

Fig.1

THE COVER shows a pair of four-storey Georgian townhouses c.1720 in Smith Square, London, superimposed on a detail of the plan of London (1737-1746) by Jean Rocque, showing the West End which was developed during the Georgian period. Courtesy of the Museum of London.

Fig.1 Detail from a capital of the ionic order from the Temple of Athena Polias, Priene, from James Stuart and Nicholas Revett's *Ionian Antiquities produced by order of the Society of Dilettanti*, 1769. The Society of Dilettanti was formed in 1723. It promoted interest in the Grand Tour through a series of well illustrated publications on the architecture of antiquity which were also useful sourcebooks for architects. See also Fig.11

were two main forms of classical architecture in the Georgian period: Palladianism and Neo-classicism.

palladianism

Palladianism followed the rules of classical architecture as expounded by the Italian architect Andrea Palladio (1508-80). Although introduced to this country by Inigo Jones (1573-1652) in the early seventeenth century, this style was most popular in polite architecture during the first half of the Georgian era. Palladio's *Four Books of Architecture* originally published in Italian in 1570 appeared in an English translation in 1715. Palladio confined his study to ancient Roman architecture and his own designs but his *Four Books* provided an excellent guide to rhythm and proportion. More abstractly, his concept of proportional relationships, based on classical models, greatly influenced the design of the facade of the Georgian townhouse.

neo-classicism

Neo-classicism exerted most influence on the interior and exterior decoration of the Georgian townhouse. The style demonstrated the greater knowledge

Fig.3



Fig.2

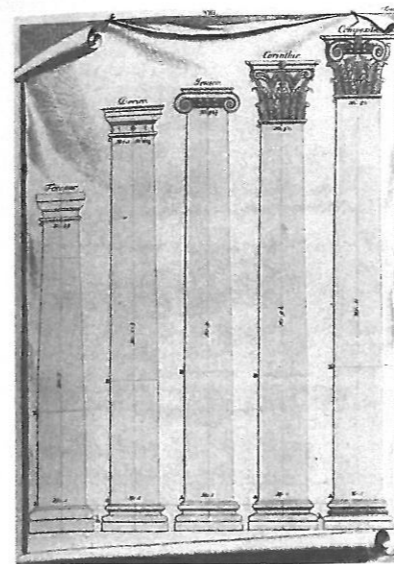


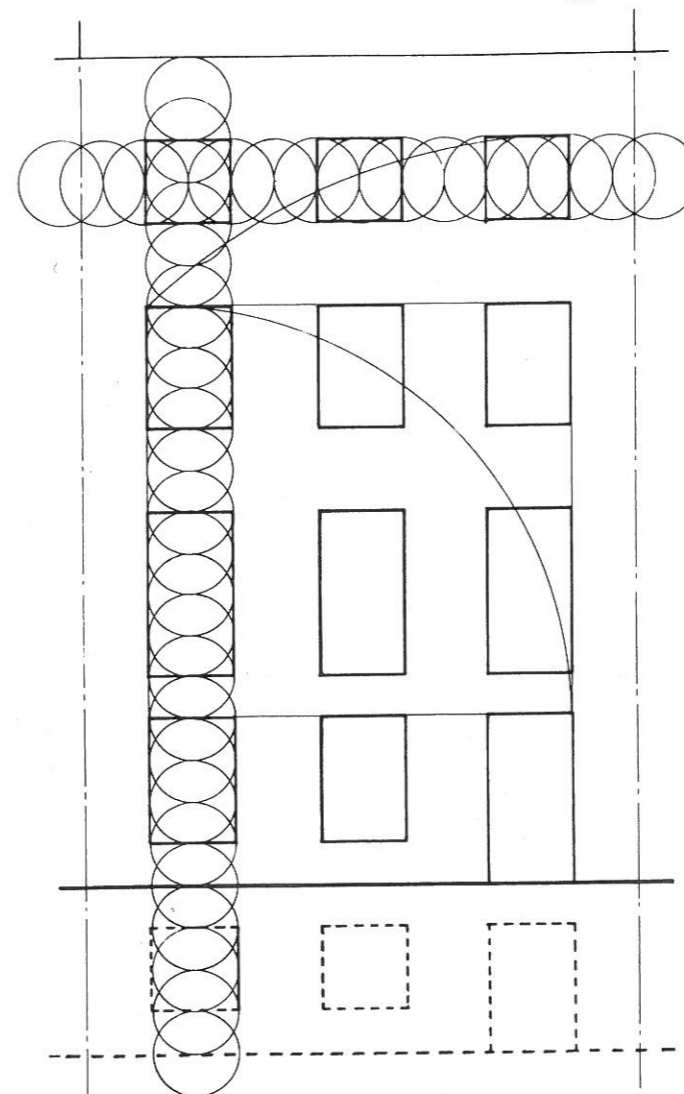
Fig.4

Fig.2 Andrea Palladio, (1508-1580). Engraving from Giacomo Leoni's English edition of Palladio's *The Four Books of Architecture*.

