of all the main Palladian and neoclassical window forms: the lower storey has rusticated surrounds with prominent dropped keystones; the sides have Palladian windows; and there are alternating pointed and rounded pediments in the middle.

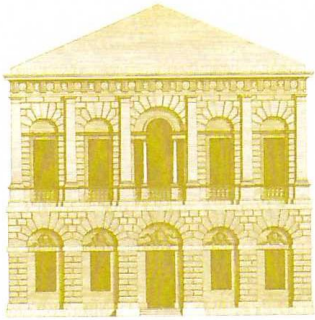


Palladian window
Popularized by Andrea Palladio, the Palladian window, also known as a Venetian window or Serliana, was extremely popular in the neoclassical period. It has a central round-arched opening that is flanked by a pair of smaller straight lights with columns and entablatures. Doors can also be made in this way.



Diocletian window
A semicircular window, that is usually divided (as here) into three compartments by two vertical mullions, is known as a Diocletian or thermal window. Derived from the early 4th-century Baths (*thermae*) of Diocletian in Rome, it was commonly used in neoclassical buildings for gable windows and other high-level openings.

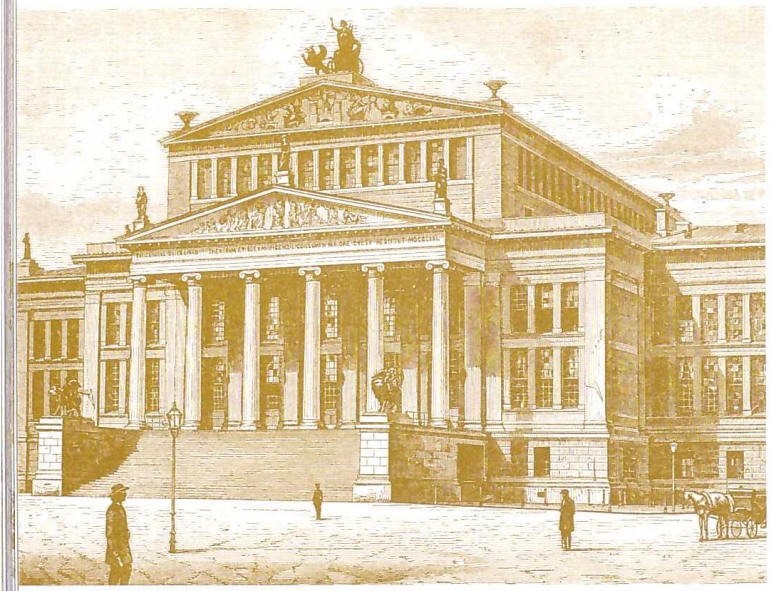
Palladian influence
Palladio's designs were very influential on the design of ordinary houses in the 18th century, leading to the Georgian (English) and Colonial (American) style. Not only were his rectangular box plans and hipped roofs popular, but Palladian windows – used here on the ground floor – and pediments were also common.



Rusticated surround
The windows of this early 18th-century London house are set within rusticated arcades. On the lower storey is a simple arcade, while the upper storey has an additional frame of an entablature with pilasters. The openings themselves would have had sash windows, although they are not shown here.

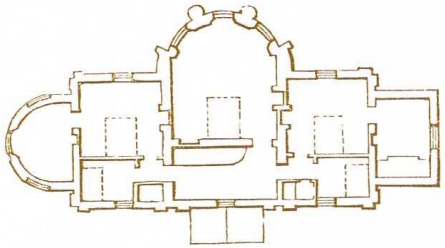
Neoclassical

The late 18th- and early 19th-century neoclassical period saw the introduction of Greek forms in place of the Roman-inspired forms that had dominated the Renaissance, baroque, and Palladian periods. In particular, the portico and continuous colonnade were key forms, but this led to a problem: Greek temples did not have windows, and architects therefore struggled to find ways to marry the portico with the need for natural light in the interior. In terms of actual window forms, the rectangular sash window was the most common, and was frequently made in different sizes in order to create pleasing visual proportions on the façade.

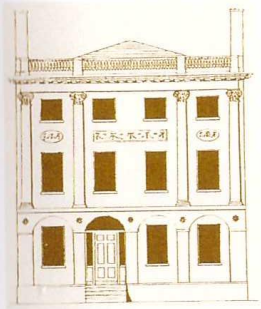


Glazed colonnade
Friedrich Schinkel's Schauspielhaus (theatre) in Berlin, of 1818–21, shows how this great architect coped with the demands of combining the usually windowless classical temple form with a building that needed many windows. He did this by creating what are essentially glazed colonnades along the sides of the building.

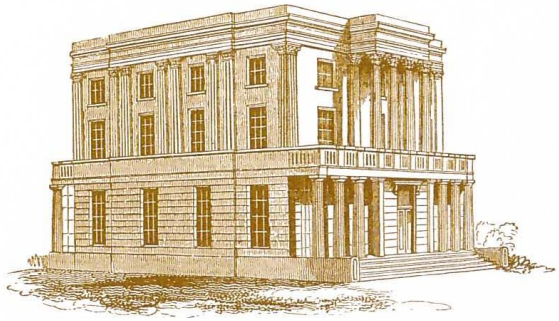
Sash window
The demolished Apthorpe House in New York City (built 1762) had rectangular sash windows topped by pediments on the main floor, and smaller, square sashes above and in the dormers. Window sizes were related to the nature and location of the rooms, with those at the top of the house being smaller.



Bow window
Curved bay windows are usually called bow windows, and give a graceful and elegant exterior profile. Bow windows were especially popular during the late 18th and early 19th centuries, and were sometimes mirrored inside by another curve to create an oval room.



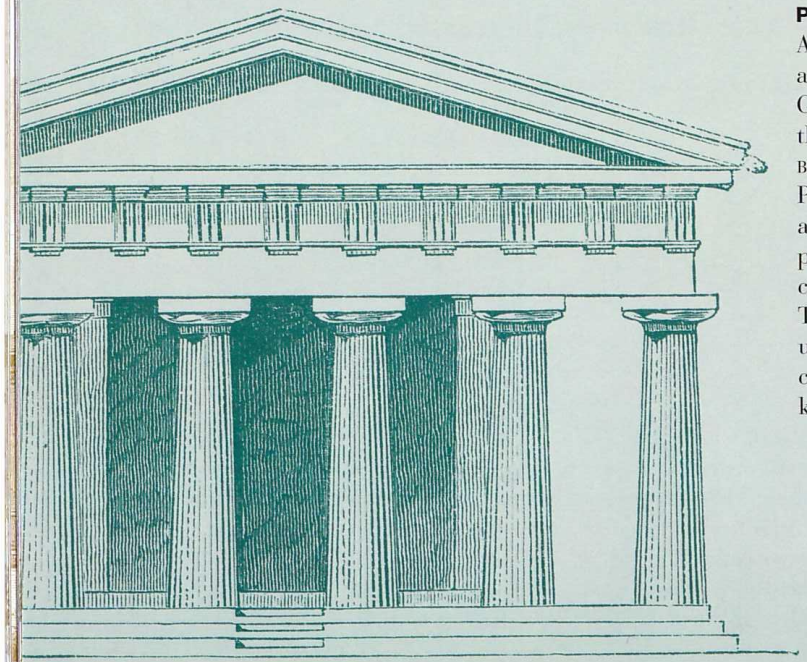
Neoclassical motifs
This house in Salem, Massachusetts, USA of *c.*1800, was influenced by the Scottish 18th-century architect Robert Adam and uses typical neoclassical motifs. The lower windows are set within a blind arcade, while those above are framed within pilasters. The small, square windows on the top floor are typical of the period.



