THE INFLUENCE OF ENGLISH ORGANIZATION
OF SPACE IN DWELLINGS ON THE
DEVELOPMENT OF DWELLINGS IN THE
UNITED STATES

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ACKNOWLEDGEMENTS

I am deeply grateful to Mr. Frank A. Beckum, one of my Architectural History professors, for his inspiration of this topic. I would also like to thank Mr. Joseph N. Smith, my Thesis Advisor, for his patience and guidance in helping me to develop the idea. Dr. Frank Clarke and Mrs. Betty Strack, my Reading Committee Members, have also added valuable ideas and corrections to this paper. Finally, I am grateful for the encouragement provided by my sister and typist, Linda Campbell, and my fiance, Rodney Lee Pope.
TABLE OF CONTENTS

ACKNOWLEDGMENTS .............................................................. iii
LIST OF TABLES ................................................................. vi
LIST OF ILLUSTRATIONS ..................................................... vii

Chapter

I. INTRODUCTION ............................................................... 1

English Houses of the Early to Late 1700's
French Houses of the Early to Late 1700's
Italian Houses of the Early to Late 1700's
Colonial American Houses of the Early to Late 1700's
A Summary of the Comparison Between English and European Dwellings with Colonial Dwellings
Development of Hypothesis and Procedure for Testing

II. THE DEVELOPMENT OF THE ENGLISH HOUSE ..................... 28

The Elizabethan Era
The 1600's: The Jacobean and Stuart Era (1603-1700)
The 1700's: The Georgian Era (1702-1830)
The 1800's: The Victorian Era (1830-1900)
The 1900's: Modern English Housing
Conclusions

III. THE DEVELOPMENT OF HOUSING IN THE UNITED STATES .... 70

The 1600's: Colonial Housing
The 1700's: The Development of Colonial Housing and the English Georgian Influence (1700-1830)
The 1800's: The Victorian Era in the United States (1830-1900)
The 1900's: Modern United States Housing and Its Development From Victorian Housing

Conclusions

IV. SUMMARY ................................................. 106

NOTES ......................................................... 112

BIBLIOGRAPHY ................................................ 118
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A Timeline of Inventions Produced by the Industrial Revolution</td>
<td>65</td>
</tr>
</tbody>
</table>
# LIST OF ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Typical Modern Houses of the United States</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Colonial Houses of North American</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Townhouses at the Circus, Bath, England</td>
<td>6</td>
</tr>
<tr>
<td>4.</td>
<td>Peper Harow at Surrey, England</td>
<td>7</td>
</tr>
<tr>
<td>5.</td>
<td>Blenheim Palace, Oxfordshire, England</td>
<td>8</td>
</tr>
<tr>
<td>6.</td>
<td>The Gardens at Stowe House, Buckingham</td>
<td>9</td>
</tr>
<tr>
<td>7.</td>
<td>French Flats of the Eighteenth Century, Paris</td>
<td>11</td>
</tr>
<tr>
<td>9.</td>
<td>The Palace at Versailles, France</td>
<td>14</td>
</tr>
<tr>
<td>10.</td>
<td>The Gardens at Versailles, France</td>
<td>15</td>
</tr>
<tr>
<td>11.</td>
<td>A Typical Italian House of the 1700's for the Middle Class</td>
<td>16</td>
</tr>
<tr>
<td>12.</td>
<td>An Italian House of the 1700's for the Upper Middle Class</td>
<td>17</td>
</tr>
<tr>
<td>13.</td>
<td>The Royal Palace, Caserta, Italy</td>
<td>18</td>
</tr>
<tr>
<td>14.</td>
<td>The Gardens at the Royal Palace, Caserta, Italy</td>
<td>19</td>
</tr>
<tr>
<td>15.</td>
<td>A Typical English Colonial Settler's House</td>
<td>21</td>
</tr>
<tr>
<td>16.</td>
<td>English Colonial House for the Upper Class</td>
<td>22</td>
</tr>
<tr>
<td>17.</td>
<td>The Peak Castle, Derbyshire</td>
<td>28</td>
</tr>
<tr>
<td>18.</td>
<td>Christchurch Castle, Hampshire</td>
<td>29</td>
</tr>
</tbody>
</table>
19. A Primitive English Farmhouse ................. 32
20. An Elizabethan H-Type Manor House .......... 33
21. English Houses for the Middle Class of the 1500's ................. 35
22. English Double-Parlor Houses of the Elizabethan Era ................. 36
23. Hardwick Hall, Derbyshire ...................... 37
24. Coleshill, Berkshire .......................... 39
25. The Gardens of Brome Hall, Suffolk ............ 41
26. English Double-Pile House of the 1600's ........ 43
27. Holkham Hall, Norfolk ........................ 45
28. Houghton Hall, Norfolk ......................... 47
29. Terrace Houses at Bath, England ............... 48
30. Typical English Georgian Cottages ............ 49
31. Bear Wood, Wokingham, Berkshire ............... 51
32. Fillongley Vicarage, Warwickshire ............ 55
33. A Row of London Houses ....................... 57
34. Dene Place, West Horsley, Surrey ............. 61
35. Talfer and Gorsefield, Llanfairfechan ........ 63
36. A Typical English Garden Plan of the Early 1900's ................. 64
37. Typical House Plans of New England and Virginia in the 1600's ........ 71
38. Georgian Colonial House Plans of New England in the 1700's ........ 74
39. Drayton Hall, Charleston, South Carolina 77
40. Vanderhorst Row, Charleston, South Carolina 78
41. A Villa in the Elizabethan Style, 1842 81
42. Typical Gardens for a Villa, 1842 83
43. A Model Home by Palliser, Palliser and Co., 1878 83
44. H. A. C. Taylor House, Newport, Rhode Island, 1885-86 86
45. The Typical American "Carpenter" House 89
46. Charles Evans House, New York City, 1922 91
47. Walter C. Baylies House, Taunton, Massachusetts . 93
49. Typical Row Houses of the 1930's 96
50. A Typical Rectangular House of the 1930's 97
51. A Typical Small Cottage of the 1930's . 97
52. Harry Toplitt House, Brentwood Highlands, California 98
53. McCall's Award-Winning House, 1952 98
54. A Typical Ranch House of the 1950's 99
55. A Two-Story House Plan of the 1970's 100
56. A Split-Level House of the 1970's 100
CHAPTER I

INTRODUCTION

In order to design a building, an architect programs the spaces needed by the user. Programming methods are employed so that development of usable activity spaces will be produced according to the user's needs. A hierarchy of those needs is determined in terms of private, semi-private and public activity spaces. Consideration is also given to the orientation of the building on the site; use of space on the exterior for service and garden space; separate smaller spaces needed in the building to support major spaces by providing services such as bathrooms and storage closets; and various forms of access to all of the spaces. Not all of these criteria have been widely used in the past; however, they seem to have been developed along with technological advances occurring in industrial societies. These programming considerations are used primarily by professionals; laymen generally do not do so because of the lack of formal training in these methods.

Since not all buildings are designed by architects, e.g., house designs, formal programming techniques are not
always used to design buildings. Laymen tend to employ patterns for drawing up plans, particularly for houses. Models copied are usually current or historically recent house designs which have proved their popularity and salability. Pattern books for houses, real estate agencies' ads, and the Sunday newspaper Homes Section all give ideas of the extent to which historically popular styles of dwellings have influenced the housing market today. All of the plans are similar in the way that rooms are used and in their placement, but the front elevations are different (Fig. 1). Therefore, the nomenclature varies according to the elevation of the house shown. Some of these styles are

Figure 1. Typical Modern Houses of the United States.
commonly called: English Tudor, Cottage, Colonial, Manor and Georgian; French Mansard, Provincial and Country; Spanish Colonial; Dutch Colonial; Swiss Chalet; and others. References in the nomenclature of modern houses are mostly patterned after English and European styles.

It would be natural to assume that the settlers from the Old World brought their own styles of house design with them to the New World. However, in many instances the houses were adapted to suit the climates in the New World (Fig. 2). These houses were built out of timber and later in brick. Brick insulated the houses in the Northern Colonies in the winter and also insulated houses in the Southern Colonies from the heat. Timber was used frequently but was not able to give as much insulation to the houses as brick. The

![Figure 2. Colonial Houses of North America.](image-url)
house in Fig. 2-E is a dog-run house of the Southern Colonies, which was adapted from the type of house shown in Fig. 2-C to provide ventilation during the summers. Adaptation to the local climate and materials available became necessary for the comfort and cost of the colonial houses, while the idea of the house remained similar to that of the settlers' native countries.

However, due to the differences in climate and customs, English and European styles are not similar to each other. Because each distinct house form is specifically different, it is possible to compare the plans in order to discover which type was most influential on English Colonial houses. Houses in the English colonies of North America must be examined at the same time as the plans for their English and European counterparts in order to validate the comparison. Therefore, the time frame acceptable to compare the plans is the early 1700's to the late 1700's. The plan most influential on Colonial houses can then be determined.

Once the elements of a plan are found to be influential on Colonial dwelling plans, those factors can be tested for a time frame embracing different styles. A suitable time frame would begin before the English settlement of the New World in 1607 at Jamestown. Continuing until today, the
A comparison of Old and New World housing would show that there are similar elements in today's dwellings. Moreover, changes in housing brought about by the Industrial Revolution in England and in the European countries also influenced housing in the United States. The scope of this introduction is limited to the comparison of English houses to those contemporary in France and Italy of the eighteenth century and this paper is limited to an examination of the influence of English housing design upon that of the United States.

**English Houses of the Early to Late 1700's**

Housing of the new middle class in England during the 1700's became the focus of many architects' work. John Wood the Elder and John Wood the Younger designed many parts of Bath, England during the middle 1700's. The houses at The Circus, Bath, were designed for middle class people by the Woods around 1754 (Fig. 3). Known as townhouses, these dwellings became increasingly popular in the expanding industrial cities in the 1700's. Small plots of garden space or sidewalks in front of the townhouse provided a transition from the street to the dwelling's entrance. Front entrances led directly into the Hall—a reception area.
A small corridor for circulation connected the three first floor rooms to the entry Hall, and also connected the first floor to the second floor with two sets of stairs. Access from room to room was also provided by openings with or without doors between rooms. Two rooms on the principal, or the first floor were primarily for guest entertainment, family living and dining areas. Floors above provided sleeping areas, giving privacy for sleeping by vertical
separation.

Peper Harow at Surrey, built about 1775 and designed by William Chambers, is an example of a middle class house (Fig. 4). The main floor plan shows a central entry Hall with openings to both the main and service stairs. One side of the lower floor is made up of service areas, such as the Kitchen and Butler's Bedroom. A side entry serves these work areas. The Library is rendered private by its placement across the hall behind the stairs, so that it can only be reached through the stair hall. This hall also leads to the two guest entertainment rooms—the Dining and Drawing rooms. Some separation is designed between social and private activities by the Hall and stairs, yet each room can be reached primarily through the doors provided between them.

An example of a royal palace of this period is Blenheim Palace near Woodstock, Oxfordshire, built in 1705-24 by
Sir John Vanbrugh (Fig. 5). Exhibiting similar principles of separation of social and private activities on a more complex scale, the emphasis on the organization of activities into specialized spaces at Blenheim Palace may have influenced later English dwellings. The main Palace has two wings built

Figure 5. Blenheim Palace, Oxfordshire, England.  

around the Stable Court and the Kitchen Court. Long corridors connect all of the rooms. Smaller corridors to the wings provide access from the guest entertainment, living and the royal family living areas. Each of the rooms is not only accessible by a corridor, but also through doors to adjoining rooms. The Entry Hall is placed on the principal axis, around
which all of the other rooms are symmetrically-placed. Main stairs to the second floor bedroom areas are located adjacent to the Hall in a symmetrical arrangement. Minor stairs provide for the privacy of the family and servant activity. These staircases are also arranged symmetrically around the Hall, but are placed further away from the Hall than the principal staircases. The main Entry Hall is oriented towards the Great Court and entrance gate. Wide expanses of lawn behind the house are used for entertainment functions.

