

English Heritage

Georgian joinery, 1660–1840

The history, design, and conservation of interior woodwork in Georgian houses

Joinery, for the purposes of this leaflet, is taken to include all panelling, internal doors and doorcases, skirtings, dado rails, and cornices where made of timber. It includes shutters, shutter boxes, and window surrounds, but not the window frames, sashes, and mechanisms (which are treated in a separate leaflet). Nor does it cover chimney-pieces or staircases.

The leaflet deals primarily with domestic joinery of the period 1660–1840. It begins with a brief historical introduction, before describing various types of joinery, followed by a section on the treatment and repair of historic joinery.

History

Full-height timber panelling was introduced in the late Middle Ages, but did not become common until the sixteenth century. Surviving examples from this early period are rare. However, by the late seventeenth century wood panelling

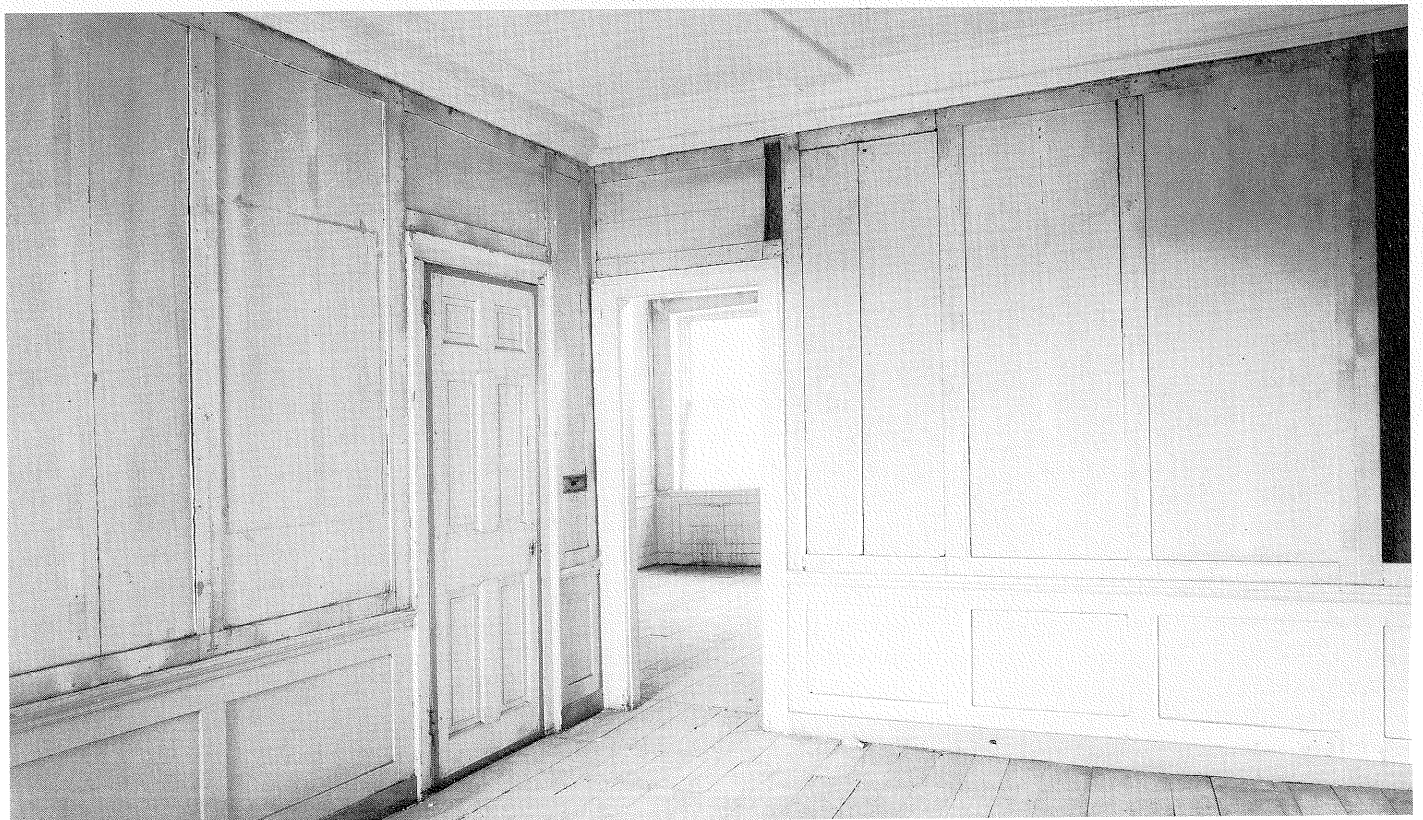
had become the normal lining for principal rooms in all but the poorest houses. Panelling served to insulate rooms, as well as providing a basic decorative treatment. In the later seventeenth century, the commonest material for most joinery was polished oak. However, in London, oak was generally being superseded by deal – pine or fir-wood – imported from the Baltic, which was cheaper as well as easier to carve. Deal naturally has a very light colour and a wide, rather coarse grain, with a lot of knots in it. For these reasons it was never normally left in its natural state. The practice of stripping pine panelling, doors, or fittings is a purely modern fashion.