Neoclassical villa
The neoclassical temple-style shell of this early 19th-century English villa is just that, for the sash windows give away its real function as a house. Architects often found it best to confine the portico to the front, because this made it easier to provide good interior light.

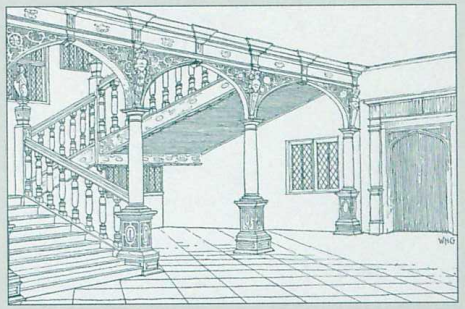
Introduction

At a basic level, stairs are simply about getting us from one level to another in a building, but in reality stairs have a much more fundamental place in the design of buildings. They can add drama and grandeur to both inside and outside; they can invite us to come in, or make it difficult for us to gain access to other levels. The design of staircases has changed over time, making them a good dating tool, and looking at the position and nature of a staircase can help to give us an understanding of how a building was intended to be used.

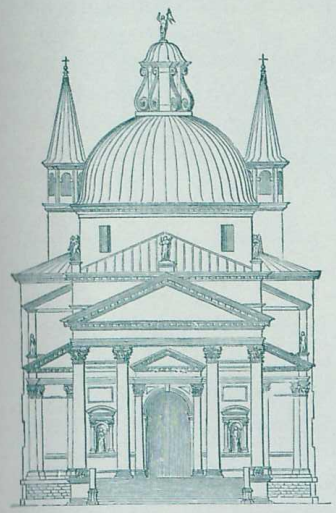


Podium
A stepped podium gave added grandeur to a Greek temple such as this 6th/5th-century BCE example from Paestum in Italy, and also provided a firm platform for the columns to stand on. The uppermost step, upon which the columns rested, was known as the stylobate.

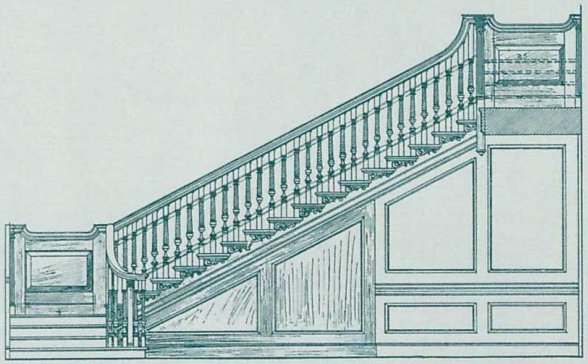
Spiral stair
Spiral, or newel, stairs, set around a central newel, or pillar, were the most common type of stair during the Middle Ages, and could be made from wood or, as seen here, from stone. They were particularly popular for castles because their confined space and limited views made them easily defensible.



Well stair
During the Renaissance period, spiral stairs became less common and were replaced by well stairs, like this example from Knole House in Kent, of *c.*1605, which goes up in short, straight flights around an open well. The newel posts at the corners are often heavily decorated.



Entrance stair
Here, a broad flight of steps is used to add a sense of drama to the entrance of the Redentore Church in Venice, begun in 1577 and designed by Andrea Palladio. The pilasters create the sense that the stairs narrow inwards as they approach the door, drawing the worshipper inside.

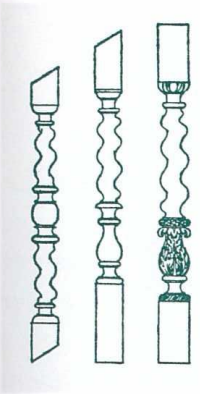


Straight run
During the neoclassical and Victorian periods, long, straight flights of stairs were fashionable, as were elegant sweeping curves, especially for the handrail. This 18th-century example has a long, straight flight, and the handrail makes a graceful curve around the newel post at the bottom.

Baroque & Rococo

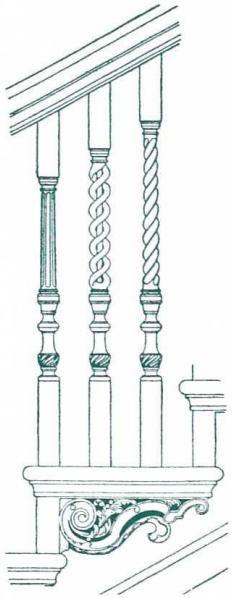
Like other aspects of baroque design, baroque staircases borrowed heavily from the Classical design repertoire, but added enough variety to create elaboration without being fussy. Tapering vase-shaped balusters were particularly popular in the baroque period, but in the 18th century much more elaborate designs – including spiral shapes and balusters made to look like miniature columns – were also used. New materials (notably cast iron, which became more widely available in this period) were utilised to good effect to create delicate designs that were not possible in wood; and open-string staircases, in which the ends of the treads and risers were exposed, were also introduced.

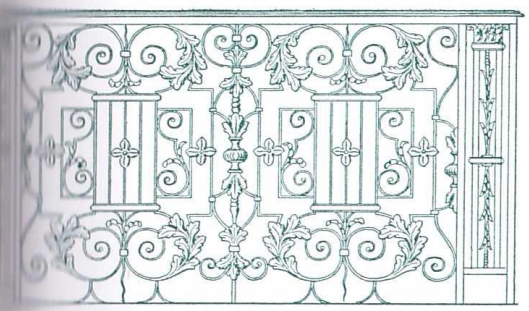
Vase-shaped balusters
The graceful vase-shaped balusters of the 17th-century Ashburnham House in London, designed by Inigo Jones, were influential in introducing much simpler, Classically inspired baluster forms into England. The overall effect, including the simple square newel posts and flat handrails, is derived from Italian Renaissance and baroque balustrades.