Public parks and private gardens were designed so that natural woodlands would survive within the city (Fig. 6).
Facing on the parks would be rows of houses, as at Bath, England. The park would include streams, ponds, clumps of trees and sometimes a meditation rotunda.

From the above examinations, it can be seen that large and small English houses of the 1700's exhibited several similar characteristics. These characteristics are:

1. The central entryway known as the Hall;
2. Symmetrical room arrangements, usually placed around the Hall;
3. Separation of vertical circulation for guests, family and servants;
4. Privacy for sleeping areas, usually in a vertical separation;
5. Separation of kitchen and sanitary facilities from the house; and
6. The English garden, or natural woodland, used as a public park.

French Houses of the Early to Late 1700's

The French developed their own distinct housing patterns for the influx of the rising middle class into industrial areas in the 1700's. Common forms of housing for the French are one-story flats which occupy one floor of a building rather than townhouses that are directly connected to the ground (Fig. 7). This kind of flat occupies only one floor of a multi-story building. Entrance corridors from
the street to stairs at the rear of the building are placed at each side. The two stairs at the rear are symmetrically-placed. The flats have four symmetrical rooms in two rows with one room connecting the rows between the symmetrically-placed stairs. There are no corridors through the flats; instead, circulation is through the center of each room. Special separation between sleeping areas and guest entertainment is not designed in the room arrangements; rather, furniture is used to support specific room uses. For instance, beds with canopies and drapes create their own private space within a room. Wardrobes are used for the storage of clothes. Facilities for the preparation of food in the basement are separated from the flat by stairs; food was carried from the kitchen up through the public stair.

![Diagram](image_url)

**First Floor**  **Second Floor**

*Figure 7. French Flats of the Eighteenth Century, Paris.*
hall to the other rooms in the flat. Sanitary facilities are located to the rear of the building. The only importance placed on a relationship to the exterior for the flat was the orientation of the house towards the street for lighting two of the four rooms. In contrast, the English townhouse oriented all rooms to a source of light and to a vista of a park (for example, The Circus at Bath).

The French upper middle class lived in the popular Hotels in the middle of the eighteenth century (Fig. 8). The interior gains light from two sides of the house which face the street and from a light well which most interior rooms face. Corridors do not exist, so that passage is

Figure 8. A Hotel in Paris: the de Crillon House.

11
necessary through all the rooms for circulation. One primary stair, a secondary stair, service stair and stair to the servant's bedroom provide vertical circulation. Some built-in storage areas were also designed.

Royalty's showplace, the Palace at Versailles, was built about 1661 by Le Vau. The Palace served as the required meeting place of the Court and as the economic and cultural center of France. Its plan is symmetrically-balanced, with two wings from the main house. Since Blenheim Palace was built approximately thirty years later in England, the plan could have been inspired by the Palace at Versailles. Rooms at Versailles are symmetrically-placed relative to the King's Bedroom on the second floor, rather than on an Entrance Hall as at Blenheim Palace. Circulation from the entry door is not through corridors, but through rooms. One of these rooms, the Gallery, is a long rectangular room which faced the gardens. All of the bedrooms for the court are located in the wings. Again, corridors do not link the bedrooms; doors provide access through each room. Privacy for sleeping could only be achieved by using the canopy bed with curtains. Also, service functions are not indicated in plan, but rather in buildings detached from the Palace (Fig. 9).
Treated as a focal point on the landscape, the Palace is located at the convergence of three roads and is used as the axis along which the gardens are designed by Andre Le Notre (Fig. 10). French parks and gardens have formal characteristics, as seen in Figure 10. A central vista provides the axis around which all the avenues through the gardens are designed. Parks within French cities were also designed as strong focal points, with carefully-placed flowers and shrubs. The Gardens at Versailles reveal the French tradition in formal and symmetrical design of public parks. Angular streets approach the Palace and lead off the main axis of the Gardens to less formal planted areas. The angular streets are symmetrically-balanced around the main axis of the Gardens. Symmetry is an important element used
in the design of the planted areas along the main axis.

Figure 10. The Gardens at Versailles, France.
From the above examples, it can be seen that French dwellings have common characteristics. These characteristics are:

1. Dwellings do not need to be attached to their own particular plots of land;
2. All rooms are directly accessible through each other, not through a special corridor;
3. Special areas for service functions are not of particular importance to the house form;
4. Entrances to the house do not occur in any set pattern;
5. Rooms within the dwelling are arranged in lines rather than in groupings around a common area;
6. Kitchens are located to the rear of the house as well as sanitary facilities; and
7. Gardens are very formal in design.

**Italian Houses of the Early to Late 1700's**

Italian housing in the 1700's for the middle class was quite simple (Fig. 11). Typical of the houses in

![Figure 11. A Typical Italian House of the 1700's for the Middle Class.](image)
Tuscany, the court serves as the entry Hall directly off the street. This outdoor entry area allows two entries from the street—one into a corridor with a stair and one into an entertaining area. A Kitchen with a hearth and a dining area adjacent to the entertaining room are at the rear of the house. Sanitary facilities are not provided, except for drains to the rear of the house where human refuse could be dumped. Sleeping areas are on the upper levels.

A larger upper middle class house is a little more complicated (Fig. 12). A front entrance leads down a short corridor to a hall with a court area beyond. Directly across the court from the entry Hall is another short hall, which leads into a walled-in garden at the rear of the house. All the rooms in the house and the garden area are symmetrically-arranged around the central court. Two stairs off the entry Hall, one of which is more grand in its treatment, serve the

Figure 12. An Italian House of the 1700's for the Upper Middle Class.
bedroom areas on the two floors above. The house looks in on itself, drawing light from the atrium. Kitchens are located on the ground floor, accessible to water from pipes. Sanitary facilities are not designed in the structure, but are provided for by a drainage system to the rear of the house.

A Royal Palace was built for the Bourbon family at Caserta, near Naples, in 1762 by Van Vitelli. It is influenced by the Palace at Versailles in France, yet also retains the Italian inward-looking house (Fig. 13). Streets to the Palace converge at a point leading to the entry, which is quite similar to the Palace of Versailles (Fig. 14). The large garden to the rear of the Palace with its vista about a central axis and smaller avenues leading off to the side of the axis is also similar to the gardens at Versailles.

Figure 13. The Royal Palace, Caserta, Italy.
However, unlike Versailles, this Palace has four symmetrical courts. The Palace's entry is underneath the second and third floors in the center of the building. A large entry area, which faces all of the courts, has a set of Principal Stairs in one of the wings. Smaller side stairs, further away from the entrance, provide for more private circulation. Entertainment occurs in the wings around two courts. There are some small corridors with their own sets of stairs leading to the center of each wing between bedrooms. Closets are not built; furniture was used for clothes storage.

Figure 14. The Gardens at the Royal Palace, Caserta, Italy.

Italian houses were placed around piazzas and streets which accommodated public functions during the day and were occasionally blocked off at night for private functions. Protection for these communities was provided by city walls; the buildings of the city focused on the piazzas.

From the preceding examination, it can be seen that the Italian houses have several similar principles. They are:
1. A court which lets in light and ventilation but does not always allow circulation;

2. Rooms which have direct access into one another;

3. Interior entry points;

4. Housing which tends to be linear around a square open space due to the fact that the rooms interconnect;

5. Kitchens with direct access to other rooms within the house, as well as sanitary facilities with drains to the rear of the house; and

6. Clustering of houses around piazzas, which provide the open space for community gatherings, markets, restaurants, and play space for children.

Colonial American Houses of the Early to Late 1700's

In order to complete the comparison of the English and European houses with colonial dwellings, this section will examine similarities of colonial dwellings to some of those elements of Old World housing. Houses in the early colonies developed from dwellings which provided only the basic necessities for survival. As the settlers prospered and communities were established, houses were designed with more regard to the amenities of living. The production of brick and other building materials aided the development of more elaborate dwellings.

A typical English settler's house was quite simple (Fig. 15). The usual configuration is a large center Hall
separating the only two main floor rooms. One of the two rooms on the principal floor is designated for family living, dining and general entertainment area; and the other room for sleeping for parents and infants. Stairs are placed in the Hall, connecting the main floor with bedroom space for the whole family on the second floor. Lofts above provide for storage and extra sleeping spaces.

Figure 15. A Typical English Colonial Settler's House.

Housing for the upper class, as seen in Figure 16, is similar to the typical settler's house in that it is oriented symmetrically around an entry Hall and has a stair to the upper rooms. Kitchen service to the Dining Room is contained in a wing off the side of the building in which the dining area is located. In some cases, the service wing is connected to the central Hall by a long narrow corridor with two rooms on each side of the entry Hall. One of the four rooms on the Principal Floor would be a Bedroom, as well as a Drawing Room and a Parlor used for entertaining. Bedrooms
are provided upstairs for the children and guests. In some cases there is a Master Bedroom as well. Closets are not generally built into any of the bedrooms or other rooms; rather, wardrobes, china cabinets, and other unattached pieces of furniture are used for storage. The four Main Floor rooms could be assigned any activity due to the symmetrical arrangement around the entry Hall. Circulation to another room has two options: through the Hall or through interconnecting doors.

In houses of the northern colonies, cellars were built under the Principal Floor for food storage, water supply and other service facilities. In the middle and southern colonies, wells could be located outside and close to the house. Baths were usually taken in large washtubs in the Kitchen; pit toilets and wells were located away from the house. At
night, chamberpots were used rather than the necessary, or outhouse. Exterior spaces to the house usually included a drive and lawn to the front of the house and a vegetable garden to the rear.

From the previous examples, it can be seen that there are typical elements in the Colonial houses. They are:

1. An entry Hall with a staircase;
2. Separation of service functions from the main floor (they are in an attached wing or a separate floor, the Cellar, or remote from the house);
3. A symmetrical arrangement of the rooms;
4. Privacy for sleeping areas, as provided by a vertical separation; and
5. A public yard to the front with a service yard to the rear of the house.

A Summary of the Comparison Between English and European Houses With Colonial Dwellings

The English and European houses of the early to late 1700's have many differences. Entrances to the English houses are located at the center of the house and are known as Halls; to the French houses, entrances exist at no particular point in the facade but are connected to a Salon and/or Gallery somewhere in the house; and to the Italian houses, entrances go through an area underneath the second and third floors which open to the air into a small reception area,
usually facing an inner court. The English arrange their rooms symmetrically around the Hall, while the French and Italians generally do not do so. Separate stairways for the guests and the servants are used by all three countries; however, the Italians do not close off the service stairs to public viewing as did the French and English. Privacy for sleeping areas is generally separated from social areas either vertically or horizontally (i.e. in the wings of the building) for three types of houses. However, the French and Italian bedrooms are interconnected. The English houses seem to have been connected to a ground floor with at least the tiniest area of green earth, while the French did not find it necessary to tie each dwelling unit to the ground. In their courtyards, the Italians opened up their houses to the light and air, rather than to green earth. English housing was quite low in density, compared to that built in France and Italy.