Fig.3 *British Milords in Rome* (c.1749-1752), attributed to James Russell, Yale Center for British Art, Paul Mellon Collection. The Grand Tour had become the usual finish for a young gentleman's education by the mid-eighteenth century. Rome was the focal point of the tour. On arrival, the 'Inglesi cavalieri' would arrange to be shown the major sites. Here, the group is seen in front of the Colosseum and the Arch of Constantine.

Fig.4 An order in architecture is made up of a column comprising the base, shaft and capital plus an entablature specific to each particular order running horizontally across the top (not shown). This illustration of the five different types of column: Tuscan, Doric, Ionic, Corinthian and Composite, was added by Giacomo Leoni to his 1715 edition of Palladio's *Four Books of Architecture*. They are distinguished by their different capitals and proportions, both of which have many variations. For instance, here, the height of Doric column is around eight times its diameter at the bottom of the shaft. This was based on the proportions of a man whose foot measurement or head was considered to have a similar relationship to his total body height. This was complemented by the feminine Ionic column with the proportional relationship of 1:9.

Fig.5

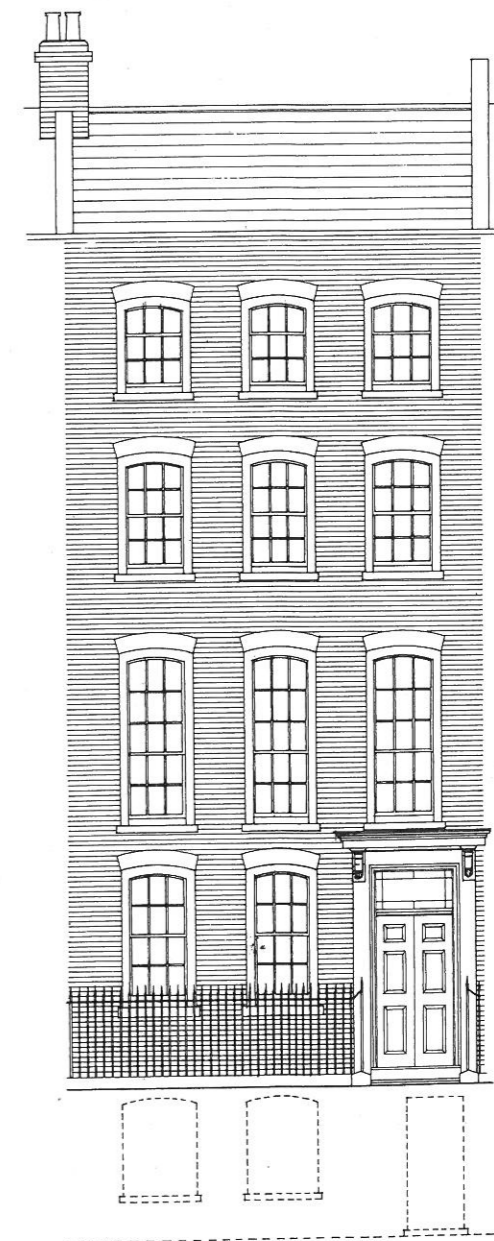


proportions were generated from the square and the cube. The proportion of 2:3 used in the townhouse facade could only be one and a half times the width. This system worked best in houses with only three storeys above ground level. But, as there were frequently four storeys above

ground level, the third floor (attic storey) was visually removed from the composition by the use of square windows and often a string course. The same proportional relationships can be found in the sizes of the windows on the remaining floors and the piers (vertical spaces) between them. The speculator's wish

for profit and the vagaries of the building process meant that perfect proportional harmony was rarely achieved. Fig.6 An early example of these principles can be seen in the sophisticated proportions of this facade from c.1720. Its early date is betrayed by the forms of the door and windows.

Fig.6



economics

GEORGIAN townhouses were built in uniform rows, often called terraces (discussed below). This system had first been introduced in the seventeenth century by Inigo Jones at Covent Garden where two terraces of houses were built together with a church and market area. The important difference between this and later examples is that Jones followed the continental model of placing dwellings above shops. Although the idea of living above the shop did not catch on here, the formula of speculative development of tall, narrow houses based on the classical principles of architecture and providing the all-important own front door, was established.