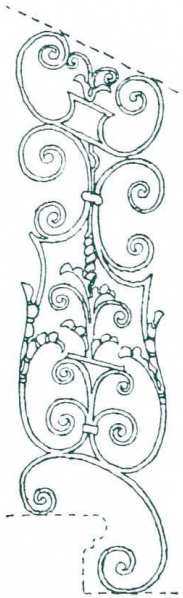
Twisted balusters
Twisted or spiral balusters were popular in the early 18th century and became a distinctive feature of stairs of this period. They were turned on a lathe and usually took the form of an open corkscrew spiral, although tighter spiral shapes can also be seen on some examples.

Mixed balusters
In the middle of the 18th century staircases with mixed balusters – including twisted and spiral shapes, as well as miniature columns complete with capitals and bases – were popular. There was no standard pattern or combination of balusters, but many such staircases repeated the same combination of three on each tread.





Ironwork panel
Late 17th- and 18th-century improvements in metal-working techniques made cast-iron balusters popular. Light and strong, they could be made in delicate patterns. Initially very expensive, they were used for high-profile projects like Hampton Court Palace in Surrey, as seen here, but in later years they became more widely available.

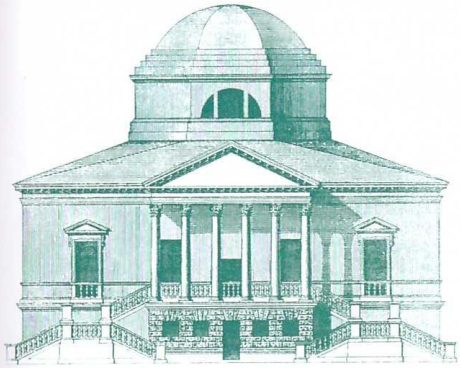


Rococo balusters
The asymmetrical C-curve characteristic of the rococo period lent itself to staircase design along with other decorative elements. These cast-iron balusters use C-curves to bridge the height gap between treads, creating a more continuous line up the stair. Notice that the treads now have an open string.

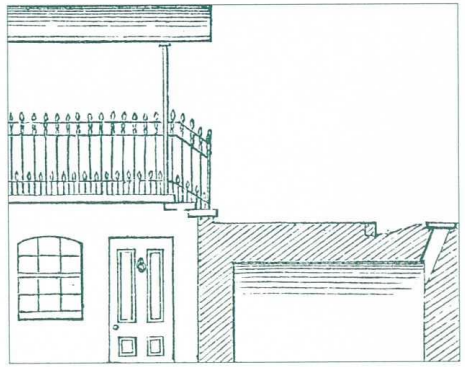
Neoclassical

In Palladian and neoclassical architecture, staircase designs drew heavily on ancient models. The temple façade, complete with stepped podium, was a key element of buildings of this period and could be used either as the main element of the façade or as one part of a larger design. As rows of terraced houses became more widespread, new uses for stairs, such as the split stair combining access to the raised front door and the sunken service area, were developed. Inside, staircases were simplified, with straight flights, sometimes combined with a gentle curve, becoming more common. Balusters, too, took on new shapes based on antique models.

Stepped podium
Thomas Jefferson's design for his house at Monticello, Virginia, USA, has a projecting portico raised up on a stepped podium that draws heavily on Greek models. Jefferson deliberately chose what he perceived to be the more democratic Greek style over the Roman style, which was considered to have royal or imperial connotations.

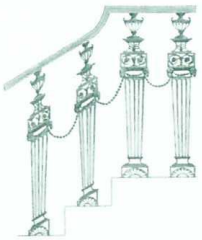


Exterior stair
Lord Burlington's Chiswick House in London, begun in 1725, was strongly influenced by Palladian models. The elaborate multiflighted external staircase on the entrance front, seen here, is based on the stairs of Renaissance Roman villas, but is combined with a temple portico based on antique Roman models.



Area
Short flights of steps descending into a lower-ground-floor space called an 'area' are common in neoclassical town houses, and usually, as here, open onto a door at the bottom. They developed from the need to provide access for servants and deliveries without going through the front door.

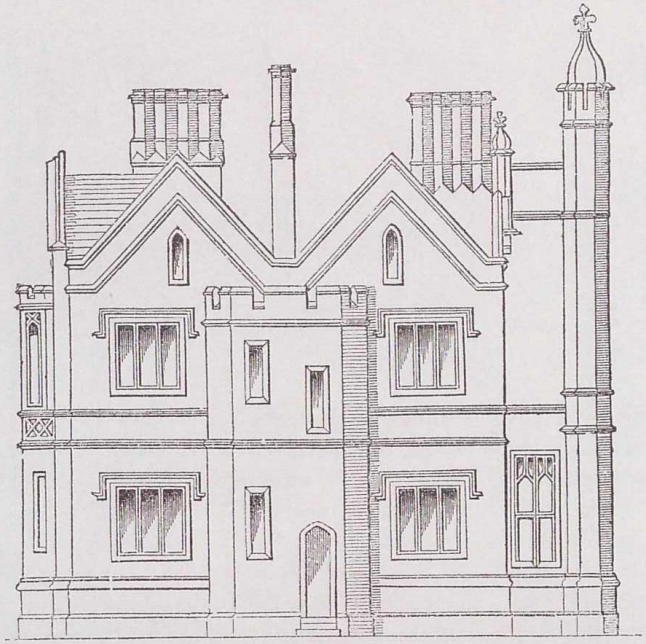
Circular stair
Unlike a spiral stair, which has a central newel post, a circular stair curves around an open well. Circular stairs were very fashionable in the 18th and early 19th centuries, as in this mid-18th-century curving stair from a large London town house.



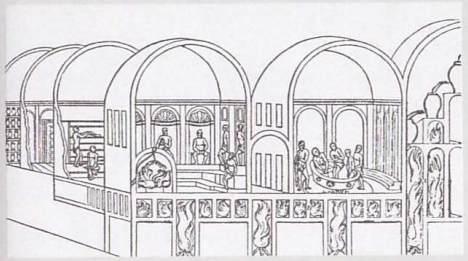
Adam-style balusters
Cast-iron balusters such as these, designed by the important neoclassical architect Robert Adam, have a tapering pilaster form that is topped by small Roman-style lanterns. The strength of the iron, even when it is very thin, enabled the pattern to be extremely delicate, a characteristic of Adam's work.

Introduction

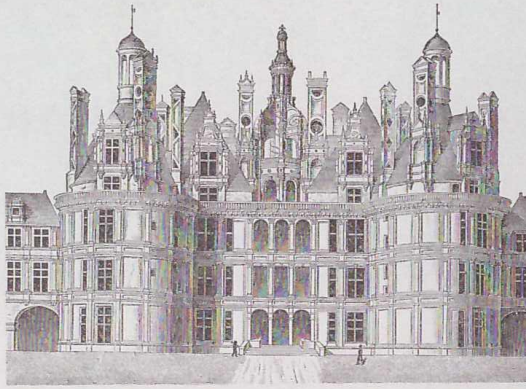
The Romans had complex underfloor heating systems called hypocausts, and medieval castles and palaces had fireplaces, but it was not until the 16th century that fireplaces became widespread in smaller houses. Before that time, most houses had a single main room with an open fire at the centre, which was used both for heating and for cooking. Fireplaces are constructed in such a way that smoke is directed up the chimney through a flue, and there is often a mantelpiece or shelf above to improve heat circulation. Both fireplaces and chimneys follow prevailing fashions and can be a good dating tool.