Colonial dwellings in the New World had characteristics strikingly similar to those of the English. In colonial houses, an entry Hall is used as the basis around which rooms are symmetrically-ordered. Sleeping areas are separated from the living areas by a corridor, wall, and/or vertical separation. Service corridors to the Kitchen are sometimes
used as well. Separation of guest and family or service stairs are occasionally used. Of all the European examples, the Colonial houses more closely resemble the English houses. Rooms are ordered around an entry Hall, separation of circulation from rooms, and the separation of service and family from guest entertaining areas all indicate strong similarities to the English housing. An examination of English housing from the time the New World was discovered might show a similar relationship to the development of housing in the Colonies through housing in the United States today.

**Development of Hypothesis and Procedure for Testing**

An examination of the influence of English houses on domestic architecture in the United States will reveal the development of similar elements in dwellings of both countries. As has already been indicated in the previous comparison of key factors in the houses of the English, French, and Italians, there were certain similar elements between the English and Colonial houses of the early and late 1700's. In order to fully examine the houses of the English and United States in a comparison, the following elements will be employed:

1. Planned circulation
2. Rooms designated for specific use

3. Planned auxiliary spaces: i.e. Storage Rooms, Pantries and Sculleries, Laundry Rooms and Service Yards

4. Privacy

5. Spaces built into the structure for specific activities rather than using multi-purpose rooms with furniture providing for specific activities: i.e. Closets instead of Wardrobes and Dining Rooms instead of the Dining Table in a multi-use Hall.

6. Exterior space use

7. Orientation of the house on the site

Planned circulation will be examined in terms of public and private entry and circulation. Rooms designed for specific use would include those necessary for service and living activities as well as those for guest entertainment functions. Auxiliary spaces such as Storage Rooms and Pantries for food will be examined in the examples. Privacy in the separation of functions by rooms and/or vertical separation will be another key element in the comparison. Some of this privacy is achieved by assigning operations and activities to spaces rather than to furnishings, such as sleeping in bedrooms rather than in a canopy bed with curtains to keep out the night air. Exterior space use and orientation of the house on the site are also elements in the development of the house in the United States.
This comparison will examine elements in the development of house design in the United States and England. Houses from England in the 1500's and Colonial to modern housing will be used in the comparative analysis. Dwellings for the upper and middle classes will also be used in the comparison.
CHAPTER II

THE DEVELOPMENT OF THE ENGLISH HOUSE

English medieval customs provided for the protection of groups of yeoman by a lord. The lord lived in a fortified castle while his "... private army of retainers, gentlemen like himself, and servants" including agricultural workers lived on the manor. An example of a lord's castle is Peak Castle in Derbyshire (Fig. 17). During the twelfth and thirteenth centuries, the Norman Keeps, or castles, were built at the edges of provinces for protection of the

Figure 17. The Peak Castle, Derbyshire.
residents of those areas. Christchurch Castle, an example of the typical medieval keep, gives some indications of the physical needs for a lord and lady's family (Fig. 18). A manor house for those not as wealthy was quite similar to this plan although smaller in scale. The castle, or manor house, had two rooms on the main floor: a Hall, and a Solar. If it was a Norman keep or castle, it had a Basement or Cellar which was located on the Ground Floor for the storage

Figure 18. Christchurch Castle, Hampshire.
of food as well as for protection of the people on the main floor. Norman keeps were built of stone, while similar houses in the interior of England were of timber (a Nordic influence). As indicated on the plan in Fig. 18, the Hall was the center of such activities as the reception and entertainment of guests including banqueting, sleeping, and courtroom activities. The importance of the Hall is indicated by the following definition:

The public dwelling of a Teutonic chieftain, typically a gable-roofed building having a large single or principal apartment in which his retainers were feasted and where they slept while in attendance on his person; hence the apartment itself;--distinguished from the bower, or private apartments. Chief of all the buildings is the hall; and near it is of course the bower of the queen. 'Hall and Bower' long remains an evident metonymy for Lord and Lady.

The actual term, Hall, was derived from the Anglo-Saxon words heal, heall; Old Saxon and Old High German halla, Old Norse hall; and the original Anglo-Saxon helan, which means to conceal. The function of the Hall was to conceal, or protect, the main activities of feudal life from disturbances.

A smaller room off to one end of the Hall, the Solar, was the private sleeping chamber for the owner and his family. "During the Middle Ages, an individual bedroom was exceptional. The servants slept in the hall or in a shake-down in the work
rooms or between the storage." The term solar "... means any room above ground level," although some believe the term "... Great Chamber is more fitting." The following is an explanation for the origin of the term solar:

This word [Solar] seems to have been derived from the French sol (floor) and solive (beam), and was used for an upper floor. In old French texts, the soler is the upstairs room, the topmost level [Latin solarium, often over the first-floor hall (salle)].

In effect, the Solar, or family's sleeping quarters, being removed from that of the servants and guests, provided limited privacy for the family. There were no specific rooms for activities or storage other than the Cellar, the Hall and the Solar, except for an occasional Garderobe off the Solar or main corridor. Garderobe meant a "Privy" or "Latrine." A shaft in the Privy allowed for the flushing of water to the outside of the building or to a pit.

During the thirteenth century, an added Garderobe Tower was built off the Solar (See Christchurch Castle in Fig. 18).

As the Elizabethan era neared, the houses of the wealthy became partitioned into more rooms. As will be seen in the next section, an Oriel (or Entry), a Chapel and a Kitchen composed the plan of the house. Houses of peasants followed the trend towards the subdivision of the Hall into rooms for specific functions. The earlier medieval houses
of peasants were circular while others were rectangular stone houses. Townhouses of the lower class had first floor shops, with a great room above for all the family's functions. Houses of the peasants who worked on farms did not necessarily include provisions for their animals and implements in the later middle ages, but did during the earlier middle ages (Fig. 19). From the porch, one enters a small corridor, which separates the two rooms in the house. One room was used as the family's living quarters, and the other room as shelter for the farm animals. Staggered entrances to the rooms provide for privacy between man and animal. Furnishings provide storage and facilities for all support activities.

Figure 19. A Primitive English Farmhouse. 32

Until changes in the life of the peasant were brought about with the expansion of British trade in the 1400's and 1500's, the houses remained similar to that described above. A hall provides guest entertainment, banqueting and sleeping space as well as for the family's entertaining and dining
needs. Sleeping spaces for the family in a solar are separated from the hall by a screened-off corridor between the hall and solar. Food preparation and facilities for the livelihood of the family are located in outbuildings. However, changing lifestyles particularly affected the houses of all the classes shortly before and during Queen Elizabeth's reign (1558-1603).

The Elizabethan Era (1558-1603)

Houses of wealthy pre-Elizabethan lords' homes retained similar elements to the English medieval houses (Fig. 20). A Hall was still used for banqueting. However, one end of the Hall was 'screened' from the Entry, or Oriel, by a screen, creating a passage. At the end of Hall opposite from the corridor is a raised platform for the lord and his family, known as the Dais. On the plan indicated, a Bay to the side of the Dais is shown, which serves as a corridor.

Figure 20. An Elizabethan H-Type Manor House.
to a private family Parlour behind the Hall. At the other end of the Dais is a stair which leads to a Solar for the family's sleeping area above the Parlour. Behind the screen at the opposite end of the Hall from the Dais is a corridor, which has two entrances from the outside. On the other side of the corridor is a Pantry and Buttery, which lead directly across the corridor by doors through the Screen into the Hall. A corridor leading to a Kitchen Court lies between the Pantry and Buttery, and is closed from the guest's view by the Screen. Thus, privacy is provided for servicing of the banquet Hall as well as for the lord's family sleeping quarters. The corridors used in these houses indicate the increasing needs for privacy and separation of activities. Rooms began to be used not for a variety of activities, but for certain assigned activities; for example, the Parlour for general guest entertainment, not banqueting; the Pantry for food storage (from the French word for bread, or bottlery); and the Kitchen Court in direct relation to the house rather than as a separate outbuilding.

Features of the dwellings of the rising middle class resembles some of those of houses designed for the wealthier class. Houses for the middle class no longer have only one room per family. Rather, they have two first floor rooms
with an attic area for sleeping. These two rooms provide for all of the family's living needs (Fig. 21). A main floor entrance door opens into either the Hall or a small entry connecting all parts of the house. The Hall or Kitchen to one side of the dwelling is used for food preparation and dining. The other room, the Parlour, serves as a work and entertaining area separated from food preparation and dining activities. If the hall is known as a Kitchen, a Pantry provides extra storage at one end of the house. For the first time, the Kitchen is under the same roof as the house. At least one fireplace is located on each floor; if located within the house, the same chimney would serve all the fireplaces. A small staircase near or within the entry leads to the upper floor. Privacy for the sleeping areas is provided by vertical separation between living and sleeping areas. One sleeping area is provided for adults and another for children. The Pantry, if added to the main floor, is the first semblance of a storage area becoming an integral

Figure 21. English Houses for the Middle Class of the 1500's.
part of the building. Outbuildings are used for storage and pit toilets are provided if storage facilities and latrines are not included within the house. Somewhat wealthier members of the middle class owners copied the Hall-and-two-Parlour scheme, similar to the H-plan of the wealthier pre-Elizabethan houses (Fig. 22). Again, Solars or private Bedchambers are located on the Second Floor, providing privacy for sleeping. One of the Parlours is the 'Lesser Parlour,' located near the entrance in the Hall. The Best Parlour is located furthest away from the door and is heated by a fireplace, unlike the Lesser Parlour.  

An Elizabeth example of housing for the wealthy is Hardwick Hall, done by Robert Smythson in 1590 for the Royal family (Fig. 23). The Hall is entered on the Ground Floor, and by means of a stair continues the circulation pattern to the next floor. A Screen separates the Entry from the Hall. Directly off to one side of the Entry corridor are the Offices for the household operations, and

![Figure 22. English Double-Parlour Houses of the Elizabethan Era.](image)
beyond a Kitchen with its own storage rooms and entrances. The Kitchen is connected to the Hall by a corridor, in which there are stairs to the upper levels. On the opposite side

Figure 23. Hardwick Hall, Derbyshire.
of the Hall from the Kitchen is the Main Stair, which is accessible from the Entry primarily through the Hall. Other offices for the estate are located on this side of the Ground Floor. Privacy for service is afforded by a service corridor. The First Floor, immediately above the Ground Floor, contains the Family Dining Room, the Chapel, the Drawing Room, and other living areas. A Gallery overlooking the Hall connects the Drawing Room to the Dining Room. Bedchambers are located on the Second Floor, giving privacy to the royal family. These Bedrooms face out towards the front lawn, while a Long Gallery runs the length of the house on the garden side. Some smaller chambers indicating storage use are built into the structure, although furniture also provides storage. The stone house has a formal, symmetrical facade facing on a large lawn with a drive, whereas the rear faces on a lawn and garden area.

Houses during the Elizabethan era had progressed from a multi-purpose Hall to a Hall with some of its functions assigned to other rooms. Family sleeping quarters were given a separate room known as a Parlour. Cooking was either provided in a basement area or more commonly in an outbuilding joined to the house. Cold food storage and storage for dishes were given spaces known as the Buttery and Pantry.
During the Jacobean and Stuart era (1603-1702), spaces within dwellings became more numerous and specialized than Elizabethan houses.

The 1600's: The Jacobean and Stuart Era (1603-1700)

The design of houses for the wealthy had changed between the Elizabethan era and the Jacobean and Stuart era. The plan of Coleshill in Berkshire, built in 1650 by Inigo Jones, illustrates these changes (Fig. 24). The rooms of the house are symmetrically arranged around a central Entry. The main entry, known as a Hall, is nothing more than a reception area with a stair to the upper levels of the house. The Hall opens onto a Salon, similar to that found in French houses. This room replaces the entertainment function of the medieval

Figure 24. Coleshill, Berkshire.
Hall. To one side of the Hall and Salon is a Bedroom area and on the other side, a Parlour and Drawing Room. Small stairs service both of these areas and the upper floors from a Kitchen and other service facilities in the Cellar. A separate stair adjacent to the Parlour provides for family and guest access from upper-level Bedrooms to the Parlour. On the Main Floor, circulation to all the rooms is provided by a corridor perpendicular to the Hall, yet doors in the corridor can be locked for privacy in certain areas. Bedrooms are located on the upper level, locked off from a central dining space by corridor doors to provide sleeping privacy.