Most Georgian townhouses were built by speculative developers whose main interest was to make a good profit. It was, therefore, preferable to build as many houses as possible on one street. This increased the density of the development and reduced road making to a minimum which was expensive and offered little return on investment. The tall, narrow fronted design of the Georgian townhouse was ideal. The linear plan, stretching back from the road, afforded ample living accommodation and ensured a high density development.

Terraces were often made up of smaller, separate developments which gave the rows a more irregular appearance. Later, terraces became longer and more uniform and the isolated (now called detached) townhouse became increasingly rare.

The garden square is one of the predominant characteristics of Georgian town planning. These were formed, often over a period of time, by the building of terraces of houses which enclosed space. The central garden area could be used by the residents for recreation.

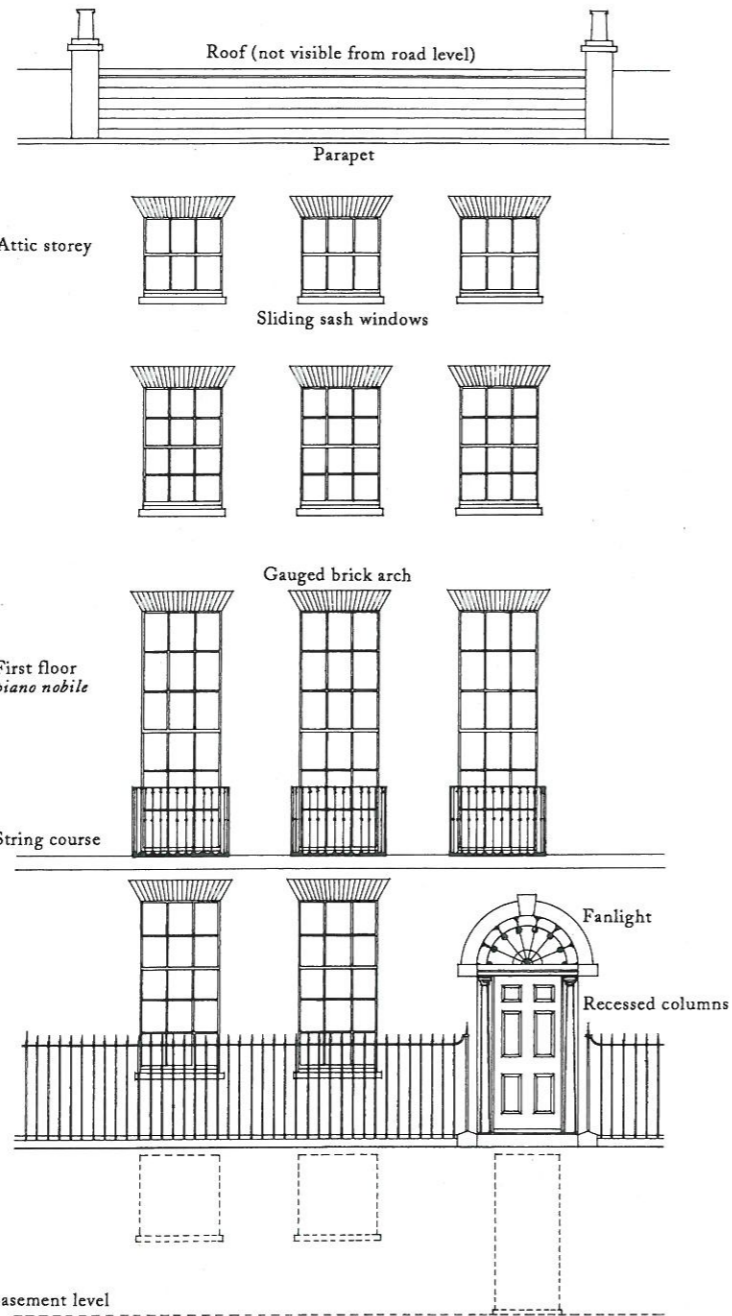
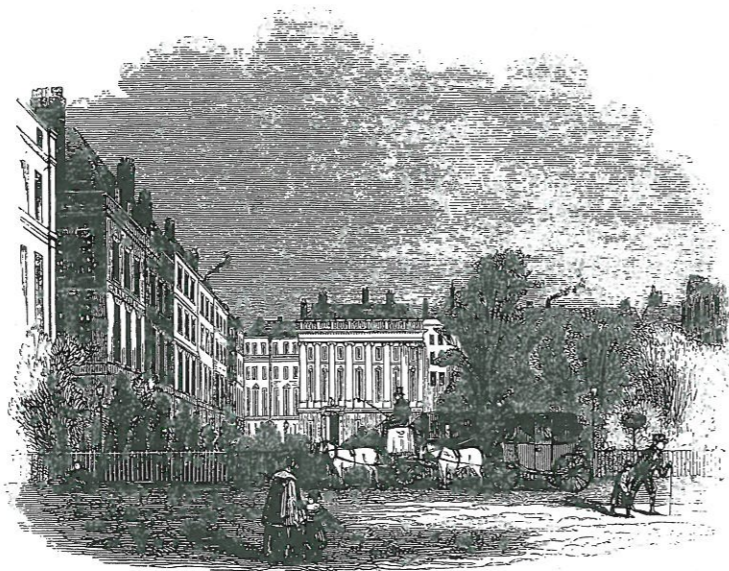