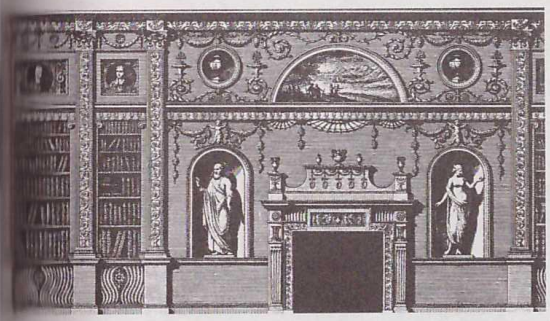
How many fireplaces?
You can usually tell how many fireplaces are inside a house from the chimneys outside. Each has its own flue that vents the smoke through the chimney, and these are normally visible at the top of the chimney. Count the flues and you count the fireplaces. On this house there are nine.



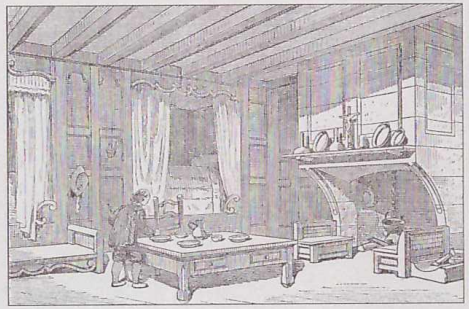
Hypocaust
As this diagram depicts, the Romans developed elaborate underfloor heating systems, or hypocausts, that were most commonly found in bathhouses, but were also used in palaces and villas. Heat from a furnace was conducted through spaces under the floor to warm the rooms above and to heat water for bathing.



Elaborate chimneystack
The heavily embellished chimneystacks of the Château de Chambord in France (begun 1519), which have a variety of decoration including roundels, chevrons and lozenges, are typical of the Renaissance period. Fireplaces were very expensive, and elaborate chimneystacks were a way of prominently displaying the owner's wealth.



Ornate fireplace
In small houses the fireplace is often the main decorative element in a room, but in larger houses it is usually only one element in an overall design. In the Long Gallery of the neoclassical Syon House near London, the elaborate fireplace is part of a grand decorative scheme.

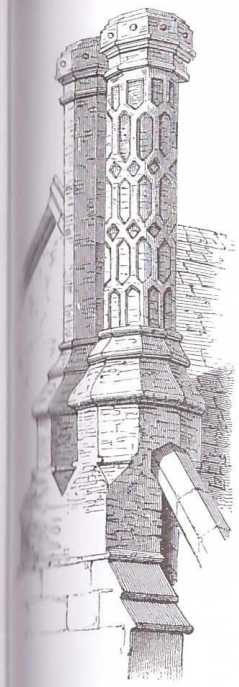


Cooking hearth
Until fairly recently, smaller houses had only one fireplace that was used for both cooking and warming the living space. This 19th-century French house shows how, with iron hooks for pots over the fire, ornaments and pans on the mantelpiece, the room was decorated for eating and living.

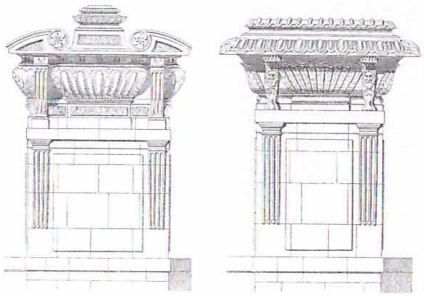
Renaissance & Baroque

Improvements in brick-making techniques in the 15th and 16th centuries made chimneys more widely available, but fireplaces were still extremely expensive. The owners of houses with fireplaces drew attention to this fact through the use of very elaborate chimneystacks on the outside of the house. Ornament followed prevailing fashions, and during the Renaissance decoration derived from Classically inspired *all'antica* motifs was particularly popular. In the later baroque and rococo periods, fireplaces were decorated with the fashionable C-curves, shells, scrolls and swags. Elaborate overmantels or chimneypieces that enabled the display of sculpture over the fireplace also became popular during this period.

Multiple chimneystacks
The multiple brick chimneystacks of the early 16th-century Compton Wynyates in Warwickshire, highlight the many fireplaces inside. There are various designs, including spirals and lozenges. Their asymmetrical placement is partly due to the arrangement of the rooms, and partly because the building developed gradually over a period of time.

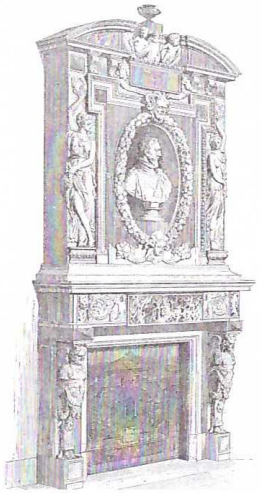


Decorative chimney
Built-in fireplaces were a great luxury even in the 15th and 16th centuries, and houses with fireplaces had elaborate chimneys so that everyone knew about them. The chimneys were heavily decorated and were very often different from one another. These 16th-century chimneys in Tonbridge, Kent, for instance, are constructed of specially carved and shaped bricks.



French Renaissance chimney
This elaborate pair of chimneystacks are embellished with *all'antica* motifs, are shaped like Roman sarcophagi (highly decorative stone coffins), and ornamented with pilasters, pediments, masks and mouldings, including egg-and-dart. They show how Classical motifs were adapted to new uses during the Renaissance and were employed to display wealth and power.

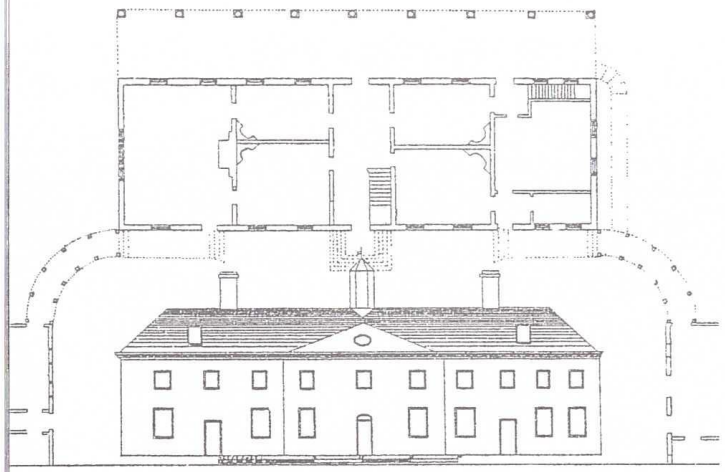
Ornate chimneypiece
In grand baroque rooms, the actual fireplace was only one part of a much larger sculptural composition, with a decorative chimneypiece above the fireplace. This example from the Château de Villeroi in France has a portrait bust in an oval garlanded frame, set within a larger frame and topped by a curved broken pediment.