Some storage areas are indicated on the Main Floor plan. A small Lavatory or bathing area is provided for the Bedroom spaces on the main floor. Small rooms called Wardrobes are provided for clothing storage in each Bedroom (wardrobe is derived from the French word garderobe). Smaller bedrooms for servants are adjacent to the service stairs at both ends of the corridor. These bedrooms do not have closets; however, Wardrobes are used for clothes storage as well as dressing areas. Exterior spaces are carefully planned using the central Hall as the main axis, with the Salon facing a rear lawn or garden. An example of the
gardens common to such a house is at Brome Hall in Suffolk (Fig. 25). Separated from farm fields and pastures by long rows of trees, the drive to the house leads directly to the front entry. A low wall is entered through a gate, a small symmetrically laid-out lawn is passed next and then another small wall enclosing a formal symmetrical entry garden beyond it is passed. This garden is entered in order to reach the front entry. To the rear, the Salon faces a lawn which has another formal garden on the side. Behind and to the side of the lawn and gardens are long rows of trees concealing the fields.

Figure 25. The Gardens of Brome Hall, Suffolk.
The fact that spaces are now being used for specific purposes indicates a change in attitude towards privacy for certain functions. The Pantry and Buttery serve the Kitchen; the Banqueting Hall is separated from the Entry and the Salon; Bedrooms are private and have Wardrobes, or Closets, for clothes storage. An examination of the term closet will give a history of where it came from. The term closet comes from the Old French, meaning a "little enclosure, or diminutive." It means in English:

- a room or apartment for retirement;
- a small room for privacy;
- a monarch's or potentate's private chamber for counsel or household devotions;
- and a cabinet for valuables or curiosities as well as a small room or recess for household utensils, clothing, etc.

By this time, the closet had become a common room for the storage of valuable items.

Closet space was not yet used in the lower middle class housing, as seen in two houses built in 1658 and 1675 (Fig. 26). They were known as "the double pile house" since their rooms were "piled" two deep on both sides of a corridor. The main entry to the house leads into a small corridor, called a Hall, which serves as circulation and reception space. A Best Parlour for guest entertainment is located directly off the Hall. The stair is visible from the entry and is reached through the Hall similar to the arrangement
in the Coleshill house. To one side of the stair is a Kitchen and to the other side a Little Parlour. A separate entry is maintained for the Kitchen. Symmetrical arrangements for the rooms show a growing trend towards a central room, used as a corridor and called a Hall, with two rooms to either side. Bedrooms are given privacy from other areas and activities by either vertical or horizontal separation. They are placed either on the upper level or on the main floor removed from the principal circulation. Pit toilets are located to the outside of the main structure. Closets are not indicated; yet the bedrooms in housing for both the wealthy and middle class indicate the beginnings of separate spaces for bedrooms and clothes storage instead of the medieval bed with canopy and bedcurtains for sleeping spaces.

Figure 26. English Double-Pile House of the 1600's.
Understandably, exterior spaces were not as carefully planned or oriented in the houses of the middle class as they were in those of the wealthy class.

The changes to symmetrical arrangements of rooms; the reduction of the Hall's use to a reception and corridor area; the separate stair system for the family, guests and servants; and the use of Closets and Bedrooms formed a basis for changes that were to occur in English housing in the 1700's. The following section is an analysis of the development of English houses of the 1700's.

The 1700's: The Georgian Era (1702-1830)

During the eighteenth century, cities were drastically changed by the Industrial Revolution. Towns, especially London, grew very rapidly. Larger houses seemed to become "compartmentalized," that is, even more rooms accommodated separate activities. English houses of the Georgian Era were influenced by the formal, symmetrical house plans designed by Andrea Palladis in Italy. An example of a large royal house is Holkham Hall in Norfolk, designed by William Kent in 1730 (Fig. 27). It is a symmetrically-balanced two-story house with a Principal Floor oriented around a large Hall and Salon, similar to Coleshill. Entertaining areas are located at the center of the house. The central
area is served by four wings known as the Library, Visitor's, Kitchen and Chapel Wings. To the east side of the Hall are the servants' Bedrooms; and off to the west is the Visitor's Wing containing the guest Bedrooms. Some of the Family, or

Figure 27. Holkham Hall, Norfolk.
State Bedrooms, are located in the central block on one side; others are in the Chapel and Kitchen Wings on the Principal Floor. Family living areas are located in the Library Wing. Although some rooms serve as circulation spaces to the wings, there are corridors provided for circulation as well. Separate stairs are provided for public and private use. Toilets are located within each bedroom area, in the Library Wing and in a back corridor of the Reception Hall. Closets and other storage spaces are not indicated on the plan, so furniture must have been used for storage units. However, Dressing Rooms are provided adjacent to bedrooms. Special rooms are designated for guests including the two Courts, two Drawing Rooms and the Statue Galleries. Offices for the Estate, Housekeeper and Steward's Room, and Entrances are located on the Ground Floor. Due to some circulation through rooms, little privacy is provided within each of those rooms. The house was surrounded by a green lawn and had a drive leading to the Principal Entrance.

Smaller houses such as those of the rising bourgeoisie, displayed similar characteristics of limited circulation and a symmetrical arrangement of rooms. Houghton Hall, designed by Colen Campbell in 1722, is an example of a Georgian house for the moderately wealthy (Fig. 28). All rooms are
symmetrically-placed around a Hall and Salon. The Hall serves as a central reception area for guests, while the Salon is used for entertaining the guests and family members. Four rooms on either side of this axis are provided for the entertainment of guests: the Parlour, Dining Room, and two Drawing Rooms. Bedrooms are located beyond these four rooms, and can be reached either by corridors or through other rooms. A Library for the family is also located within this area. Circulation is defined as a separate function from activities within rooms. A central stair and a secondary stair are located off the main Hall leading to Bedrooms on the upper floor. A Kitchen is located on the lower floor and has access to the Dining Room through the secondary stairs. Small storage closets adjoin the secondary stair and Dining Room. The house also has a larger room which serves as a Cabinet, or storage room, for the Dining Room.

Figure 28. Houghton Hall, Norfolk.
Family and guest Bedrooms are located on the upper floor (not shown), providing privacy for those functions by vertical separation. The Hall faces a front lawn with a drive, while the Salon faces a rear Garden.

An example of the typical Georgian city dweller's house, the townhouse, is one of those built in Bath by John Wood the Elder and John Wood the Younger in the 1750's (Fig. 29). The Entry Hall, unlike houses of the 1600's, is nothing more than a corridor. A Kitchen is located on the Ground Floor, and the Eating Room, or Second Drawing Room, is located on the First Floor. Only one stair is needed to connect the services on the Ground Floor, the entertaining areas on the First Floor and the sleeping areas on the upper floors with each other. In other examples of this type

Figure 29. Terrace Houses at Bath, England.
house, small plots of grass would often be located at the front entrance of the house; and in some cases, an areaway would be cut into the ground to provide light to a below-grade service floor. No auxiliary storage spaces are indicated on the plans. Privacy is provided for different types of activities by circulation through a corridor and stair hall. The house separates service, guest and family functions. These generalized functions were further subdivided in the design of houses in the Victorian era.

Georgian cottages or farmhouses have division of activity spaces similar to those found in the townhouses. A large part of the non-city dwelling middle class lived in these cottages (Fig. 30). At least two rooms and more commonly four rooms were arranged symmetrically about a corridor with a stair to an upper bedroom level. The four rooms could be used for Parlours, Kitchens and Bedrooms in different patterns. Toilets were usually located away from the house in rear outbuildings.

![Diagram of Victorian house](image)

![Diagram of Georgian cottage](image)

Figure 30. Typical English Georgian Cottages.
All of these Georgian examples show further developments in: the separation of circulation for public and private use; activities occurring in specialized rooms; closet spaces which are provided; and operations or activities which are assigned to built spaces rather than to furnishings. Public and private corridors with stairs allow for the separate circulation of family, guests and servants. More rooms, such as Drawing Rooms, Parlours and Salons, are provided for guest entertainment than during the 1600's. Each room is given its own special activity. Closet spaces for the storage of clothes are being built adjacent to the Dressing Rooms in the houses of the wealthy. Dining occurs around a table in a room for eating, and it is not a multi-purpose room. All of these elements were expanded in the houses built during the Victorian era.

The 1800's: The Victorian Era (1830-1900)

Characteristics of the Victorian house's are: the long corridors providing access to all the rooms; rooms specifically designed for a special purpose; planned auxiliary service and storage areas; privacy for the different types of activities; and activities assigned to particular spaces within the house rather than to furnishings. One of the
classic examples of a Victorian house is Bear Wood, designed by Robert Kerr in 1865-74 (Fig. 31). A Hall with a Screen

Figure 31. Bear Wood, Wokingham, Berkshire.
is similar to the medieval house while the remaining portion of the house uses elements important to Victorian houses. Guests enter through a porch (similar to an Oriel), opening to the entry screened from the rear of the Entrance Hall. At the other end of the Entrance Hall is a Principal Stair and Transverse Corridor. The Transverse Corridor connects the guest entertainment area with the service corridors. Men's and Women's Servants' Stair are provided to isolate vertical circulation. The Ground Floor contains rooms for guest entertainment (the Gentleman's Room, the Garden Entrance, Library, Morning Room and Drawing Room around a Picture Gallery): a Dining Room with service rooms; the estate Offices with a separate entrance; the Menservants' Corridor with highly specialized service rooms; the Housekeeper's Corridor with similarly specialized service rooms; a common Servants' Hall; and the Kitchen Court with its own set of specialized rooms. The First Floor has Guest Bedrooms above the guest entertainment area with one side of the floor allotted for male guest bedrooms and the other side for female guest bedrooms. Family Bedrooms, Nurseries, Schoolroom and Women Servants' Bedrooms are also located on this floor. The Second Floor also contains guest bedrooms for the Young Ladies and Bachelors on opposite sides of the building, along with
the Menservants' Stair and Bedrooms. All of these breakdowns of activity can be generally categorized as spaces for the family, guests and servants. Corridors provide access to every room, which is typical of Victorian houses. Each room is assigned a very specialized activity. In this manner, privacy is maintained for each of these functions; activities are assigned to particular spaces rather than to furnishings. In order to clearly understand these categories of activity spaces, the activities or spatial functions are listed in the following manner:

I. Family Activity Spaces

A. Parents
1. Bedroom with Bathroom, Water Closet, Dressing Room and Boudoir
2. Offices for the Gentleman of the House with an Entrance, Waiting Room, Billiard Room and Deed Room

B. Children
1. Schoolroom with Water Closet, Washroom and Closet
2. Nurseries with Water Closet, Bathroom and Scullery

II. Guest Activity Spaces

A. Male Guests
1. Entertainment Areas--Gentleman's Room and Library
2. Bedrooms with their own Stair and Corridor, Dressing Rooms, Lobbies, Water Closets and Bathrooms

B. Female Guests
1. Entertainment Areas--Morning Room and Drawing Room
2. Bedrooms with their own Stair and Corridor, Dressing Rooms, Lobbies, Water Closets and Bathrooms