In the later seventeenth and early eighteenth centuries, deal would often have been grained to resemble oak (which was more expensive and thus more prestigious). In the eighteenth century, painting became the usual treatment,

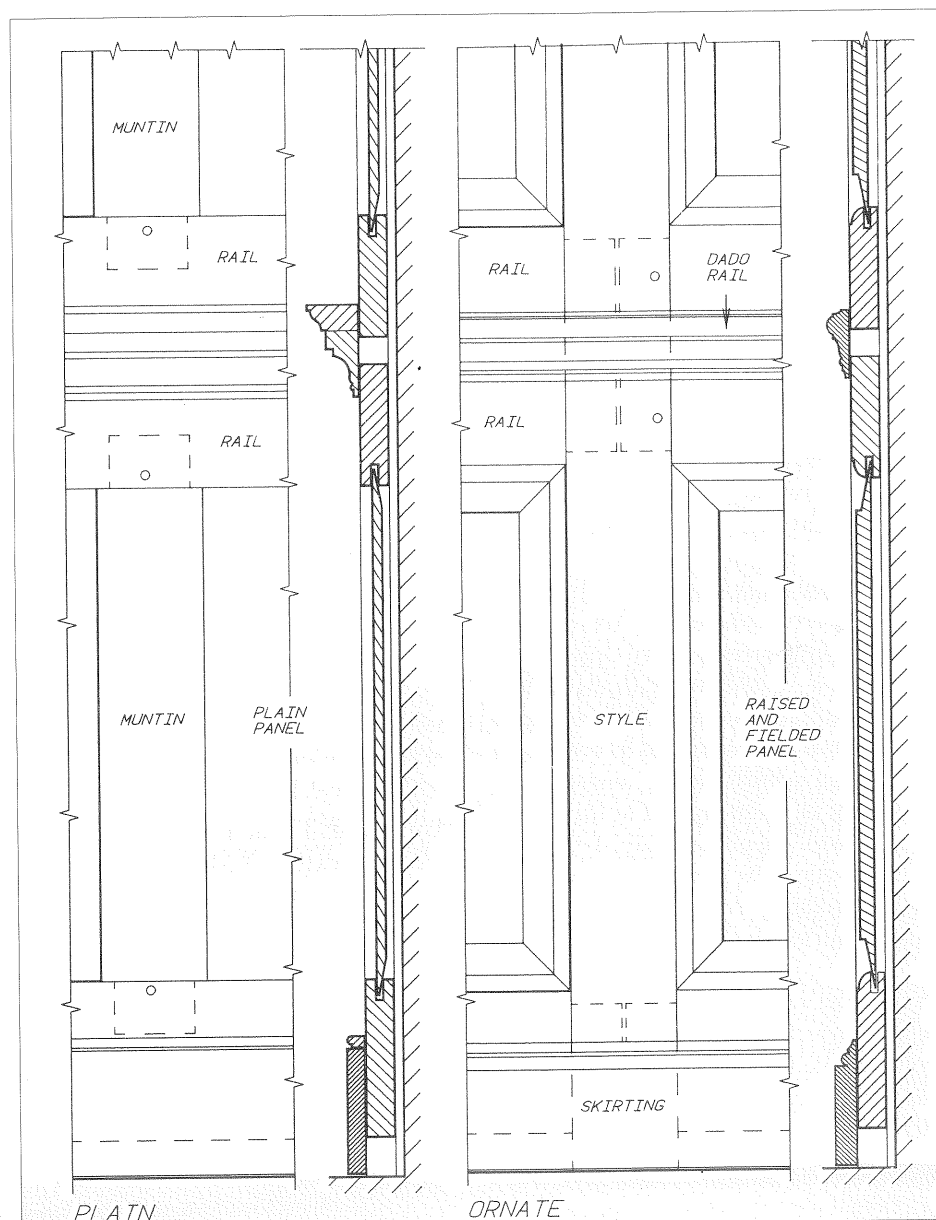
The guidance given in this leaflet derives from English Heritage's conservation work in London, but it may well be applicable elsewhere. However, traditional regional architecture and repair techniques do vary and the advice of the local planning authority should always be sought.

the most popular colours being olive green, brown, stone grey, a yellowish stone colour, or cream. The aim was generally to make the deal look like a more expensive material, such as hardwood, stucco, or stone. Colour schemes tended to get lighter and more varied as the eighteenth century progressed.

From c 1720 full-height panelling began to go out of fashion, although this happened very slowly; one can find individual rooms still fully panelled as late as the 1760s. A number of alternative treatments were used. It remained common for mid-Georgian houses to be wood-panelled just to dado height, often for protection against damp. This kind of half-height panelling would often be quite smooth and flush, not displaying actual panels. The upper part of the wall would be plastered and painted, or covered in a textile or with wallpaper. Plasterwork would usually be laid on a bed of laths, not directly on



Plain panelling of painted deal c 1700, at 46 Queen Anne's Gate, London



The structure of wood panelling

to masonry. Textile hangings (eg silk damask) tended to be expensive; these would be pinned to wooden battens. Wallpaper in the eighteenth century would not be pasted directly to the wall or to plaster or timber, but laid on a backing paper, itself laid over a hessian scrim, stretched between wooden battens.

In the mid eighteenth century, timber and plaster were increasingly being used in combination. So a room might be wood-panelled to dado height, but have plasterwork above. A simple cornice might be cheaper to make from lengths of timber, but a more ornate cornice would be more cheaply cast in plaster.

Ornamental plasterwork could be cast and laid over timberwork. For example, if a client wanted an ornamental cornice, doorcase, or dado rail, lengths of wood would be cut to the basic profiles. The required ornament would be cast

in small sections, in plaster or a lime-putty composition, and stuck to the wood. It would then all be painted, to give the impression that it was all carved work. Thus it is not always possible to make a hard and fast distinction between joinery and plasterwork.