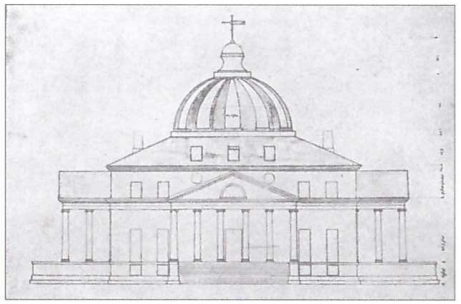
Mirrored overmantel
This fireplace from the Palace of Versailles near Paris has a mantel shelf with elegant scrolling C-curves and shell decoration. The area over the fireplace has a mirror made to look like a window, but a real window in this position would have been impossible because of the chimney behind.

Neoclassical

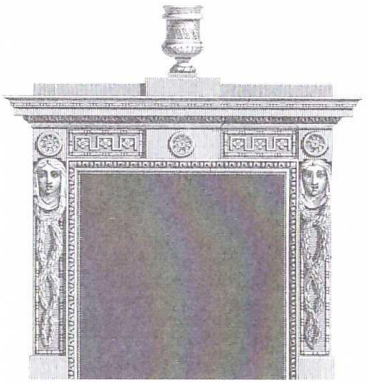
Visible chimneystacks did not suit the purity of Classically inspired buildings very well, and so in the neoclassical period chimneys were often hidden, either by placing most of their length within the roof or by concealing them behind a parapet. However, this was not always easy because improvements in both fireplace and chimney designs saw fireplaces become taller and shallower and the chimneys made longer to improve the draft. Fireplaces had flanking pilasters and a straight mantelshelf like a projecting cornice above. The sides could be plain or fluted, and in the early 19th century bull's eyes in the corners were also popular.



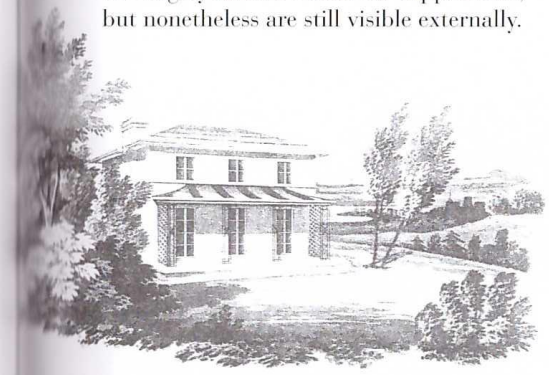
Multiple fireplaces
George Washington's house at Mount Vernon, Virginia, USA (1757–87), has two chimneystacks, one towards each end of the house. The plan shows how these chimneys were able to serve multiple fireplaces inside, which would each have had a separate flue within the main stack, with separate flue stacks almost hidden within the hipped roof. Positioning them in this way enabled them to serve two sets of rooms.



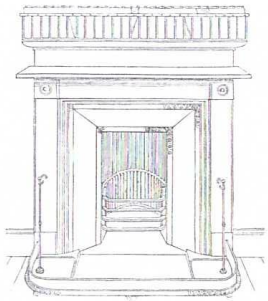
Partially concealed chimneystack
Thomas Jefferson's unexecuted competition design for the president's house located in Washington, DC (1792) draws heavily on Palladian models, with a central dome and porticoes on all four sides. The unavoidable chimneystacks, necessary to provide heating, are largely hidden within the hipped roof, but nonetheless are still visible externally.



Adam fireplace
This fireplace in the style of the Scottish architect Robert Adam makes use of a range of neoclassical decorative motifs, including the Greek key or meander pattern. There is a projecting mantelshelf based on a cornice, and the pilasters at the sides are represented by female heads with garlands.



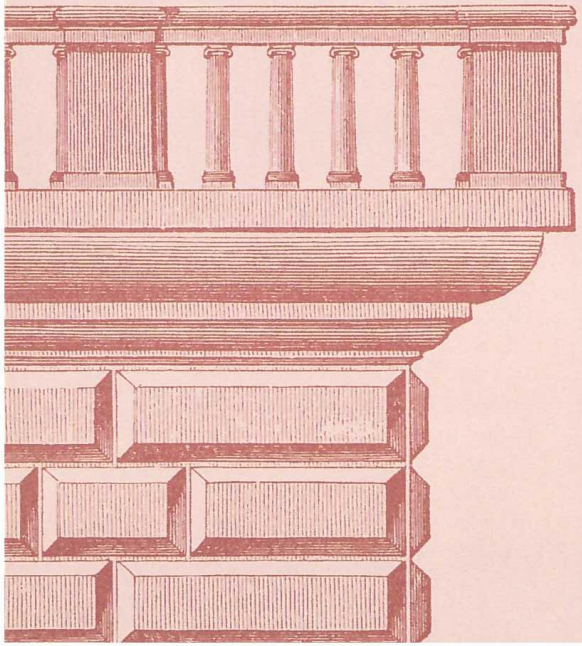
End stack
On this house the chimneys are located on the side, or end, walls and would have served fireplaces placed one above the other on each floor. This arrangement, called an end stack, was common in the 18th and 19th centuries and could also be adapted for terraced or row houses.



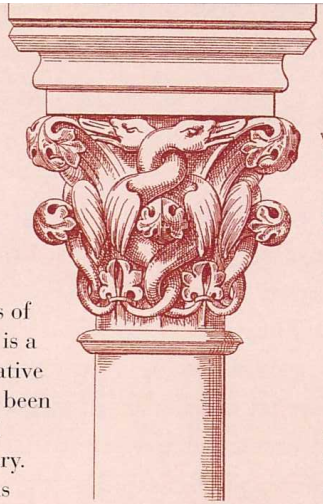
Bull's-eye fireplace
This illustration shows one of the most common types of early 19th-century fireplace. It has a roundel or bull's-eye motif in each corner. Here the sides of the surround are plain, but they could also be fluted. This design could be made in marble or in painted wood.

Introduction

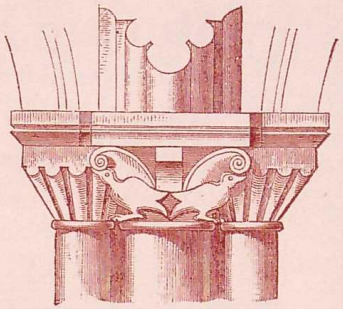
Ornament is a fundamental part of architecture, and is used to enliven surfaces, highlight particular parts of a structure and generally make the building more attractive. Designers in all periods of architectural history have exploited a huge variety of motifs, ranging from human and animal forms through foliage and flowers to all manner of geometric designs. Architectural elements such as pediments and gables are also used decoratively, and even simple variations in texture can be highly ornamental. This section takes a look at the main classes of decorative ornament and helps you understand how it has been used over the centuries.