C. Common Areas
1. Entry and Entrance Hall
2. Picture Gallery and Garden Entrance
3. Dining Room

III. Service Activity Spaces

A. Male
1. Butler--Bedroom, Plate Safe, Pantry, Servery, Buffet, and Water Closet

B. Female
1. Housekeeper--Bedroom, Corridor, Store Room and Still Room
2. Others--Bedrooms, Stair, Corridors, Work Room, Linen Room, Nurseries, Closets and Water Closets

C. Common Activity Spaces
1. Living and Dining Area--Servants' Hall
2. Kitchen with an Entrance, Lobby and Servery, Larder, Pantry, Pastry, Fuel Closet, and Scullery

This listing of rooms designed for specific uses is certainly one of the most complete of all of the English houses. A house this size could hardly be afforded by the middle class. However, their compact houses had similar, though far less impressive arrangements. Bear Wood had lawns and gardens and a drive across the front lawn to the Carriage Porch. In a similar way, houses for the middle class were oriented to a formal front lawn and garden and a rear garden.
A typical middle class house of the Victorian era is Fillongley Vicarage in Warwickshire, designed by Mr. Murray in 1859 (Fig. 32). The house is entered through a Porch into a Hall with a Stair to one side of the Hall, or corridor. The four-room plan of the Georgian era is retained with added storage closets to the Kitchen. These four rooms are the Study, Drawing Room, Dining Room and Kitchen. No room can be entered through another room, but can only be entered by a doorway into the Hall or corridor. This is quite a change from the earlier English houses, whose rooms were inter-connected. Use of a corridor as access to all rooms allows for the privacy of activities within those rooms. The storage spaces allotted to the Kitchen are the Scullery for dishwashing, Pantry and Butler's Pantry. A small service stair to the upstairs bedroom area connects the

Figure 32. Fillongley Vicarage, Warwickshire.
Kitchen to the Bedrooms. Two storage areas are attached to the house at the rear entrance to the Kitchen—the Coals and the Larder. The upper floor has four family Bedrooms, two Dressing rooms, one Closet and a Bathroom to the rear of the house with a Water Closet. The Servant's Bedroom to the rear of the house behind one of the main Bedrooms adjoins the rear Service Stairs. Rooms were designed more for the privacy of the assigned activity than ever before. Closets were being widely accepted and built, and separate storage areas to the Kitchen began to be built in many middle class homes. Dishwashing, for instance, is done in a specific room rather than in the Kitchen. The house had a small front lawn and a rear yard used for vegetable gardening.

Townhouses had tiny plots of land (Fig. 33). The plot of land at the front of the house often occurred at Basement Level, giving light and ventilation to the service activities located on that floor. The main entry was entered by a sidewalk one floor above the Basement at the Ground Level, creating vaults underneath for storage. Stairs lead from the sidewalk to the Basement Floor inside a Porch. The Kitchen, also entered from the stairway, has its own storage rooms—a Scullery facing an Open Area between houses for light, a Pantry and Larder. The Porch
opens into a Passage with a Service Stair, a Light Well, a Storeroom and Lift. Beyond the Service, or Back Stair is the Housekeeper's Room, Wine Cellar, Butler's Pantry and Bedroom with a Safe and Beer Closet. Other service rooms include the Servant's Hall, Still Room, Housekeeper's Closet, Laundry, Men's Bedroom reached by a Stair to the Carriage House, and a Rear Vault for Coal and Dust. The Basement Floor provides the services for the other floors, particularly the Ground and First Floors, which are the entertainment floors. Included in the Ground Floor is the main Entrance Hall with a small Cloak Room and Water Closet; a short hall, or Lobby, leading from the Entrance Hall to the

Figure 33. A Row of London Houses.
Staircase Hall with a Library and Dining Room off to one side and a Service Stair to the rear of the Principal Stair. The Ground Floor of the house is separated from the Carriage House by a Terrace over the Basement Floor. The Carriage House is removed from the house, and provides privacy for the Menservants' Bedrooms by designing the Bedrooms above the Stable and Houses for Carriages. On the First Floor in the house (opposite the bedroom floor in the Carriage House) are the family living areas and two Drawing Rooms for guest entertainment. Service is provided on this floor by the Service Stair and the Lift. The three upper floors have privacy for the bedrooms; the Second Floor, the Family and Guest Suites; the Third Floor, Childrens' Bedrooms; and the Fourth Floor, Nurseries and Servants' Rooms. Service areas accompanying the Bedrooms are Bathrooms, Water Closets, Wardrobes, and Clean and Soiled Linen Rooms.

Circulation through the house is within one major vertical shaft containing both a Principal Stair and an enclosed Service Stair. Rooms are planned with specific activities in mind, such as the Kitchen, Dining Room and Nursery. Auxiliary storage spaces are provided in Water Closets and Bathrooms. Due to the vertical breakdown among three different types of spaces, privacy is maintained for
the service areas and for the guest entertainment areas and bedroom areas. Activities assigned to spaces in the building rather than to furniture include Closets, Pantry, Scullery, Wine Cellar and others. The house is carefully related to the exterior public, private and service spaces. It is also oriented so that the main Entrance Hall is directly accessible from a public sidewalk with private service entrances one level below. The house also has a private entertaining Terrace and a Service Entrance from a service alley to the rear of the house.

Victorian houses and townhouses had used and developed further elements common to Georgian dwellings. Georgian houses were symmetrical in their room arrangements around a Hall. Separation of Bedrooms and service areas from guest entertainment rooms was also characteristic of the Georgian houses. Provided for the guests were Drawing Rooms, Parlours and Dining Rooms. Victorian dwellings, however, expanded the concept of the separation of guest, family and servant areas. Guests were provided with rooms specifically designed to separate the males and females, with separate stairs and corridors. Servants' work areas became extremely compartmentalized into separate spaces for every service need as well as into a division of male and female servants' areas.
The family had its own apartments separated from the servants and guests with a further division between the parents' and children's areas. Privacy was given to the guests, family and servants. Auxiliary spaces, such as the Pantry, Larder and Scullery, were built in order to separate activities. Instead of relying on pieces of furniture for storage, items such as closets and china cabinets were built into the structure and called Closets and the Butler's Plate Safe. Exterior spaces to these houses were planned around formal entry yards and lawns with rear gardens and service yards. The following section examines how the Victorian house has been translated into modern housing to fill today's family needs in England.

The 1900's: Modern English Housing

Turn-of-the-century housing in England is represented by Dene Place in Surrey, designed by H. S. Goodhart-Rendel in 1910 (Fig. 34). The house faces a Forecourt, creating distance between the House and the Coach House which has its own entrance, or Yard. The walled Forecourt is the main entrance to the House, through which guests pass to the Porch. A Hall, or corridor, provides circulation to all the entertainment rooms on the Ground Floor from the Porch. These rooms include the Smoking Room, Drawing Room and
Dining Room. A Service Wing off the main house is reached from the main Hall by a corridor. The service rooms also have their own entrance and stairs, and include the Servants' Hall, Kitchen, Scullery, Storeroom, Coals, Water Closet, Larder and Pantry. Privacy is provided for the circulation of servants from the guests and family by the positions of the corridors and stairs. A Garden Entrance leads through an Ante Room off the Drawing Room. Above the guest entertainment and service activities are sleeping areas on the First and Second Floors, providing privacy for those

Figure 34. Dene Place, West Horsley, Surrey.
activities. The First Floor has three bedrooms for guests and family, with a Dressing Room, a Bath, a Water Closet, a Sink, and a Linen Room. The Second Floor is a bedroom area for the servants and children. Separation of spaces within the house to service, entertainment, and two types of sleeping spaces are similar to the townhouses of the Victorian era. Circulation is planned to provide both public and private spaces. Privacy allows for all the separate activities in the house by the circulation system provided and the vertical separation of activities. Rooms are designed for specific activities, such as the Bath Room for baths, Water Closet for a toilet, and a Sink Room for washing. The house provides for activities not only by furniture but also by rooms—a development far beyond the one-room-serves-all idea of the medieval houses. Exterior spaces are arranged around a public Forecourt, Service Yard and Private Garden.

A typical semi-detached bungalow for the English middle class is shown in Figure 35. It has simplified the numerous rooms of the Victorian house, yet has retained some of its characteristics. An entry is provided into the combination Dining and Drawing Room for public entertainment. To the rear of the house is a Stair to the Chamber Floor for
both public and private access; a Study for privacy; and a Kitchen with Pantry, Scullery and Larder. A Water Closet on the Ground Plan is accessible only from the outdoors. Upstairs on the Chamber Floor, however, is a Bath and Water Closet—a combination of functions as yet not typically built into a bungalow. Four Bedrooms on this floor are given privacy from guest activities on the lower level. Closets are not provided, but one Bedroom has a storage area for boxes. Rooms in this house are built for specific functions, such as sleeping in the Bedrooms and guest entertainment in the Drawing Room. Limited areas are allotted for auxiliary service spaces, such as the Bathroom, Scullery, Larder and Pantry. Due to the circulation patterns, privacy is given to guest entertainment activities, service and sleeping areas. Orientation of the house to a front lawn and a rear

Figure 35. Talfer and Gorsefield, Llanfairfechan.
formal garden is seen in Figure 36. If the house belonged to a wealthy family, a Tennis Court, Bowling Green, Kitchen Gardens and Orchard would be located further away from the house.

Unique technological developments in the English house occurred after the Victorian era. Inventions simplified
spatial needs to accommodate electrical appliances such as refrigerators, washing machines, irons, and others (Table 1). The Bathroom itself became simplified as water and sewer systems supplied and treated large amounts of fresh and

Table 1. A Timeline of Inventions Produced by the Industrial Revolution.55

<table>
<thead>
<tr>
<th>Year</th>
<th>Invention</th>
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<tbody>
<tr>
<td>1823</td>
<td>Gas Lighting</td>
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<td>1830</td>
<td>Central Heating Units in Cellars</td>
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<td></td>
<td>Mechanical Saw; Mass Production of Nails</td>
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<tr>
<td>1835</td>
<td>Lime Mantle Light</td>
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<td>1836</td>
<td>Wood Stove</td>
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<tr>
<td>1840</td>
<td>Incandescent Lamp</td>
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<td>1842</td>
<td>Hard Oil Lamp; First-Known Bathtub (in England)</td>
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<td>1846</td>
<td>Howe Sewing Machine for Homes</td>
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<tr>
<td>1853</td>
<td>Heating Stoves</td>
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<tr>
<td>1855</td>
<td>Vulcanized Rubber; Type Revolving Press; Electric Light</td>
</tr>
<tr>
<td>1856</td>
<td>Harvester; Wastewater Treatment Practices Developed</td>
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<tr>
<td>1859</td>
<td>Discovery of Mineral Oil</td>
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<tr>
<td>1860</td>
<td>First Heating Radiator; Chimneys for Kerosene Lamps</td>
</tr>
<tr>
<td>1863</td>
<td>Fire Engine; Fire-Alarm; Telegraph; Breach-Loading Rifle</td>
</tr>
<tr>
<td>1876</td>
<td>Gas Light is Common; Hand-Operated Domestic Washing Machine</td>
</tr>
<tr>
<td>1878</td>
<td>Edison's Carbon Filament</td>
</tr>
<tr>
<td>1879</td>
<td>Gas Crates for Heating; Water Filters in Cisterns</td>
</tr>
<tr>
<td>1884</td>
<td>Pumps in Kitchens</td>
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<tr>
<td>1885</td>
<td>Aluminum Ware Manufacturing Process</td>
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<tr>
<td>1890</td>
<td>Ice Refrigerator</td>
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<tr>
<td>1895</td>
<td>Enameled Ware</td>
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<td>1900</td>
<td>Vacuum Cleaner</td>
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<tr>
<td>1909</td>
<td>Power Washing Machines; Electric Iron</td>
</tr>
<tr>
<td>1910</td>
<td>Tungsten Filament</td>
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<tr>
<td>1911</td>
<td>Electric Light</td>
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Early 1900's--Clothing Manufacturing; Gas and Electric Stoves; Electric Refrigerator; Power Mixers and Grinders; Canned and Packaged Food.
waste water. Baths that had been communal in houses among neighborhoods and families were finally designed for each family.