Full panelling was dying out c 1740–60 as the cost of plasterwork came down. However, the basic way of decorating rooms, dividing them horizontally with a skirting board at the foot of the wall, a dado rail three to four feet up, and a cornice at the top – which originates from panelling design – remained near-universal for most of the eighteenth and nineteenth centuries. In the period 1750–1840 the main part of the wall surface was usually plastered or covered with fabric or wallpaper. The skirting board, dado rail, and sometimes the cornice would be made of wood. The skirting board and dado rail served to

protect the wall surface from damage – the skirting from people's feet and from furniture, the dado rail from the backs of chairs, hence the alternative term 'chair rail'. They had to be made of wood, as plaster would be damaged too easily.

Wood panelling

By the later seventeenth century, virtually all panelling followed the same basic scheme, derived from the classical orders of architecture, with the dado area representing the pedestal and the dado rail as its top-moulding; the main area of wall represents where the columns would be, with the cornice on top standing in for the whole entablature.

There was usually one row of relatively low panels below the dado rail and another row of much taller panels above it. They were almost always aligned, and of the same width. Occasionally, in late seventeenth-century and a few early eighteenth-century houses, there was also a top row of very shallow panels, forming a kind of frieze; this is something of a rarity.

The design of panelling changed a little over the period 1660–1750. In the later seventeenth century, the panels tended to be relatively narrow, with the framing around them fairly thick. In the eighteenth century, the panels became bigger and the framing relatively thinner. In the period 1660–1715, a variant called 'bolection-moulded' panelling was popular, although this was more expensive to make; here the mouldings, and sometimes the panels, projected outwards from the framing instead of being recessed within it. In the eighteenth century bolection moulding went out of fashion, and 'raised and fielded' panelling was introduced as the new form of more elaborate, expensive work. The drawing on this page shows a basic version of raised and fielded panelling. The panels have bevelled edges, instead of being entirely flat. Raised and fielded panels are also often seen on Georgian front doors.

The panels proper were made of one, two, or three planks, half an inch to an inch thick, butt-jointed together and glued. The face to the room always had a smooth surface, but the concealed face was often quite roughly finished. The reverse, concealed side of the panel was usually feathered, that is tapered off towards the edges. This was done so



Polished oak panelling in 20 Buckingham Street, a house of c 1675 by the developer Nicholas Barbon

that the panels would sit in thin grooves cut in the framing, without needing to be nailed into place.

The horizontal pieces of the framework are called rails, and the vertical pieces are called muntins or styles. A muntin is a vertical piece which runs just from rail to rail (the height of a panel), whereas a style is one which runs all the way from floor to ceiling, spanning the dado rail area. The styles are usually the real structural supports of the panelling; see the drawing opposite where the dots mark the wooden pegs with which the rails are fixed into the styles. The drawing on the back of this leaflet shows styles on either side of the window.

The panelling was assembled in the room and fixed to the wall, leaving gaps at the top, at the bottom, and in the middle, between the upper and lower rows of panels. The skirting board, the dado rail, and the cornice would be nailed on separately, covering the gaps. In other words, the skirting, dado rail, and cornice are not integral parts of the panelling, though they are an essential element in the decoration of the room.

As has been noted, the panels themselves were generally made of planking, stuck together with glue. The framing was fixed together with simple joints and wooden pegs, like much of the furniture of the time. The panels were feathered, as noted above, so that they were made to sit in the grooves in the framing without being either glued, pegged, or nailed in place. It is necessary to stress this point: because the panels are quite thin, they need to be free to expand and contract in reaction to changes in

temperature or humidity; otherwise they will crack. *Nails should not be driven through the panels themselves, and they should not be nailed to the framing.*

The panelling was fixed to the walls (sometimes to the floor joists) in various ways, depending on the circumstances. Sometimes it was placed right up against the masonry, without any appreciable cavity behind it. In these cases, nails were driven through the