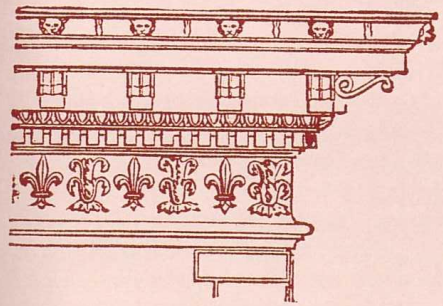
Light and shade
Subtle variations in the depth of carving can add enormously to the visual complexity of an ornamental pattern. On these blocks, rustication – the shadow pattern created by the angled grooves between the blocks – creates a far more sophisticated effect than would be possible with flatter carving.



Paired motifs
Using multiples of the same motif is a common decorative device that has been employed in all periods of history. Here, two swans with intertwined necks provide a sinuous centrepiece for a Romanesque capital from Speyer, Germany, while also recalling the actual mating behaviour of these long-necked creatures.

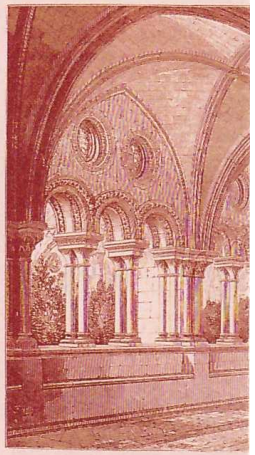


Addorsed forms
One simple way of creating interest and variety in a design is to use the same object mirrored. This is particularly common with birds and beasts, which are said to be 'affronted' if they are face to face and 'addorsed' when they are back to back, as here with these Romanesque birds.



Alternating motifs
The alternation of motifs can keep a very regular design from looking dull. Here, on the entablature of the Palazzo Farnese, Rome, fleurs-de-lis alternate with Gothic-derived foliage, thereby breaking up the design while still maintaining the symmetrical rhythm.

Repeated forms
Multiplication of forms creates variety without being overly elaborate. In the Romanesque cloister at Tarragona in Spain, the arcade is carried on paired shafts with paired sets of mouldings. The twin round openings above repeat the doubling motif, and give a 3-2-1 effect with the outer arch.



Glossary

ACANTHUS a type of plant with deeply divided leaves.

AISLE the part of a building divided off by an arcade.

ALL'ANTICA based on antique models.

ALTAR a block or stand where offerings are made to a deity.

AMBULATORY an aisle enclosing a church choir.

ANTEFIX one of the vertical blocks used along the edge of a roof in the Classical period.

ANTHEMION stylized honeysuckle leaf.

ANTIQUITY the ancient Greek and Roman periods.

APEX the pointed top of a gable or pediment.

APPLIED made separately and added later.

APSE the curved east end of a church.

ARABESQUES scrolling foliage designs.

ARCADE a row of arches.

ARCH a curved opening.

ARCHITRAVE the lowest component of a Classical entablature; also the frame around an opening.

ASHLAR stone masonry of regular blocks.

ASTRAGAL a half-round moulding.

ATLAS (PL. ATLANTES) a support in the form of a male figure.

ATRIUM an open-roofed entrance hall or central court.

ATTACHED *see* Engaged.

BALCONY a projecting gallery or walkway.

BALUSTER a vertical shaft supporting a rail.

BARGEBOARD a decorative board covering the angled sides of a roof gable.

BAROQUE the extravagant European architectural style of the 17th and 18th centuries.

BASE the lower part of a column.

BASILICA a Roman and Christian building type with an aisled nave.

BATTLEMENT a parapet with alternating high and low sections; also called crenellation.

BAY the vertical division of a building, often by windows or arches.

BCE before the current, Common or Christian era (period).

BEAM a horizontal structural support.

BEAUX-ARTS an elaborate late 19th- and early 20th-century architectural style.

BELLCOTE a small gable holding bells.

BELL TOWER a tower for bells.

BIFORATE WINDOW a window with two openings, often with a roundel above; also called a Venetian arch.

BLIND (of an arch or tracery pattern) placed against a wall without an actual opening behind it.

BLIND ARCADE a blank arcade, without openings.

BOND a pattern of laying bricks.

BOSS a central stone, locking together vault ribs.

BOW WINDOW a curved bay window.

BRACE a diagonal support linking a series of uprights.

BUCRANIA ox-skulls used as ornament, usually with garlands.

BUST the head and shoulders of a human figure.

BUTTERY a room in a medieval house for storing wet foods.

BUTTRESS a mass of masonry built against a wall to reinforce it.

CAISSON a sealed, watertight concrete structure used as a foundation in wet conditions.

CAME a lead strip holding stained glass.

CANOPY a projecting ornamental hood.

CANTED angled.

CANTILEVER an overhanging projection with no support on its outside edge.

CAPITAL the top of a column.

CARTOUCHE an ornamental frame, usually oval or round.

CARYATID a support in the form of a draped female figure.

CASEMENT WINDOW a window with hinged panes.

CE in the current, Common or Christian era (period).

CELLA the enclosed inner sacred area of a Classical temple.

CEMENT a lime-based paste that binds together and sets hard; it is used in mortar, concrete, and as render.

CHAMFER a bevelled edge.

CHAPEL a subsection of a church with its own altar, or a small church.

CHEVRON a V-shape or zigzag.

CHOIR the part of a church reserved for the singers.

CLADDING an exterior covering.

CLAPBOARD a type of wooden cladding.

CLASSICAL pertaining to the ancient Greek and Roman periods.

CLERESTORY a row of high-level windows.

CLOSERS short bricks or stones around an opening.

COFFERING a pattern of sunken panels.

COLONETTE a small column.

COLONNADE a row of columns.

COLUMN a freestanding shaft, often supporting an arch or entablature.

CONCRETE a mixture of cement and aggregate (sand and stones) that dries very hard; it is used as a building material.

CONOIDS cone-shaped structures that form the fans of a fan vault.

CONSOLE a bracket support with an inward-curving scroll at the top and an outward-curving scroll at the bottom.

CORBEL a projecting block or capital supporting an arch or shaft above.

CORINTHIAN one of the five Classical Orders.

CORNICE a horizontal projecting moulding, especially the topmost component of an entablature.

COTTAGE ORNÉ an "ornamental cottage" in a fanciful rural style, often intended to form part of a Picturesque landscape.

CRENELLATION *see* Battlement.

CRESTING an ornamental feature on top of a horizontal element.

CROCKET a projecting stylised foliage knob.

CROSSING the area in a church where nave, transepts and choir intersect.

CRUCIFORM cross-shaped.

CUPOLA a small decorative form of dome.

CURTAIN WALL a thin, nonstructural wall in front of a structural frame.

CUSP a decorative point within an arch.