Fig.7 A townhouse facade c.1790 showing refinements made during the period to the proportions, windows, doors and details.

Fig.8 Soho Square, London.



interior of the georgian townhouse

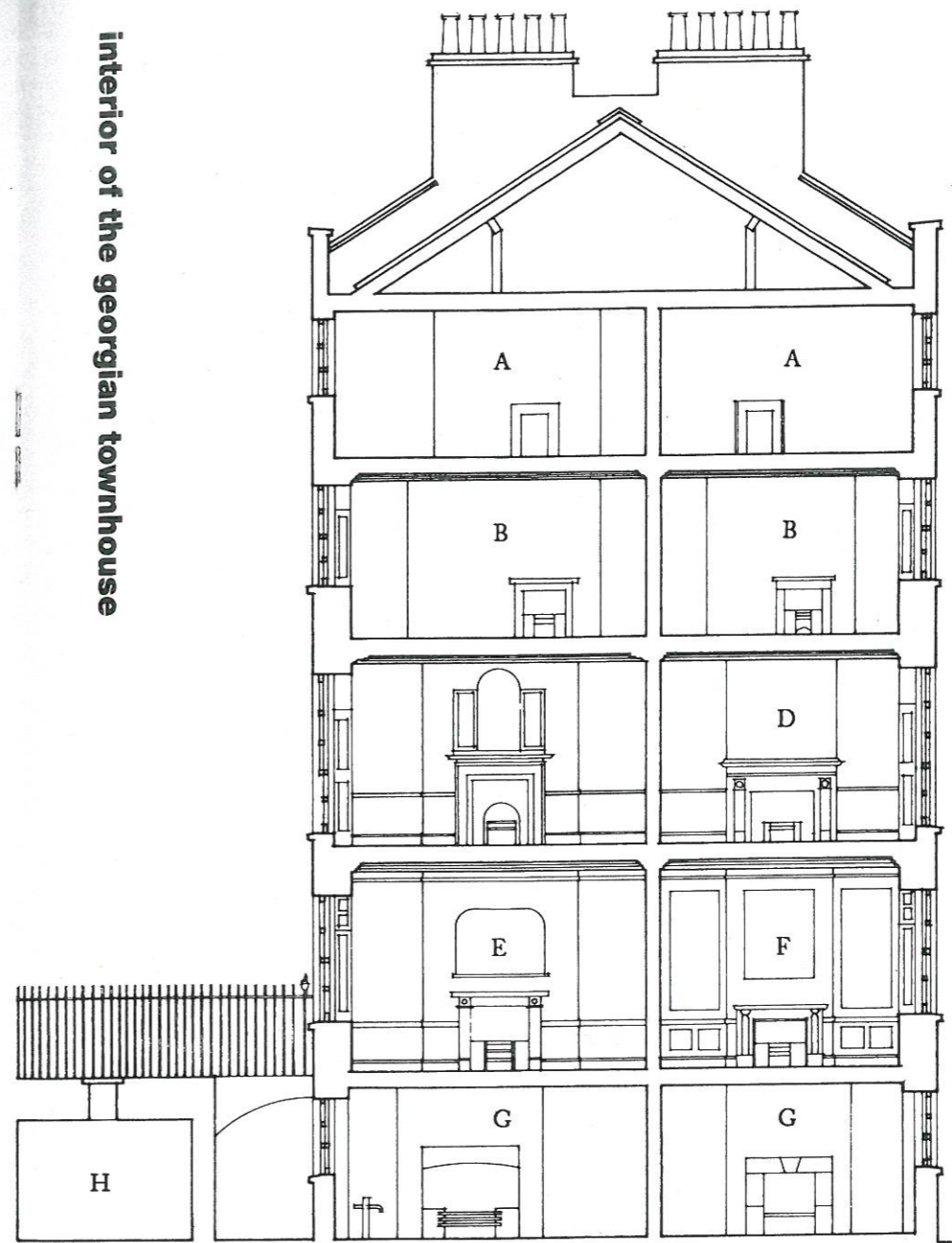


Fig.9 Section of a five-storey Georgian townhouse. The grandest rooms are on the ground and first floors as seen in the ornate panelling and fireplaces and the window heights.

- TOP FLOOR or attic storey
 - A. Servants' quarters or nursery
- SECOND FLOOR
 - B. Bedrooms
- FIRST FLOOR or *piano nobile*
 - C. Drawing-room
 - D. Dining-room
- GROUND FLOOR
 - E. Front parlour
 - F. Breakfast parlour or dining-room
- BASEMENT LEVEL
 - G. Kitchen and, sometimes, servants' quarters
 - H. Storage areas

THE LAYOUT of the Georgian townhouse was one room front and back, a small closet and a staircase on each floor. In height, the house would usually number four or five storeys, including the basement. The top floor was either in the garret roof space or incorporated into the facade of the house, which afforded better internal proportions. This latter system became increasingly popular as it augmented the overall size and value of the house.

The basement was situated in only a shallow excavation, although from the front of the house it appeared to be completely underground as the road was built up above ground level. The road was raised on a system of arcades