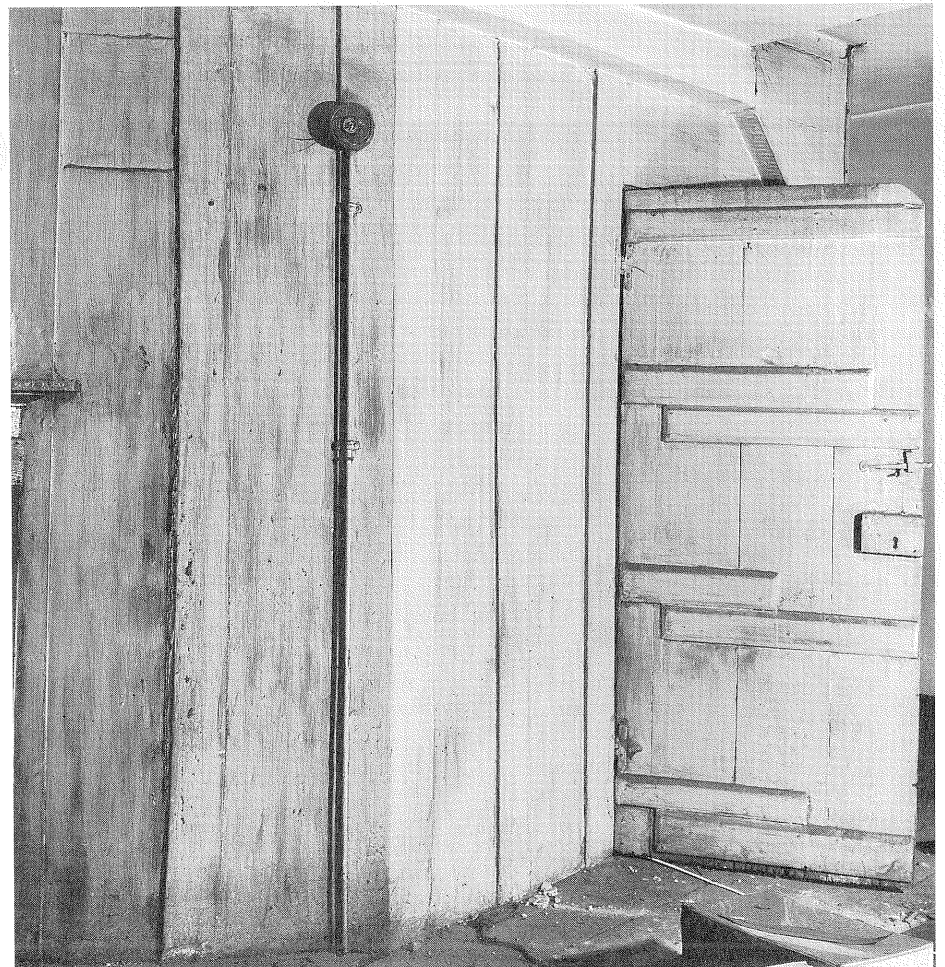
styles into wooden blocks or lengths set into the masonry. Sometimes a cavity was left between the panelling and the wall for insulation purposes, or to protect the woodwork from damp, or to adjust the shape of the room – such cavities can be quite large. Where this is the case, there might be wooden uprights behind the panelling to which the styles are nailed. Alternatively, the styles themselves may have been made taller so that they could be nailed to the floor and ceiling joists.

Sometimes the panelling itself forms a thin partition wall between two rooms; ie there is nothing 'behind' it. In these cases, it will probably be fixed to the joists.

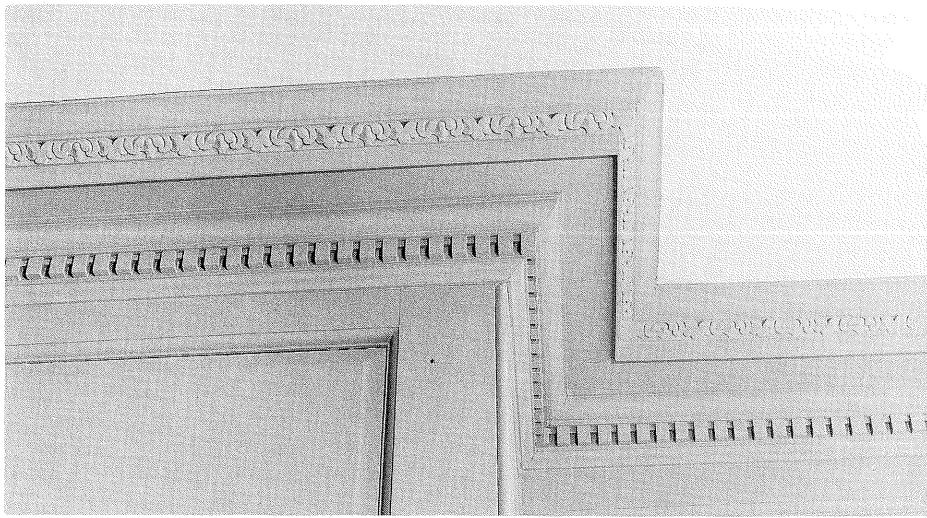
Basements and attics rarely merited true panelling. However, in some cases, they were given partitions or were part-panelled with vertical planking, as seen in the illustration below.

Doors and door surrounds

The modern panelled door, consisting of a framework holding two, four, six, or eight panels, was developed in the mid seventeenth century and became the standard design for all houses of quality throughout the eighteenth and



A simple plank door and plank partition in Stoke Newington Church Street



67 Dean Street, Soho, c 1732; the first floor front room has an Ionic cornice, reflecting its status as the 'best' room

nineteenth centuries. Simpler rooms – or houses – had simpler doors, usually made of vertical planking nailed to horizontal battens across the back. Thus, an early eighteenth-century terraced house might have plank doors in the basement, relatively elaborate panelled doors on the ground and first floors, plainer panelled doors on the second floor, and plank doors in the attic. Sometimes plank doors were made to look like panelled doors by having strips of wood nailed or glued on.

True panelled doors (those in which the panels are made of separate pieces of wood) might have two, four, six, or eight panels, depending on the door's size and the importance of the room. For most of the period in question,

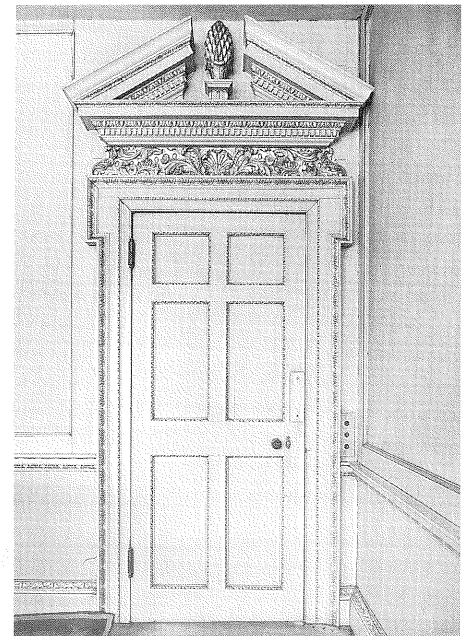
doors would be pegged together, not glued or nailed; in other words, they are constructed in much the same way as panelling. The same terms are used to describe panelled doors as panelling.