A personal bathroom as we know it today is a very recent development, one that is by no means universal now and even in the most highly developed nations of the world. The bathroom in this example is one of the most developed bathrooms commonly used. Technology brought with it not only the mass-produced service items, but also the ability to condense space for the same activities.

**Conclusions**

The development of the English house from a one-room Hall to a house separated into many rooms for the privacy of functions is shown by the previous examples. Corridors and stairs developed as not only a means of arriving at a space, but also to provide privacy for all of the activities in the house. The medieval Hall without a corridor became a Hall with a Buttery and Pantry connected by a corridor in the Elizabethan era. Jacobean and Stuart houses used corridors to connect rooms with one another, but they also permitted circulation between rooms by the use of doors. Georgian houses did the same with their circulation and then, in the Victorian era, separation of circulation from rooms into
corridors became a common element of houses. Not only was circulation limited to corridors in the Victorian houses, but also differing types of circulation was limited to certain corridors and stairs.

Rooms became more specific in their usage, with functions assigned to spaces rather than to furnishings in order to provide privacy for that activity. The medieval Hall served as the sleeping, banqueting and general entertainment space. By the Elizabethan era, a separate Solar had evolved into many Bedchambers in order to separate members of the family from one another. A Parlour for guest entertainment and sleeping space also became an integral part of the house. Kitchens for cooking and dining became common in houses for the middle class. The Victorians took all of the activities in the house and assigned them to specific spaces, such as eating in a specific Dining Room; storage for plates in a Plate Safe; and storage for clothes in a Closet instead of a Wardrobe.

Planned storage spaces to service activities became much more specific. Later, medieval houses exhibited the Buttery and Pantry as two built storage spaces within the structure. Cellars were also included underneath the structure. Elizabethan and Jacobean and Stuart houses brought
the Kitchen within the dwelling. Georgian houses did not add any storage spaces to services. Victorian houses, however, provided a separate storage space for every major work center. Kitchens had a Pantry and Larder; Coal Houses had Coal Storage Rooms; and Nurseries had their own Linen Closets. Modern houses brought these functions together into the Kitchen, a mechanical heating ventilating and air conditioning system, and one Linen Closet for all the Bedrooms.

Not only did the English house change in the interior for privacy, but also in the orientation of the house towards specific outdoor space uses (public guest, private family and service uses). Medieval houses were oriented around the town and its needs, while Elizabethan houses became more self-sufficient. Formal entry lawns; service yards to the side of the house; and rear formal gardens, vegetable gardens and fields became important to the identity of the house. Not until the Victorian age was this developed further into separated entries for guests and servants, service yards, and entertaining areas to the front and rear of the house. Modern houses retain the front, formal entry yard with a side yard for service entrance and a rear yard for entertainment activities.
Changes in the developing English house did affect the development of the house in the United States. From the time the settlers arrived in the New World and building materials were refined from the abundance of natural resources available, a pattern of housing for the middle class emerged. These houses changed to a more specific space use-oriented house as had the English houses. The following chapter examines the emerging house in the United States from the 1600's to the present and compares them with the English houses of the same periods.
CHAPTER III

THE DEVELOPMENT OF HOUSING IN THE UNITED STATES

Housing in the colonies of the New World consisted of small structures built by each family or community for the family members. These houses were generally built of timber due to its abundance and availability. As time passed, development of building materials from natural resources included other methods of building houses such as brick and stone. Settlers used not only the simplest materials, but also the simplest house forms. The following section describes these homes and their similarity to pre-Elizabethan English houses.

The 1600's: Colonial Houses

Colonial houses were as simply planned in the number of rooms as pre-Elizabethan houses in England (Fig. 37). Common to both the Northern and Southern Colonies were the one-room Hall and two-room Hall and Parlor houses. The one-room Hall provided for all of the functions of the family except sanitary facilities and, in the South, food preparation facilities existed in separate buildings. Although the
climates were very different, the configuration of the house plans are quite similar. Northern Colonial houses provide privacy for sleeping by the design of an attic, or second room, above the Hall. Stairs to that floor are separated from the Hall by an Entry, called the Porch. However, the back entrance to the Hall does not have a separate entry.

Southern Colonial houses were more open to the air; that is, they had direct entries into the Hall. Sleeping spaces in these houses are combined with the Hall instead of a separate second level space. Houses that had double rooms in both Northern and Southern Colonies are also quite similar to one another. In both types, an upstairs provides room for sleeping areas. Again, the Northern Colonial houses have a

![Colonial New England Dwellings](image1)

![Colonial Virginia Dwellings](image2)

Figure 37. Typical House Plans of New England and Virginia in the 1600's.57
separate entry, or Porch, containing the stairs. Southern houses have an entry directly into a Hall with their own set of stairs. The Hall could serve as the Kitchen and Dining Room; and the Parlor "... would contain one of the beds." In the Southern Colonial houses, the two-room plan is expanded into a Hall and Parlor with a corridor between them. If there is a second floor, stairs are built in the corridor. At times, this corridor was even open to air and in such cases, the house was known as a Dog-Trot or Dog-Run house.

In many respects, the Colonial houses closely resemble English houses of the pre-Elizabethan era. A simple Hall with a Porch served as the house, similar to the later medieval English houses. As the plan developed, two rooms with a possible upper floor were built for a family. Symmetry in the room arrangements became more important in the Georgian era. Circulation is given limited spatial areas, and is not completely planned for in the design. Rooms are not as yet designed for specific purposes. Auxiliary spaces to the rooms are not provided so that furniture must be used for storage purposes. Privacy for activities is not important to the design of the house, as evidenced by the lack of circulation spaces, the lack of
rooms assigned for specific uses, and the dependence upon furniture to provide activity and storage centers. Exterior space use and orientation of the house is not highly developed. Houses in both Boston and Charleston had similar types of yards. A front yard is planned, usually walled-off to the passerby and allowing entrance through a gate. A rear yard provides for access to an alley, or service road; an outhouse or privy for sanitary facilities and a well; and a small garden for trees as well as a vegetable patch.

Colonial houses are similar to pre-Elizabethan houses in the circulation expressed; rooms provided for general activities while furniture provided activity centers and storage; the resulting lack of privacy due to general uses of rooms with only a small distinction between sleeping and living areas; and the front, rear and service yards surrounding the house. Activities were not as yet assigned to spaces, but to furnishings, as in not only the English medieval houses but also the houses of the 1500's and the 1600's in England. However, within the next century, the Georgian houses in England would greatly affect the development of the houses in the Colonies and the newly-formed United States of America.
The 1700's: The Development of Colonial Housing and the English Georgian Influence (1700-1830)

During the 1700's in the Colonies, building materials were sufficiently developed for brick and mortar to become popular building materials. All of the following examples were not only built with timber, but also in brick, which is very similar to the English development of dwelling material. English medieval houses were more commonly made of half-timber or wattle and daub construction, the Elizabethan in brick and the Jacobean, Stuart and Georgian in stone. Georgian Colonial houses in New England were also built in brick as well as timber. The typical house in the Northern Colonies is quite similar in plan to the Georgian houses (Fig. 38). A Hall is built for a major and minor entrance, with a stair in it for circulation upstairs. The stair also

Figure 38. Georgian Colonial House Plans of New England in the 1700's.59
provides circulation to a Cellar or larger storage and sanitary facility. A Closet is also provided underneath the stair for storage of wraps and cleaning materials. The Hall itself is no more than a corridor and reception area. Two rooms to either side of the Hall compose the symmetrical arrangement of spaces for activities. Circulation to rooms is not only provided by the Hall, but also by doors between rooms. Each room can serve any purpose, so that activities can be assigned to any of the rooms. One room would serve as the Parlor (for guest entertainment), another for a Living Room (for family entertainment), a Bed Room or Chamber and a Dining Room. The Kitchen would be located in an ell off the Dining Room end of the house, and preferably not attached to the house. If fireplaces are located between the rooms, a small storage and circulation area is located to either side of the fireplace. Privacy is provided for the activities in the rooms by a separation of some of the circulation from the rooms and by providing for the separation of activities. Since dining, sleeping, family living and guest entertaining have been provided in rooms rather than in furnishings, such as dining tables within a special Dining Room, privacy for activities has become a more important element that before. Exterior
spaces are given priorities in their uses by a front lawn for guest access on which the house faces and a rear yard for service and family use.

In many respects, this house typifies the English Georgian houses. A central Hall forms the axis around which rooms are symmetrically arranged. The Hall serves as a reception and corridor space instead of an entertaining area, and the rooms on all sides are entered through the corridor. Circulation also has access through each room, but an option is provided through the corridors so that privacy for activities in rooms is provided. Activities take place in rooms rather than around only furnishings. Storage facilities are not yet provided in rooms but in furnishings. Exterior space use and orientation of both types of houses are similar in the design of a front formal lawn and the rear family garden with service yard. These similarities are quite strong, particularly in the development of separate spaces for activities and the separation of circulation from rooms for privacy. It can be concluded that the houses in the Colonies had followed the English patterns of housing development.

Southern Georgian housing also exhibited the same characteristics found in the Northern Georgian houses.
Drayton Hall, a plantation house built near Charleston, South Carolina in 1738-42, is an example of a house in the Southern Colonies built in the 1700's (Fig. 39). The Basement Floor Plan serves as the service floor. Central to this floor is the Servants' Hall, with symmetrical arrangements of rooms around the Hall. Four entrances lead past all the rooms to the central Hall. Two storage rooms, an Office to run the Plantation and a Kitchen are provided for service. Adjacent to the Kitchen is a service Stair to the Dining Room and upper level Bedrooms. The First Floor Plan has a reception area, a Hall, and a Stair Hall beyond it on the central axis of the house. Four rooms which can serve any

Figure 39. Drayton Hall, Charleston, South Carolina.
activity are located on this floor. They are assigned as the Dining Room, Chamber, Library and as an undesignated reception room. Circulation between the rooms is provided as well as Closet space between the two rooms. The Second Floor plan has a Great Drawing Room on the center axis, with four bedchambers for sleeping around the side. Each of these rooms is accessible through each other as well as through the center Drawing Room. All of these room arrangements are directly similar to that of the English Georgian and other Colonial houses of the 1700's.

Townhouses also displayed similar characteristics to the English Georgian townhouses. An example is Figure 40.

Figure 40. Vanderhorst Row, Charleston, South Carolina.
These townhouses were built in 1800 in Charleston, South Carolina. On the First Floor, a Reception Room serves as the entry. It leads into the Dining Room and from the Dining Room into the Stair Hall corridor. Back entries provide access to Kitchens and sanitary facilities in the basement as well as to outbuildings. Up on the Second Floor is the Drawing Room and Card Room, both of which have access into the corridor and through each other. Closets used for storage are located adjacent to some of the fireplaces on this floor and on the Third Floor. The Third Floor has two chambers for sleeping, which have access to the corridor and not through each other. The Attic provides two similar Chambers for sleeping as well as storage space. Some circulation space gives privacy to activities in separate rooms. Rooms are not specifically assigned to an activity. As a general rule, sleeping spaces are assigned above the main activity floors. Some storage and adjacent activity spaces are assigned to the building rather than to furniture. Privacy is beginning to be emphasized in these homes with houses oriented directly towards the street for immediate access, and rear yards and an alley used for service access. Green areas are assigned to public spaces rather than to the house itself. All of these characteristics of the townhouses
in the United States are similar to the houses at Bath in England of the same period. The exterior space use and orientation, a Hall and corridor with stairs for circulation, and the need for privacy in the sleeping areas are the similar elements.