constructed of brick which could be entered from the basement through openings in the retaining walls. These vaults were used for the storage of fuel which was easily delivered through coal holes in the road. This arrangement gave the house its sloped appearance as the garden at the back, reached directly from the basement, was the natural ground level.

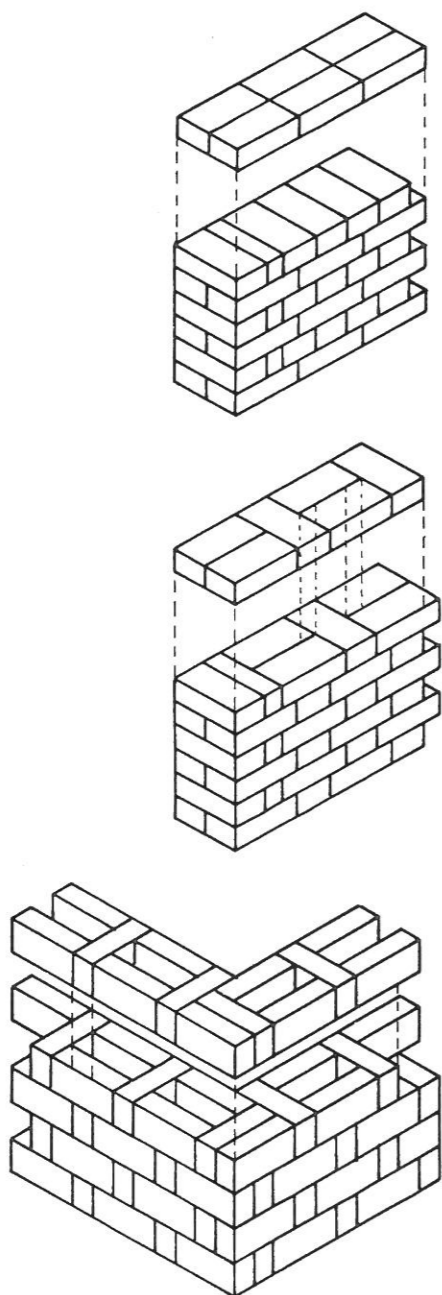
The kitchens were situated in the basement, where any direct water supply would enter the house. Cooking was mostly done on an ordinary fire and grate. Conditions were cramped as this floor was often also used as the servants' quarters. Throughout the period the uses of, and relationship between, the ground and the first floors was not fixed. According to the Palladian principles of design, the most important rooms should be on the *piano nobile* (first floor). The most formal room in the Georgian townhouse was the dining room but this was found on either floor. There were two main reasons for this. In smaller four-storey houses the first floor may have had to be used for bedrooms. But there was

also a reluctance to designate a single room for such a function. The use of gate-leg tables, or several small tables grouped together for big parties, meant that a variety of rooms or even substantial hallways could be used for dining without surrendering a great deal of space to a large dining table.