An early eighteenth-century six-panelled door in a very grand doorcase is illustrated. On the door itself note that the long pieces on either side run the whole height. As in panelling, these pieces are called styles. The one on the hinge-side is called the 'hanging style', while the other one is the 'shutting style'. The rails in between, in an eighteenth-century panelled door, would never run the whole width of the door. On a six-panel door, they are called (from bottom to top) the bottom rail, the lock rail, the frieze rail, and the top rail.



31 Great James Street; simple panelling, a Tuscan cornice, and raised and fielded panels on the door

With regard to materials, the earlier history of doors is much the same as that of panelling. In the mid to late seventeenth century, the commonest material was oak, usually polished, not painted. As native supplies of oak ran out, imported deal became the commonest material, and this was usually painted, or sometimes grained to look like oak. After c 1750, mahogany was introduced from the West Indies. This has a beautiful colour and grain, and so was polished, never painted, but it was very expensive. Gradually the price came down, and by 1800 mahogany doors (and furniture) could be found in many of the better class of terraced houses.



A fine door of c 1730 at 45 Upper Grosvenor Street with an Ionic cornice supporting a broken pediment

Only very prosperous people could afford to have carved ornament on their doors, but in the later eighteenth and early nineteenth centuries it became common for doors in reception rooms to be given cast ornament, which was much cheaper. Strips of ornament cast in plaster or lime-putty composition would be glued to the woodwork, and such doors would always be painted.

Various kinds of hinges were developed in the period in question. Good panelled doors might have 'H'- or 'L'-shaped hinges, 'butterfly' hinges, or 'barrel' hinges (where the hinge is cylindrical). Plank doors would often have an older kind – the long strap hinge, which may stretch almost the whole width of the door.

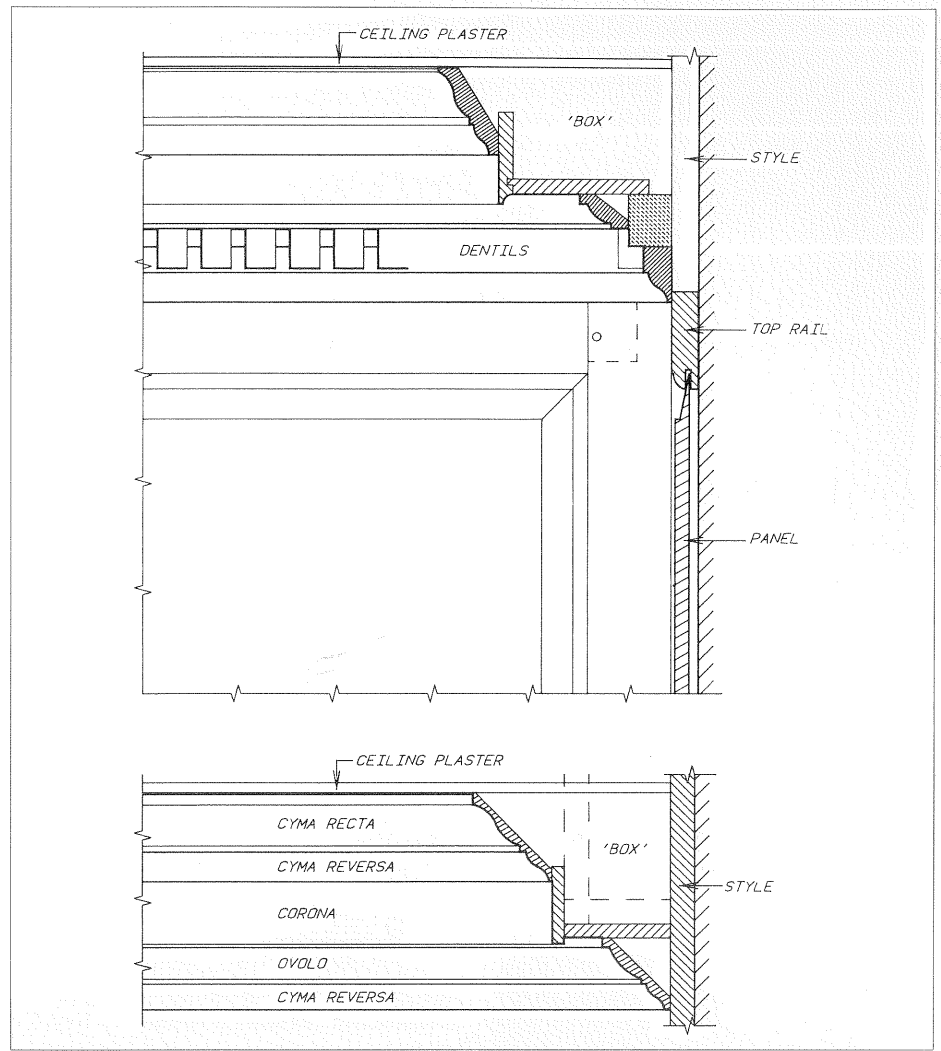
Cornices

The cornice was developed as a feature of ancient Greek and Roman architecture. Originally it was an external feature, a way of decorating projecting eaves to provide some shade to a building and to cast rain water off the wall. Cornices are commonly seen as external features on classical buildings from the sixteenth century to the present day.