CYCLOPEAN MASONRY very large masonry.

DECORATED a style of English Gothic architecture.

DENTIL MOULDING a row of small square blocks.

DIAPER a pattern of repeated squares or lozenges.

DIOCLETIAN WINDOW a half-round opening with three subsections.

DORIC one of the five Classical Orders.

DORMER a window projecting from a roof.

DOUBLE-HUNG WINDOW a sash window with two sliding sections.

DOVECOTE a building for raising doves or pigeons for food.

DRIP MOULDING *see* Hood moulding.

DRY STONE WALLING masonry made without mortar.

Glossary

EARED (of an architrave) with projections at the upper corners.

EAVES the part of a roof that projects beyond the wall.

EGG-AND-DART a type of moulding resembling egg shapes alternating with dart shapes.

ELEVATION any of the vertical faces of a building, inside or out.

EMBRASURE the sides of a window opening.

EN DÉLIT detached (referring to a Gothic stone shaft).

ENFILADE a series of rooms leading off each other with the doors aligned.

ENGAGED (of a column) attached to the wall.

ENTABLATURE the whole of the horizontal structure above the capitals in a Classical Order.

EXEDRA(E) large niche(s).

FAÇADE the front exterior face of a building.

FACET one face of a geometric shape.

FANLIGHT a semicircular window over a door.

FEDERAL STYLE American neoclassical architecture of *c.*1776–*c.*1830.

FESTOON a curved foliage and fruit garland tied with ribbons.

FIELDED PANEL a square or rectangular panel with a raised central section.

FINIAL the decorative knob on top of a gable, post or other upright.

FLAMBOYANT a late medieval style of Gothic architecture characterised by flowing motifs.

FLÈCHE a small spire, usually of lead-covered timber.

FLUE the pipe inside a chimney to conduct smoke outward.

FLUTING parallel concave channels on a column or surface.

FLYING BUTTRESS a freestanding arched buttress.

FRAMING a structural skeleton in wood or metal.

FRIEZE a decorative horizontal band, especially the central component of an entablature.

FRENCH DOORS OR WINDOWS full-length casement windows opening like doors onto a balcony or terrace.

FRESCO a painting with pigment applied directly into wet plaster.

GABLE the pointed end wall of a roof.

GALLERY an internal passage, usually open on one side.

GARGOYLE a grotesque water spout.

GARLAND a band of flowers and foliage; *see also* Festoon.

GEORGIAN English architectural style of *c.*1714–1830.

GIANT ORDER an arch encompassing two or more storeys.

GLAZED made of glass; glossy.

GLAZING BAR *see* Muntin.

GOTHIC European architectural style of *c.*1150–*c.*1500.

GOTHIC REVIVAL a late 18th- and 19th-century Gothic-inspired style.

GREEK the style current in ancient Greece from the 7th to 2nd centuries BCE.

GREEK REVIVAL a late 18th- and early 19th-century style drawing on ancient Greek examples.

GROIN VAULT an intersecting barrel vault without ribs.

GROTESQUE fantastic or mythical; especially refers to figures combining human, animal and foliage forms.

GUILLOCHE a decorative pattern of interlaced circles.

HALF-TIMBERED having exposed timber framing.

HALL an entranceway; also the main room of a medieval house.

HAMMERBEAM a short roof timber cantilevered out to carry an upright.

HEAD STOP the end of a moulding that is carved with a human face.

HEARTH a fireproof floor area for making a fire.

HERALDIC using, or pertaining to, heraldry.

HERALDRY the system of coats of arms and symbolic badges.

HIPPED ROOF a roof that is pitched at the ends as well as the sides.

HISTORIATED depicting a narrative.

HOOD MOULDING a three-sided moulding over a window or door; also called drip moulding.

IMBREX **(PL. *IMBRICES*)** a curved tile used to cover joints between *tegulae*.

INFILL material used to fill spaces between the components of a framework.

IONIC one of the five Classical Orders.

JAMB the vertical part of a door or window opening.

JETTY an overhanging upper storey.

JOIST a horizontal timber supporting a floor or ceiling.

KEEP the main tower of a castle.

KEYSTONE the central block locking together an arch.

LANCET a tall, narrow, pointed, early Gothic window.

LANTERN a turret or tower on top of a roof or dome to let in light.

LESENE a decorative stonework strip.

LIERNE a purely decorative vaulting rib running between two other ribs.

LIGHT an individual opening in a window.

LINTEL the beam over an opening, supported on jambs or columns.

LOGGIA a gallery with an open colonnade along one or more sides.

LOUVRE a small structure or opening for ventilation.

LOZENGE a diamond shape.

LUCARNE a small Gothic dormer window.

LUNETTE a half-round window.

MACHICOLATION an opening that enabled missiles to be dropped from a parapet onto an enemy.

MANTEL a lintel or shelf above a fireplace.

MANTELPIECE the decorative structure around a fireplace.

MASK decorative human or animal face.

MASON someone who builds in stone or brick.

MASONRY stone or brick construction.

MEANDER a snaking pattern of straight lines joined at angles.

MEDIEVAL the period in European history, *c.*1000–*c.*1550 CE.

METOPE a plain or decorated slab on a Doric frieze; it alternates with triglyphs.

MICRO-ARCHITECTURE miniature architectural motifs, such as arches and gables, used decoratively.

MINARET a tower associated with a mosque, for calling the faithful to prayer.

MODERNIST the architectural style current from *c.*1920 till the late 20th century.

MODILLION a horizontal scroll bracket below a cornice.

MOULDING a strip with a shaped or decorated surface.

MORTAR a paste made of lime or cement, used in between blocks or bricks.

MORTISE a hole or slot for a tenon, which is used to join wood pieces.

MOSAIC a picture made of tiny coloured tiles.

MOTIF a decorative element, usually repeated.

MOUCHETTE a teardrop shape used in Gothic tracery.

MULLION a vertical element dividing a window into sections.

Glossary

MUNTIN a small vertical or horizontal wooden bar holding the panes in a sash window; also called a glazing bar.

NAOS see *Cella*.

NARTHEX the area in an early Christian church where new converts stood.

NATURALISTIC lifelike.

NAVE the area of a church reserved for lay people.

NEOCLASSICAL an architectural style based on Classical precedents, which was fashionable in the 18th and early 19th centuries.

NEWEL the central post of a spiral stair, or the endpost of a straight stair.

NICHE an ornamental recess, often curved at the back and top.

NORMAN *see* Romanesque.

OBELISK a tall, four-sided tapering form.

OCULUS a round window.

OEIL-DE-BOEUF a round or oval window.

OGEE a shallow reverse-curve or S-curve.

OPISTHODOMOS an enclosed porch at the back of a Greek temple.

OPUS RETICULATUM a netlike pattern of small stone tiles set in concrete.

ORDERS the five accepted styles of Classical columns and entablatures.

ORIEL a bay window starting above ground level.