The remaining floors were usually used as bedrooms with the closets as dressing rooms for members of the family. The closets sometimes also served as servants' quarters but these could, equally, be found in the garret which would have been converted into a dormitory. The garret or top floor of the house was often used as the children's accommodation, affording a playroom/schoolroom and bedrooms for them and their governess.

This description of the interior of the Georgian townhouse presumes that it housed one family, plus servants—about ten people in total. But the houses were frequently occupied by several tenants. These were either artisans, whose wages did not match the high rents charged for housing, or visitors who stayed only a season in cities such as Bath or London. The layout of the house made this quite easy. The hall, staircase and landings were communal areas which allowed access to the rooms on each floor which were usually let together.

Fig.10 Patterns of brickwork:
top, English bond with stopped end;
centre, Flemish bond with stopped end;
bottom, Rat Trap bond.



WOOD and brick were the main building materials used for domestic architecture in

the pre-Georgian period. Of the two, wood was the more popular as it was cheaper and more readily available. But its easy combustibility, coupled with the clustered nature of building at this time, made it less than ideal. After the Great Fire of London attempts were made, through legislation, to avoid such a disaster happening again. Many of these laws affected only London but had a more general effect upon patterns of house building in this country.

The 1707 Building Act banned the use of wood for eaves and cornices in the cities of Westminster and London and insisted that a party wall parapet should stand 18 inches above the roof line to stop the spread of fire. This was soon continued around the front and rear elevations. Although introduced for safety, the parapet influenced the proportions and form of the Georgian townhouse.

In 1709 an act passed to reduce further the amount of exposed wood on the facade stated that windows now had to be recessed by four inches. This made the use of the usual casement windows more difficult.

Instead sash windows, a Dutch invention which had been known about for some time, were adopted and became very fashionable—even replacing older casement windows. The dimensions of sash windows were quite flexible so enabling the fenestration of the townhouse to fit in with the overall proportion relationships of the facade.

The 1774 Building Act, drafted by the architects Sir Robert Taylor and George Dance, consolidated and enforced much of the preceding legislation. Once again, one of the main concerns of the Act was the prevention of fire. It laid down rules for construction, paying special attention to party walls. These rules were the basis for the categorization of building into 'rates' which were calculated according to the square area and value of the property. Each rate from first down to fourth had different structural and material requirements. This increased the standardization of the Georgian townhouse and encouraged the building of longer and more uniform terraces.

focus on brickwork

Bricks were introduced to this country by the Romans but only became a popular building material in the latter half of the seventeenth century with the importation of finely finished bricks from Holland. After the Great Fire demand for brick rose considerably and it was established as one of the main constructional materials. Throughout the Georgian period the treatment of brickwork changed considerably.

colour

Early eighteenth-century brickwork, like its seventeenth-century predecessor was red. This was soon rejected by the Palladians who wished to disassociate themselves in every way from their immediate social, political and architectural past. A whole new range of colours was added, ranging from yellow to dull brown. Towards the end of the century stucco became very popular as it looked like stone, which was far more grand and impressive, but bricks were still used underneath.

brick substitutes

It was not only politics and fashion which altered the use of brick, economics also played an important part. The 1784 Brick Tax encouraged builders to use mathematical tiles to construct walls, confining bricks to the window and door surrounds only.

brickwork patterns

During the Georgian period a number of brick patterns were used. These are called bonds. This does not refer to the pointing (the mortar between the bricks) since gravity is enough to hold the bricks together. The mortar acts only as a protective finish for the joints. In the eighteenth century English and Flemish bond were the most popular brick patterns. As Fig.10 shows, these use a great many bricks. Rising costs and the Brick Tax led to the introduction of more economical bonds, for example English Garden Wall or Flemish Garden Wall. After 1800 Rat Trap bond was introduced which used even fewer bricks so making it structurally weaker than the others.

The Georgian Group publishes a series of advisory leaflets on specific aspects of the Georgian house which complement the text of this booklet. Subjects include: Windows, Brickwork, Doors, Paint Colour, Render Stucco and Plaster, Wallpaper, Mouldings, Ironwork, Fireplaces, Roofs, Floors, Stonework, Lighting, Curtains and Blinds. Each leaflet is well illustrated and contains a full bibliography and sources for further information. Details available from the address below.

The local authority Conservation Officer may be able to give details about specific houses and/or conservation areas which may be of interest.