By the later seventeenth century, most town houses had cornices in all their principal rooms. This was always for aesthetic, ornamental reasons, although it might be argued that the cornice played a role in concealing the top edge of the panelling. The basic cornice patterns were based on the ancient classical orders of architecture, and were very long-lived, continuing in use from the seventeenth century until well into the present century. Indeed, these shapes are commonly used by decorators and shopfitters today.

The lower part of the drawing on this page shows the 'Tuscan' cornice, probably the commonest form. Tuscan columns were the simplest kind used by the Romans, so they only merited a fairly simple cornice. The upper drawing is of an 'Ionic' cornice, and is marked out as such by the 'dentils', the row of tooth-like blocks. Apart from the dentils, there is not a great deal of difference between these examples. However, in great eighteenth-century houses, cornices could be very elaborate indeed (the six-panelled door illustrated opposite has a rich Ionic, dentilled cornice above it).

All cornices depend for their effect on the contrast of a number of different mouldings, producing different shadows. Although modern electric light produces a different effect from eighteenth-century candle-light, this still holds good. The most important mouldings are named on the drawing. A cyma recta, for instance, is a serpentine curve, convex below and concave above, usually (but not invariably) based on a line at approximately 45 degrees. A cyma reversa, as its name suggests, is the opposite – a serpentine curve which is concave below and convex above. The little square-profile moulding separating them is called a fillet. An ovolo is a single curve, which might represent a section of a circle (as here) or a section of an ellipse. The corona is square in profile, usually representing the mid-section of a cornice.



Examples of cornices



Fine raised and fielded panelling in an early eighteenth-century house at 4 Fournier Street, Spitalfields

All these basic shapes were developed in ancient Greece, modified (and named) by the Romans, and remain in common use today. They are part of the language of classical architecture, and are an essential part of interior decoration in the period under discussion.

Cornices, like panelling, played a part in expressing the hierarchy of rooms; the more important the room, the more elaborate the cornice. Thus, in a three-storey terraced house of the early eighteenth century, the downstairs reception rooms might have Tuscan cornices, while the first floor front room (usually the smartest in the house) might have an Ionic cornice. The second floor bedrooms, however, might only merit a cyma recta over a cyma reversa (the top half of the Tuscan cornice), or perhaps a single ovolo moulding over a fillet. The basement rooms would usually not have a cornice at all. Features such as these are part of the social history of a house.

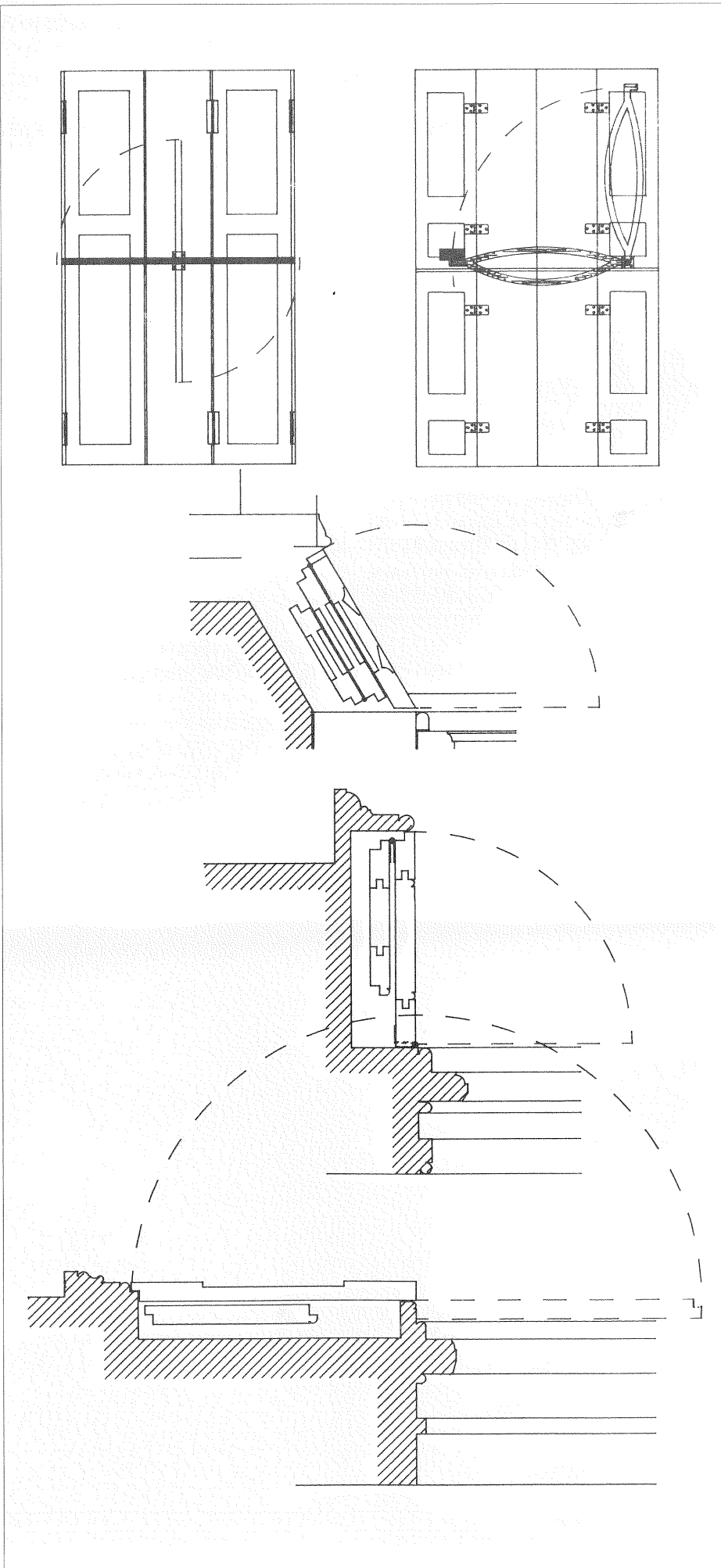
In the period 1660–1760, most cornices would be made of lengths of wood cut to the profiles required, as shown in the drawings. In the mid eighteenth century, the basic cornice might be made in wood with ornament made of plaster or lime-putty composition added to it. Later on (after *c* 1760 in the London area), as the cost of plaster came down, the whole cornice would usually be cast in plaster. Plaster cornices may look just the same as timber ones – indeed it can be impossible to tell the difference without taking a paint-scrape – but they no longer come under the heading of ‘joinery’.