PALLADIAN in the style of Andrea Palladio (1508–80).

PALLADIAN WINDOW an opening with two straight sidelights whose entablatures support a central arched opening.

PALMETTE a stylised palm leaf.

PANELLING a decorative wooden or plaster wall covering with areas defined by mouldings.

PARAPET the edge of a wall projecting above roof level.

PEDESTAL the substructure below a column or supporting a statue.

PEDIMENT the gable above a Classical portico; also a gable form used decoratively.

PELMET *see* Valance.

PENDENTIVE a curved triangular area between a round dome and its rectangular base.

PERISTYLE a Classical colonnade around a building or courtyard.

PERPENDICULAR a 15th-century style of English Gothic architecture, characterised by panelled effects on walls and windows.

PICTURESQUE literally 'like a picture', a late 18th-century aesthetic movement that stressed variety and drama.

PIER a masonry support like a column, but larger and more solid.

PILASTER a flat column form, usually attached to a wall.

PILLAR a column or pier.

PINNACLE an ornamental structure, usually pointed, on top of a buttress or other structure.

PITCH the slope of a roof.

PLAN a horizontal section or drawing showing the arrangement of spaces in a building.

PLASTER finely ground lime or gypsum paste for interior wall finishings.

PLATE GLASS large sheet glass.

PLINTH a plain projecting support at the bottom of a wall, column or other upright.

PODIUM a platform supporting a Classical temple.

POLYCHROME multicoloured.

PORCH a partially enclosed space in front of a door.

PORTAL a door.

PORTE-COCHÈRE a covered passage allowing access for vehicles, or an open porch large enough to drive under.

PORTICO a covered area with a colonnaded front.

POST a vertical timber support.

PURLIN a horizontal beam along the length of a roof.

PUTLOG HOLE a gap left in masonry to support scaffolding.

***PUTTO* (PL. *PUTTI*)** naked boy figure.

QUATREFOIL a four-lobed shape.

QUEEN ANNE an eclectic 19th-century style with mixed Gothic and baroque detailing.

QUOIN large block used to strengthen angles and corners.

RAFTER a long, angled roof timber supporting the covering.

RENAISSANCE the revival of Classical forms and learning in Italy in the 15th and 16th centuries, and in the 16th and 17th centuries in northern Europe.

RENDER a paste of cement and aggregate (sand or stones) used as a waterproof wall covering; also called stucco.

RESPOND an attached half-shaft at the ends of an arcade.

REVEAL the vertical inner face of an opening.

RIB an arched moulding on a vault.

RIDGE the top edge of a roof.

RISER the vertical part of a step.

ROCOCO a light and delicate 18th-century style.

ROMAN pertaining to ancient Rome, and especially the Roman Empire, 27 BCE–330 CE

ROMANESQUE the architectural style of *c.*1000–1200 CE; also known as Norman in England and Normandy.

ROTUNDA a circular room.

ROUNDEL a small circular frame or motif.

RUBBLE masonry with irregularly shaped blocks.

RUNDBOGENSTIL German for 'round-arched style', a mid-19th-century revival style using motifs from different periods. Sometimes called Richardsonian Romanesque in the USA after one of its practitioners, Henry Hobhouse Richardson (1838–1886).

RUSTICATION masonry cut so that the centre of each block projects.

SASH WINDOW a window with vertically (or occasionally horizontally) sliding wooden frames holding the glass panes.

SCAGLIOLA a paste made of pigment, plaster and glue.

SCOTIA a hollow moulding.

SCROLL an S-shaped curve.

SEMIDOME a half-dome.

SERLIAN WINDOW a Palladian window; also known as a Venetian window.

SHAFT the cylindrical body of a column.

SHINGLE a wooden tile; also a late 19th-century American architectural variation of the Queen Anne style.

SHUTTERS wooden doors used to cover a window.

SOFFIT the underside of an architectural component, such as an arch.

SPANDREL the triangular area between an arch and its rectangular surround.

SPIRE the tall, tapering top of a church tower; also called a steeple.

SPLAY an angled surface.

SPOLIA reused materials, often with a symbolic meaning.

SPRINGER the blocks from which a vault rises.

SQUINCH the filling between a dome and the building below; less sophisticated than a pendentive.

STAINED GLASS coloured glass.

STALL RISER the solid lower section of a shop window.

STEEPLE *see* Spire.

STOREY a level, or floor, of a building.

Glossary

STRAPWORK a decorative pattern resembling leather straps.

STRING the diagonal side of a staircase; it can be closed (solid) or open (showing the ends of the treads and risers).

STRING COURSE a raised horizontal moulding that visually divides storeys; also called a plat band.

STUCCO *see* Render.

STYLISED abstract or symbolic in depiction.

STYLOBATE the upper step of the base or podium of a Classical temple.

SUBDOME a partial dome, often used to support a larger dome.

SURROUND a frame or architrave.

TAS-DE-CHARGE the point at which vault ribs begin to emerge or spring from the wall surface.

TEMPLE a religious building, especially Greek or Roman.

TENON the projection inserted into a mortise to join two pieces of wood.

***TEGULA* (PL. *TEGULAE*)** Roman roof tile, originally flat but later having small raised edges to support an *imbrex* tile over the joint.

TERRACE a row of houses joined together; a raised platform in a garden.

TIERCERON a decorative rib running between a structural rib and the central ridge rib.

TORUS a half-round or roll moulding.

TOURELLE a small turret projecting from the wall above ground level.

TOWER a structure that is considerably taller than it is wide.

TRABEATED a form of construction with vertical posts and horizontal beams (lintels).

TRACERY the decorative stone bars in a Gothic window.

TRANSEPT a part of a church that projects at right angles from the nave.

TRANSOM horizontal bar across a window; also the upper part of a door frame.

TREAD the horizontal part of a step.

TREFOIL a three-lobed form.

TRIFORIUM the middle storey of a Gothic cathedral.

TRIGLYPH a three-grooved panel on a Doric frieze; it alternates with metopes.

TRUMEAU a post in the centre of a portal supporting the centre of the tympanum.

TUDOR the period of English history from 1485 to 1603.

TUFA a type of lightweight volcanic stone.

TURRET a small tower, especially one starting above ground level.

TUSCAN one of the five Classical Orders.

TYMPANUM the area between a door lintel and an arch above.

VALANCE the fabric or wooden covering above a window; also called a pelmet.

VAULT a curved stone ceiling.

VENETIAN ARCH *see* Biforate window.

VICTORIAN pertaining to the reign of Queen Victoria, 1837–1901.

VILLA a country house or suburban house.

VOLUTE a spiral curve or scroll.

VOUSSOIR a wedge-shaped block in an arch.

WEATHERBOARDING a cladding formed of overlapping horizontal boards.

WEATHERVANE a pivoting roof ornament to show wind direction.

WEBBING the surfaces between the ribs of a vault.

WING the side part of a building.