From the examples in this section and the previous section, houses in the developing Colonies and the United States directly correlated with the growth of the English house towards more privacy for activities. The following section deals with the development of U. S. dwellings into highly compartmentalized buildings.

The 1800's: The Victorian Era in the United States (1830-1900)

Changing technologies, expansion of the new frontier, and continued immigration of the English and Europeans into this country brought about changes in the needs of families and their houses. A typical house of the first half of the 1800's was expressed by A. J. Downing in 1842 in his book, Cottage Residences (Fig. 41). A central Hall provides a reception area for guests, access to entertaining rooms and access to a corridor. Two rooms are designed for guest entertainment: the Drawing Room and Library. Family areas, a Library and Bedroom are located beyond the entertainment
area to either side of the Stair Hall directly adjoining the Hall. A service passage to outlying service rooms and offices, including the Servants' Bedrooms and Kitchen, is provided off the Stair Hall and can be closed off by a door for privacy. The upper level allows for more Bedrooms around the Stair Hall. Instead of an outhouse, a Water Closet is designed closer to the house than in Georgian houses. Mr. Downing in 1842 described this house as:

The large space devoted to the staircase and hall gives the house a dignified appearance, while the rooms are of good proportion and are conveniently arranged for privacy and home comfort, with studious avoidance of all effect produced by the connection of one apartment with another.

He comments on the appearance of planned circulation areas, while the separation of service from the main house by another corridor is also very important. He is also more impressed by the proportions of the room and their ability to provide privacy. Rooms are given specific activities,
which cannot be easily exchanged. The "locking" system to provide privacy is established as corridors to rooms, rather than a room-to-room circulation system. Auxiliary spaces to the house such as service facilities (the Kitchen and a Water Closet) are located directly adjacent to the house in a separate wing. However, storage for clothes in rooms takes place within furniture rather than in a Closet to the side of a room. The house has a front lawn with a drive to the main entrance and a rear garden with natural growth (Fig. 42). Further behind the rear formal garden is acreage for planting crops or for a smaller vegetable garden. A service yard to the side of the house allows for access to the Service Wing.

A smaller house for the city is shown in Figure 43, designed by Palliser, Palliser and Company in 1878. It is similar to the Georgian houses of the 1700's, yet some changes have been made. An open air porch, or veranda, allows for the entry of guests to the inner central Hall. The Hall gives access to the two main entertainment rooms, the Parlor and Sitting Room; Stairs to the upstairs Bedrooms; and to a short Service Passage. The Sitting Room and Dining Room are also inter-connected and share an outdoor entry for family and guests. A Kitchen is separated from all of the
Figure 42. Typical Gardens for a Villa, 1842.  

Figure 43. A Model Home by Palliser, Palliser and Co., 1878.
other rooms, although included within the structure. It has a separate entry, service stairs to upper level Bedrooms and a corridor to the Dining Room. Servicing the Kitchen are the following spaces: the Pantry, Milk Room, Sink Room, Closet and Woodshed. On the upper level, four Chambers for sleeping also have special service areas—a separate private Stair and a Bath Room (for bathing only). Closets are provided within the structure for all of the Chambers rather than dependence upon pieces of furniture for storage.

As in the farmhouse, this house has provided for privacy of activities by the separation of circulation into public and private stairs and corridors. Rooms are specifically designed to provide a specific purpose, and cannot serve other functions with ease. Auxiliary spaces, such as the Kitchen and all of the other necessary service and storage facilities, are built at the rear of the house. Privacy is given to almost all of the activities, except for two Chambers which open into each other as well as into the Hall. Privacy for storage has been built into the structure with closets instead of using separate pieces of furniture for clothes storage. The outside lawn has a guest entrance at the front, a side entrance for the family and a rear service area.
The example of the English house, Bear Wood, is the ultimate in planned circulation patterns, rooms designed for specific uses, planned auxiliary spaces, and activities built into the structure rather than centered around furniture. All of these elements provide for three types of activities: guests, family and servant functions. Although the examples cited above are not to the scale of Bear Wood, some of the same elements exist in the two previous examples. For instance, there is the separation of service from the family and guests by separate stairs and corridors. Guest entertainment is restricted from the family living areas and servants' living, dining and working facilities. Privacy became a more valuable element in Bear Wood, as it did in the English middle class housing. Upper class vacation houses in Newport, Rhode Island also exhibited some of these characteristics.

Some homes in Newport in the 1880's were commonly called the Shingle and the Stick Style. One such example is the H. A. C. Taylor house designed by McKim, Mead and White in 1885 (Fig. 44). It has an outer Porch (open to the air), with an inner Vestibule for the main entry. Inside the Vestibule is a set of Closets for storage of guests' wraps. A reception area known as the Hall with stairs is
built along a central axis. Four rooms are placed symmetrically about the Hall, which are the Study, Parlor, Library and Dining Room. A Service Passage provides the Servants' access from the Kitchen wing to the Hall. Servants are not only given a Passage to the Guest entertainment areas, but also a separate corridor called a Hall. They are also given a Hall for living and dining activities with a Stores (storage area) adjacent to it. The servants' work area includes a Water Closet, a Kitchen with a Scullery, a Butler's Pantry and Safe and China. A separate Porch provides an entrance for service to the house. Upper level sleeping quarters are provided for family and guests with servants' bedrooms in a separate wing, reached by a separate corridor with stairs. As seen in previous examples, the house provided two sets of circulation—one for service

Figure 44. H. A. C. Taylor House, Newport, Rhode Island, 1885-86.
access and one for guest and family access. Rooms which were specifically assigned functions could not serve for any other purpose. Auxiliary spaces are planned for the Dining Room (a China, Butler's Pantry and Safe) and the Library (a lavatory). These service rooms are more separated in function than in previous examples, yet totally serve each major space. Instead of activities centered around pieces of furniture, they are based within rooms, or spaces, such as built-in closets within the Vestibule. Privacy is obviously considered a valuable element in the houses of the wealthy, so that it is not surprising that the same values are carried over into the houses of the middle class. Exterior spaces and orientation of the house, although treated rather formally, include a front lawn and drive for the reception of guests, a sideyard for service and a rear-yard for entertainment and play.

Victorian houses in the United States display characteristics very similar to English Victorian houses. Circulation is planned not only to separate traffic from room activities, but also to separate types of circulation. Guests, family and servants are separated by corridors and stairs to rooms provided specifically for their activities. Spaces which serve Kitchens and Bedrooms, such as a Pantry,
Larder, Scullery and Bathroom are also provided. Privacy for different types of activities is very important, as can be seen in the separation of rooms from others by corridors. Rooms were not only built for specific activities, but also to replace furnishings which had provided for those functions in previous homes. Dining, still centered around a table, was removed from an entertainment room to a room used solely for dining. Bedrooms still used beds in which to sleep while separating sleeping from all other activities. The Victorian house was oriented around a formal entry yard, side and rear service yards and an informal rear yard. All of these elements in Victorian housing in the United States directly paralleled the English Victorian houses. Housing for the middle class in the United States during the 1900's further developed these elements, using them as a model and a guide. The following section describes the impact of the English-influenced houses of the 1800's on housing in the United States during the 1900's.

The 1900's: Modern United States Housing and Its Development From Victorian Housing

A sample of the type of house more commonly used around 1900 is graphically illustrative of the carry-over of the English influence in modern U. S. houses. The "Carpenter"
House, meaning carpenter-designed rather than professionally designed, is shown in Figure 45. An outdoor entrance porch, called a piazza, provides the guest entrance into a vestibule which led the guest into the corridor and Stair Hall servicing family living and guest entertainment functions. A Music Room and Parlor provide space for guest entertainment, while a Living Room and Dining Room are used by both family and guests. Entrances to the Kitchen area behind the Dining Room are completely separated from the main circulation. The Kitchen is separated from the other rooms and has its own specialized rooms. The activities within the Kitchen (which provide for auxiliary services) are the Pantry, Laundry, Stairs to a Storage Cellar and Stairs to the Maid's Room on

![Diagram of the Typical American "Carpenter" House](image-url)

**Figure 45. The Typical American "Carpenter" House.**
the Second Floor. Privacy is provided for the sleeping rooms by their separation on another level from the main activities. A Hall in which the Principal Stair is located provides access to five Bedrooms, an attic Stair, a Bathroom, and a Hall (or corridor) to the Maid's Room. The Bedrooms have closets built-in to the structure for storage, and the Bathroom includes facilities for bathing, a toilet and sink. The bathroom had developed from separate rooms into one facility for personal hygiene. Elements important to the development of the English house are of importance to the elements of this house plan. Circulation routes are provided separately for service, family and guests. Rooms are designed to serve as a Parlor, a Music Room, a Drawing Room, and others. A Pantry and other storage areas serve the Kitchen, as in Bear Wood. Activities and services are assigned to the building rather than to furniture, as seen in dining activities having a room as well as a table, and clothes storage having built-in Closets instead of wardrobes. A front lawn, even though tiny, is always planned along with a service yard to the rear. All of these elements are similar to the English elements displayed in the development of their housing.
In the 1920's, housing for the wealthy upper middle class set the patterns of development for later, larger suburban houses in residential areas. An example of these houses in the house built for Mr. Charles Evans in New York City, designed by Dwight Baum (Fig. 46). It has a central Hall for guest reception with a Stair Hall and rear entry. A sink and toilet are located off the rear entrance and are used by the family and guests on the lower level. A Living Room and Dining Room provide family and guest facilities. The Living Room is expanded to the outdoors by the Sun Room and Porch. The Kitchen has a Pantry connecting it with the Dining Room and with a Servants' Hall via a Stair. Although not directly connected, a garage is adjacent to the Kitchen.

Figure 46. Charles Evans House, New York City, 1922.
The upper level provides privacy for the Bedrooms. Two maid's rooms, each with its own Closets and Bathroom (including a Bathtub and Sink), are completely closed off from the family and guest Bedrooms. Four Bedrooms for the family and guests share two full Bathrooms. There are Closets in each room, a major Stair Hall, and a separate Hall leading to one of the Bedrooms—possibly the "Master" Bedroom for the owner and his wife. Off the Hall to one Bedroom is a small Closet and a Larger Closet, presumably for storage of linens and a Laundry. Access to the attic is through a stair in one of the Bedrooms.

The house has separated circulation from family and guest areas from the servants' end of the house. Rooms have only one designed specific function, such as a Living Room, a Dining Room, and a Kitchen. Auxiliary spaces which serve the major spaces are provided, including the Pantry for the Kitchen and the Bathrooms to the Bedrooms. Functions assigned to the building rather than to furniture include the built-in Closets instead of portable wardrobes and a Dining Room rather than just a dining table. Privacy for each activity is given great consideration in the separation of rooms by circulation. Since the site is small, the front yard serves to allow guest access while the service yard is
now placed to the side of the house and the drive is combined with the garage and service end of the house. As typical to the English, this type of house always faces the street across a front yard.