Shutters and shutter boxes

In the late seventeenth and early eighteenth century, houses normally only had shutters, not curtains, and the window reveals (the sections through the wall) were usually at 90 degrees to the plane of the wall.

In the mid eighteenth century curtains became popular, and the windows themselves became larger and taller. To satisfy the demand for more light, it became common for the window reveals to be ‘splayed’, so that the window embrasure broadened out towards the room.

Shutters were normally made in four panels, two to each side, and were folded back into boxes in the reveals; this remained the commonest pattern throughout the eighteenth and nineteenth centuries.



Shutters



67 Dean Street, Soho, c 1732; the first floor room has built in window seats, recently restored

The shutters were sometimes constructed with panels and pegged together like panelled doors, or they were made of simpler planks joined together with tongue-and-groove joints and glued.

In the late eighteenth century a different design was invented, whereby the shutter was made in two pieces like the two parts of a sash window. They operated on the same principle as a sash window, suspended from ropes and pulleys with counter-weights. Such shutters would be let down into a cavity below the window sill, though occasionally the upper half might slide upwards, into a cavity above lintel level.

Shutters can still perform valuable functions, insulating rooms, protecting contents from sunlight, and improving security. In many houses, the shutters have been painted shut, and survive unused and unnoticed.

The treatment and repair of historic joinery

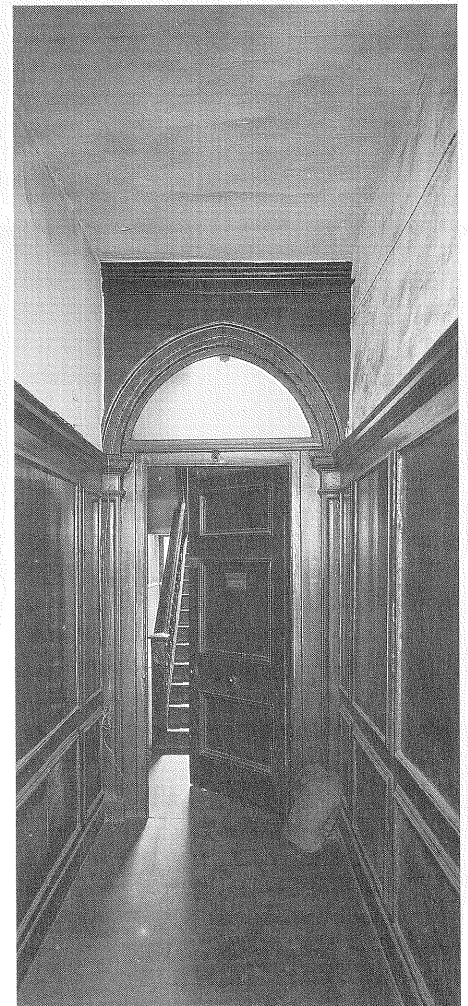
Historic joinery is an essential part of the character of a listed building. It should be left *in situ* as far as possible, and careful repair is always preferable to replacement. Where replacement is unavoidable, like should be replaced with like in terms of material and design. The removal of any joinery from

a listed building, whether or not it is part of the original decoration, requires Listed Building Consent. *Its removal without having obtained consent is an offence.*