The National Portrait Gallery Education Department, St Martin's Lane, London WC2, can present informal discussions, gallery visits and slide lectures on topics relating to Georgian personalities and portraiture. Teachers should contact the Education Department (071 306 0055 ex. 212) to discuss this in greater depth.

further reading

The most comprehensive account of the Georgian townhouse appears in D. Cruickshank and N. Burton, *Life in the Georgian City*, Viking Penguin 1990. An extensive bibliography is available from the Georgian Group. More specific publications about local examples may be produced by branches of the Civic Trust or local preservation societies.

notes for teachers

The range and breadth of the material covered in the text makes the Georgian townhouse a suitable subject for the teaching of many subjects in the national curriculum at several levels, including history, mathematics, technology and geography. Local examples of Georgian townhouses may not always be accessible for field work. The general principles of its form and function can be used for classroom based studies or as back up material for other projects. The booklet has been designed to ensure that the most relevant illustrations can be easily photocopied. Below are some suggestions as to how to use the Georgian townhouse in the study of history and some ideas for classroom and on-site activities across a range of subjects.

History

The Georgian townhouse can be used to help pupils develop an awareness of the past through a range of sources, many of which may be available locally eg. artefacts in museums, buildings and sites as well as written sources. It can be also used in connection with:

Key Stage 1, levels 1-3

The Georgian townhouse as a means of exploring everyday life, work, leisure and culture of a period in history.

Key Stage 2, level 4

'Describe different features of an historical period'. Arrange a display of labelled pictures and/or models presenting life in a Georgian townhouse.

Supplementary Study Unit B

A local Georgian townhouse can be used in conjunction with local museums, archives and maps to understand an aspect of the local community over a short period of time.

Key Stage 3

The Georgian townhouse can be use in the teaching of:

CSU3: The making of the UK, 1500-1750

The information contained in the text is a

good starting point for a study of 'the impact on the arts and architecture of political and religious change' and the homogeneity of the design, whether in polite or vernacular architecture, sheds interesting light on 'regional differences in wealth, lifestyle, religion and culture.'

CSU4: Britain 1750-1900

The role of speculative housing in the development of the Georgian town or city and the innovations in the interior decoration can be used to explore 'the impact of economic change on families and communities' and 'how the arts and architecture reflected the growth of industry.'

Suggested activities & related subjects

History: chronological charts showing the major personalities and events from British and/or world history during the Georgian period can be used to place the townhouse in its social and political context.

History and Geography: compare the Georgian townhouse either using local examples or the text of this booklet with ordinary housing or a Great House (eg. a nearby National Trust property) from another period. Points to consider include: form and function, materials and lifestyle.

History or Geography: compare a local Georgian townhouses to the surrounding buildings. How well do they fit together? Are the proportions and materials the same, complementary or completely different? Is the area a conservation area? If so, what are the implications? (see note on local authorities above).

Geography or Technology: hands-on experience of materials can be gained by visits to local stonemasons, brick factories or architectural salvage yards.

Mathematics: the height and proportions of the facade of a Georgian townhouse can be calculated using the dimensions of one of the bricks. The proportional relationships of the different elements of the house can be explored using the classical system.

Fig.11 Detail from a base of the ionic order from the Temple of Athena Polias, Priene. See also Fig.1



THE GEORGIAN GROUP

The Georgian Group exists to save from destruction or disfigurement Georgian buildings, townscapes, monuments, parks and gardens. The Group welcomes new members, donations, grants and legacies to assist its work.

**The Georgian Group
37 Spital Square, London E1 6DY
Telephone 071 377 1722
Registered charity no. 209934**

This project has been made possible by a grant from the Architecture Unit of the Arts Council of Great Britain.

Experiencing the past - the Romano-British way

Roger Butts, an Advisory Teacher for Outdoor Education, describes an ambitious project to re-roof and inhabit a Romano-British house at Chysauster, Cornwall.

In these days of constant educational change and argument, I still believe that children learn best from an enjoyable and educational 'real experience'. With this as my main philosophy in education, I was delighted to leave Dr Peter Stone's office in February 1992 with his blessing and a grant from English Heritage. The Early Technology Project, to take place at Chysauster near Penzance in Cornwall, was under way!

We decided at an early stage on the following:

- that the project would last for one week in June 1993.
- that it would be cross-curricular as far as possible.
- that the schools involved would use the preceding term for a major project involving this period and in preparation for the Early Technology week. In this, they would have the help of the Royal Cornwall Museum, Truro, the Cornwall Archaeological Unit and various Advisers and Advisory Teachers should they wish to request such help (which, of course, most did.)
- that four small primary schools all belonging to the same cluster would be invited to send their Year 5 and Year 6 children, totalling nearly sixty, on the project for two and a half days. They



Activity day at St. Ives, shifting a heavy weight.

were to be followed by a similar number of Year 7 children from a secondary school for the next two and a half days. We envisioned some overlap between the two groups.