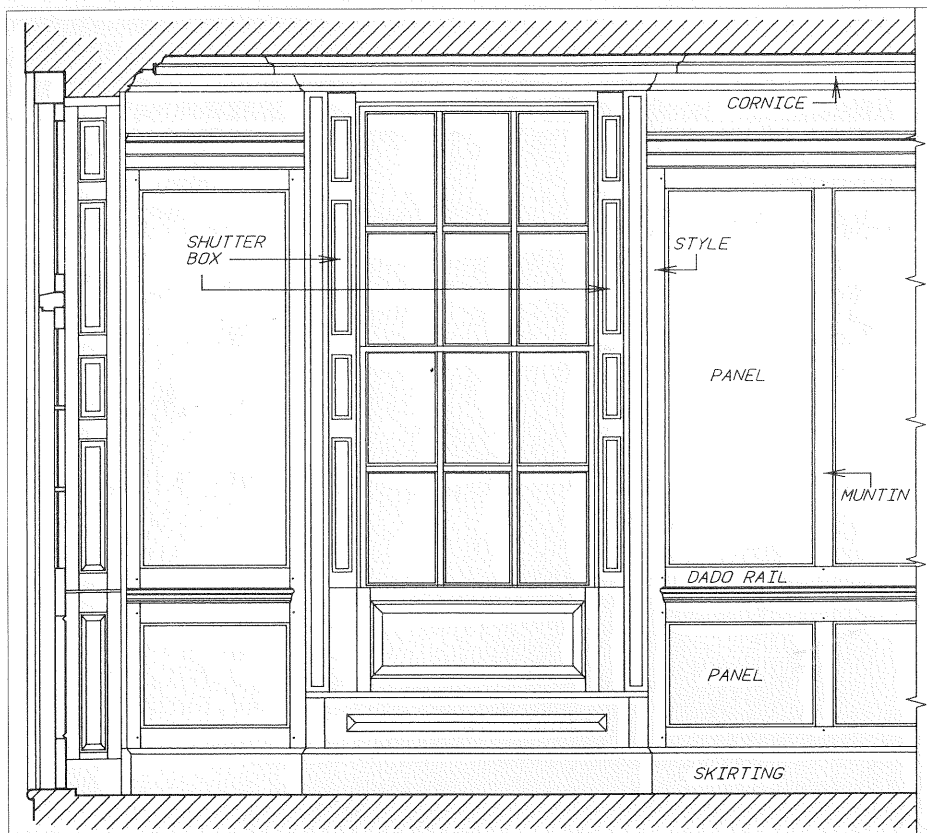
Dismantling Where panelling has been in place for 250 years or more, it is obvious that dismantling it will do very little good and can do a great deal of harm. Dismantling is rarely necessary, and should be avoided. Listed Building Consent for removal should not be given unless a clear need for such action can be shown. Where panelling is to be dismantled and consent has been obtained, it should be photographed in detail and the pieces numbered prior to removal.

It may be necessary to investigate the condition of the structure behind the panelling. Preliminary investigation can be achieved without disturbing the panelling by using fibre-optic inspection probes. This is the preferred option.

Central heating Eighteenth-century houses had no central heating, and historic joinery will often distort and crack when it is installed. The damage can be mitigated if steps are taken to maintain the natural level of room humidity, by leaving pots of water next to radiators. Even watering pot-plants can produce



15 Soho Square; the hallway retains its oak 'bolecion-moulded' panelling and archway of c 1680.



Typical early eighteenth-century wall panelling

the same effect. Radiators should be carefully positioned, if possible away from historic joinery.

Electrical services It should generally be possible to minimise the disruption caused by installing electrical sockets, telephone points, etc, and the associated cabling, by setting them into the floorboards or, failing that, the skirting-board.

Repair and replacement As far as possible, where historic joinery is being repaired, like should be replaced with like. A similar material should be used and, in so far as it can be understood, the original design should be followed. Most of the joinery at 67 Dean Street illustrated here is in fact a modern replica of the eighteenth-century original. This illustrates the sort of high quality work which it is still possible to achieve.

It will sometimes be found that panelling or other historic joinery survives incomplete. In such cases, making up the missing elements may be a very desirable thing to do, but care should be taken to get the details right. Listed Building Consent is still required.

Where replica joinery is to be installed in a listed building, some attention should be paid to plausibility. There has been a tendency in recent years to instal

much more elaborate fittings and joinery into historic interiors than they would originally have had. Thus, simple cottage interiors have received 'Adam' chimneypieces, and small bedrooms have been given oversized cornices. This falsifies the history of a house.

Paint and paint stripping It has been pointed out above that the modern habit of leaving eighteenth-century deal joinery in its bare, stripped state is 'un-historical'; it would originally always have been painted. Often, stripping the paint will reveal knots, flaws, or cracks sealed with fillers, which are best covered up.

It is recognised that thick layers of paint can obscure the detail of panelling and joinery. Furthermore, modern emulsion paints can prevent wood from responding to changes in temperature and humidity, thus causing panels to crack. Nevertheless, as a general rule it is best to avoid stripping paint if possible, not least because it represents the history of the house.

If paint stripping is going to take place, these points should be borne in mind:

- Blowtorches and hot-air guns should never be used in historic buildings.

- Wood was often used in combination with plasterwork and lime-putty composition. If stripping is to be undertaken, the nature of the material underneath should be checked, and the effect the stripping agent will have on it clarified.

Very often, Georgian and Regency houses were redecorated and refitted in the Victorian and Edwardian periods. One can usually tell where this has been done, by looking at the style of the work, the materials and finishes used, the length of the pieces of wood employed, etc. Victorian and Edwardian joinery was mostly cut by mechanical saws and lathes, not by hand, and it generally comes in longer and straighter sections than earlier work. Nonetheless, later joinery can be of great intrinsic value, and is part of the house's history – it too is protected by the listing of a building. Applicants should not assume that they will receive consent for the removal of Victorian or Edwardian fittings from an earlier, listed building.

Conclusion

Historic joinery has much in common with antique furniture. Yet, while old furniture is generally prized, joinery has often had much more mixed fortunes. There are obvious reasons for this, one of which is that furniture is much more movable and disposable. This is not to suggest that joinery should be removed; historic joinery should remain *in situ* as an essential part of an historic building, except where removal is genuinely the only way of saving it. Historic panelling and joinery are finite and precious parts of our heritage, and deserve the basic care which one would give to a good piece of furniture.

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