■ that all concerned with the project would, as far as possible, be in costume.

■ that children would sleep under canvas in a modern camp adjacent to the site. Whilst I could see no real problem with children coping with the weather during the day, the thought of ensuring that the children were warm and comfortable at night was rather worrying, if we insisted that they experienced a Cornish Force 10 westerly of two thousand years ago!

Making preparations

The schools which were eventually invited were St. Erth, Gulval, Gwinear and Nancledra Primary Schools and St. Ives (Secondary) School. We held a lot of meetings, probably too many, though I made every attempt to keep them to a minimum, attended by various Advisers, Advisory Teachers, teachers from the schools involved, members of Cornwall Archaeology Unit and lots of other interested parties. Many ideas were discussed but the main sticking points seemed to be

what actual activities would be undertaken by the children during the week. They met John and Jacqui Wood and their family. John and Jacqui are in the process of building an iron age village on their land just outside Truro. They had already built a roundhouse, were beginning their second and had experimented with many tools, meals and methods of cooking, dyeing weaving and spinning, sprang work (a term entirely new to me, this is a wonderful way of making anything from hats to mattresses by twisting wool on a half-looped wooden frame,) and many other interesting and exciting activities.

The project in action

Then we decided a programme: permission would be sought from English Heritage to thatch a part of one of the huts at Chysauster. The general archaeological opinion was that the site had been rooted over and

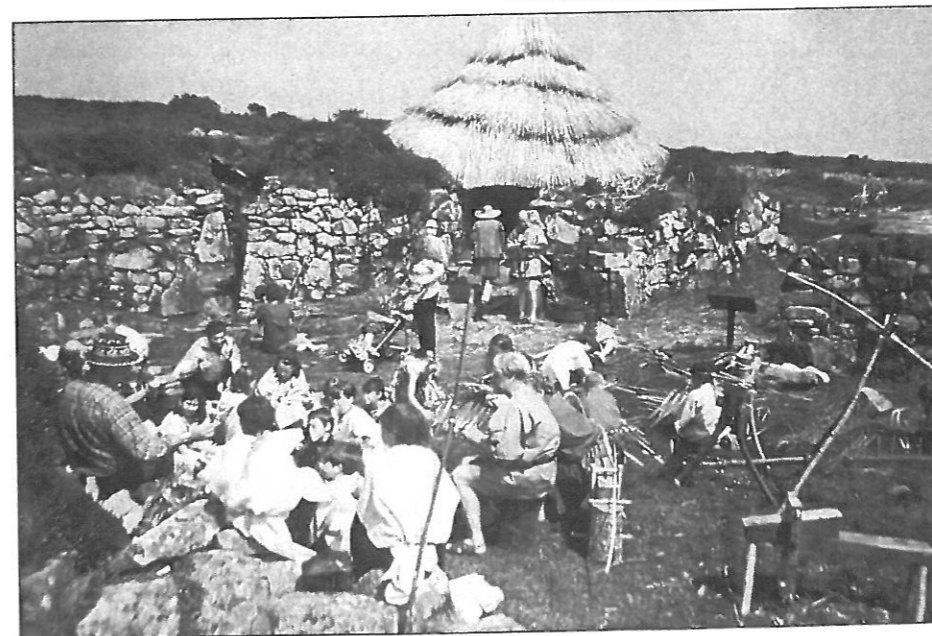


The thatched part of Hut No. 6 at Chysauster

practically rebuilt by the Ministry of Works in the 1930s, so that little harm could be done. I had already ascertained that Phragmites reeds for thatching could be obtained from the new Royal Society for the Protection of Birds reserve at Marazion Marsh. The warden, Dave Flumm, was most intrigued with the idea and even more interested in the thought that he might get his necessary reed cutting done for free by a bunch of loopy volunteers!

A training day would be held at the Wood's iron age village for the teachers to sample a variety of activities possible for the children. They would be sure to come because the menu for an iron age lunch to be prepared by Jacqui Wood was mouth-watering.

Nick Johnson and Steve Hartgroves of the Cornwall Archaeology Unit would put on an evening slide talk for us at St. Ives School to give us background information on the Romano-British period in Cornwall. I, for one, was in dire need of this, not being a historian or archaeologist at all! Jane Morris, Advisory Teacher for Science and Sue Pearce, Advisory



The project in action