Housing for the middle class has not developed in the manner of the Evan's house. However, their houses did closely follow the patterns of the late 1800's and early 1900's (Fig. 47). Designed for Walter C. Baylies in Trenton, Massachusetts by Parker, Thomas and Rice, Architects, this house has not developed from the earlier houses of the 1900's, but remained similar to them. The other house done as a model at Larchmont, New York and designed by C. C. Merritt, was developed from the type of house done for Mr. Baylies (Fig. 48). The Hall in the Larchmont house is no longer

Figure 47. Walter C. Baylies House, Taunton, Massachusetts.
indoors, but outside along a Porch. The Living Room and Dining Room are separated only by a doorway, not a Hall. By travelling through the Dining Room, the Kitchen can be reached. The Kitchen has its own entrance with stairs to a Cellar. Bedrooms are accessible from the Living Room by a special corridor for the Bedrooms. These Bedrooms have Closets, a Linen Closet in the Bedroom corridor and a Closet in the Living Room for storage. A Bathroom exists between the two Bedrooms, and a Stair to the attic is enclosed within the Bedroom Corridor. Compared with the Baylies' house, many of the corridors and storage units there have been deleted in the Larchmont house in order to reduce the costs of those houses. Yet the rooms are still designed for specific uses, and the spaces have Bathrooms, although small, attached to them. Closets and a Dining Room are provided

Figure 48. Model Houses, Larchmont, New York.
as rooms instead of pieces of furniture. Because all of these essential elements were retained, even in the most common middle class house, privacy was provided for all of the activities. An attempt was made to provide even exterior space when it had to be very limited due to a densely populated urban setting. This space is arranged as it has always been throughout the development of English and U. S. housing. Typically, a front yard provides guest and family entrance to the house, a side yard an entrance for service into the Kitchen, and a rear yard an informal entertainment area. Houses were, as usual, oriented towards the street.

Typical row houses, however, have no side yards since the houses are continuous. They have only small plots to the front and rear of the house--the one on the street is public and enhances the main entrance; the private yard is used for service and children's play (Fig. 49). Most row houses provide an entry through a Porch into the Living Room. Stairs to the upper Bedrooms are located to one side of the Living Room or between the Living Room and the combination Kitchen-Dining Room. The Kitchen has its own Entrance and Closet as well as access to a cellar or basement for storage. Upper level Bedrooms are provided with their
own Closets and one Bathroom. Even in such a small amount of space, custom is still followed by recognizing the need for separate rooms for living, dining and sleeping. Circulation is very tightly arranged, yet is separate from some of the rooms. A Cellar, Kitchen and Bathroom help to service the family's activities, carrying through the idea of self-sufficiency within a dwelling. Closets and the Dining Room, although small, serve as enclosures for functions rather than using pieces of furniture for these purposes. Privacy is an element that was highly valued in even a small, middle class row house.

Shortly before the end of the Depression of the 1930's, the number of yearly housing starts in the United States began increasing. Houses built for the wealthy in the United States during the early 1900's were used as models for the new influx of housing for the middle class after the

![Diagram of Row Houses]

Figure 49. Typical Row Houses of the 1930's.
Depression (Fig. 50 and 51). The houses typically have an Entrance Hall with a stair to the upper floor. A Kitchen, Dining Room or Alcove, and a Living Room occupies the rest of the floor. Porches are located on at least one side of the house for entertainment purposes. Usually closets for storage of wraps are in the Hall and a Kitchen would have a closet for cleaning supplies. On the First Floor, a Lavatory with sink and toilet is provided off the Hall. In a larger house, a Maid's Room with a Closet and Bath as well as a Service Entry is built adjacent to the Kitchen (Fig. 52). A

Figure 50. A Typical Rectangular House of the 1930's.

Figure 51. A Typical Small Cottage of the 1930's.
Garage for the storage of cars at the service end of the First Floor is also planned. The Second Floor in all of the houses shown is used for Bedroom Space. The central Hall with stair access to the First Floor also provides access to every room and a Bathroom. Part of this Hall is also used for sewing, as shown in one of the plans. Each Bedroom has a Closet. In some designs the Master Bedroom has a Dressing Room and adjacent Bathroom. A Linen Closet is also provided in the Hall. Extra storage areas are provided under the roof in an attic. Circulation on each floor is planned around the central Hall and gives direct access to each room in the house except for the necessary services to each room.

Figure 52. Harry Toplitt House, Brentwood Highlands, California.
These rooms are designed with a specific activity in mind and allow for the storage of items needed as well. Assigned spaces in the building such as Closets are functions that previously had been attached to a piece of furniture. Privacy for some of the sleeping areas have also been designed in the service area (the Kitchen) from the living areas on the Main Floor. Exterior spaces are arranged so that a drive to the rear yard is for children's play and the front yard serves as a formal lawn, carrying through the need for surrounding natural open spaces which the English used. Orientation of the house is towards the street.

Houses built after World War II, as shown in Figures 53 and 54 are only variations of the houses built since the

Figure 53. McCall's Award-Winning House, 1952.
The one-story ranch popularized in the early 1950's provided similar elements of the separation of sleeping from family and guest activities as well as work areas. Circulation space, although limited, insures the privacy of all three types of areas: the family sleeping area, family and guest combined areas, and the service areas. Kitchens no longer need a Pantry or Scullery, since storage of dishes and dishwashing is included within the Kitchen. A separate Dining Room and Closets are built into the structure, carrying through the idea of separation of spaces for specific purposes instead of using a piece of furniture within a large, multipurpose room. Exterior spaces are arranged so that a front yard serves as access for guests, a side yard for service and a rear yard for informal entertainment.

Due to the advancement of technology and the rapid invention, production and use of electrical appliances, large spaces for work areas were no longer required. Houses were

Figure 54. A Typical Ranch House of the 1950's.
built for privacy of family activities and the efficiency of those activities, while the configuration employed and priorities developed for the house were developed from the English system of housing. Figures 55 and 56 show houses built today in Atlanta, Georgia which are typical to housing in the United States during the Post World War II era. These

![Figure 55. A Two-Story House Plan of the 1970's.](image)

Figure 55. A Two-Story House Plan of the 1970's. 79

![Figure 56. A Split-Level House of the 1970's.](image)

Figure 56. A Split-Level House of the 1970's. 80
houses are larger than those in Figures 52 and 53, yet the plans are very similar. Figure 55 shows a two-story house arranged around a central Hall with stairs to the upper level. A Living Room, Dining Room, Kitchen and sometimes a Bedroom are located on this floor. A Bathroom and Family Room also serve family and guest activities. Circulation, although given a Hall, leads through a service area (the Kitchen) to a family entertainment area. Storage for services is included within the carport/garage area. The upper level provides privacy for Bedrooms which have Bathrooms and Closets as auxiliary service and storage areas. Exterior spaces are separated into a front yard for guest entry, a side yard for services (usually in the carport/garage), and a rear yard for informal entertainment. The plan in Figure 56 is a split-level, which is a house that separates the Bedrooms from the main floor by a half-level above it. The emphasis on separation of Bedrooms from the other sections of the house is a carry-over from the early houses of the 1800's. The attempt at symmetry is also a reminder of the Georgian houses of the 1700's. It appears as if the Georgian symmetry of rooms about a Hall and the Victorian provision for service needs have been intermixed to produce today's housing in the United States.
Conclusions

The development of the house in the United States from a one and two-room Parlor and Kitchen to a house separated into many rooms for the privacy of functions is shown by the examples in this chapter. Activities have been provided privacy by separating circulation from activity spaces. The short entry Hall in Colonial dwellings became a longer Hall connecting many rooms with one another. Georgian houses used this Hall to connect rooms with one another, but also permitted circulation through one room to another. However, Victorian houses completely separated rooms from one another and provided for public and private access to rooms. Modern U.S. houses have condensed circulation into one corridor, yet do not allow circulation from room to room.

Each room was specifically used for one activity rather than as a multipurpose room. The Parlor and Kitchen in the Colonial dwellings served as sleeping, dining, food preparation and guest entertainment areas. During the Georgian era, more rooms were added to the house for specific purposes. Drawing Rooms and Parlors were used for guest entertainment, Kitchens were used for food preparation, and Bedrooms were used for sleeping. Victorian houses added more specialized rooms to the typical house. Dishes were stored
in a Pantry, clothes in a Closet, and musical entertainment occurred in a Music Room. Modern houses have taken rooms and also assigned a specific activity to each of them, such as the Living Room for guest entertainment and the Den, or Family Room for the family living area.

Planned storage areas developed from pieces of furniture in Colonial houses to Closets in modern houses. Wardrobes, trunks and sometimes Cellars served as storage spaces in the Colonial houses. Georgian houses used furniture and Cellars for storage as had the Colonial houses. However, in Victorian houses, Closets instead of wardrobes were widely used. Storage for services such as the Pantry for the Kitchen were provided. A Kitchen in the modern houses combined all of these services into one room.

U.S. houses emphasized privacy in its circulation patterns and separation of spaces for specific uses. Not only was privacy emphasized on the interior of the houses, but also on the exterior. Colonial and Georgian houses had specific front entry and rear service yards. However, the Victorian houses clearly denoted front entry yards from the side or rear service yards and informal entertaining yards. Modern houses retained the front entry, side or rear service, and rear informal entertainment yards.
Housing in the United States developed from a simple, multipurpose room house to a house with many rooms, each specified for a separate activity. English houses developed in the same fashion during a longer period of time, beginning with the houses of the medieval age. The next chapter deals with the similarity in the development of the English houses and their influence on dwellings in the United States.
CHAPTER IV

SUMMARY

Housing in the United States followed a trend from the general use of rooms to the specialization of activities within rooms from Colonial times to the present. In Figure 58, a comparison of seven elements in both English and U.S. housing shows a great similarity in their development. Planned circulation developed from no entry in Medieval English houses, an Entry with stairs in the Elizabethan and Colonial houses, and an Entry with corridor and stairs in the Jacobean and Stuart English housing as well as Georgian U.S. housing. English Georgian houses were more specialized in their separation of planned circulation for guests and family. The Victorian age brought about the separation of circulation for guests, family and servants. This was kept as the circulation pattern in the smaller, efficient houses of the 1900's in both countries.

The second element important to housing in England and the United States was rooms that were designed for specific uses. In Medieval, Elizabethan and Colonial housing, rooms were used for many purposes. English Jacobean
Table 2. A Comparison of English and U.S. Houses

<table>
<thead>
<tr>
<th>SEVEN ELEMENTS</th>
<th>ENGLISH</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLANNED CIRCULATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry with stairs</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Entry and corridor with stairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entries, corridors and stairs for guest family servants</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ROOMS DESIGNED FOR SPECIFIC USE</strong></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Multi-use rooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Several rooms for any purpose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rooms assigned specific activities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guests (male &amp; female)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family (parents &amp; children)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servants (male &amp; female)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PLANED AUXILIARY SPACES WITHIN THE STRUCTURE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A hall for living activities</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>A hall as a corridor/reception area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parlor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morning room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living room / salon</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PRIVACY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One room in structure (none)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Two rooms in structure (some)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separation of sleeping &amp; entertainment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separation of family, guest, service areas</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>ACTIVITIES BUILT INTO THE STRUCTURE RATHER THAN OCCURRING AROUND THE HOUSE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wardrobe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dressing room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guests (including all storage areas)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laundry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pantry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scullery</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXTERIOR SPACE USE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open space outside towns</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>House with guest entry and rear gardens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>House with guest entrance and yard as well as family &amp; service entrance yards</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ORIENTATION</strong></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Overlooking manor and/or drive to the house</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
and Stuart houses as well as Georgian houses of England and the U.S. displayed rooms for several purposes which could be assigned functions or only provided so that activities could be separated from each other. With Victorian housing, rooms were provided not only special access to one another but also activities which were broken down into those for members of the family and for male and female guests and servants. The third element of planned auxiliary spaces within the structure also followed a similar pattern in the development of housing in both countries. In Medieval, Elizabethan and Colonial housing, a Hall for all living and dining activities was used. English, Jacobean and Stuart housing used a Hall as a corridor and reception area and a Salon as a separate living area for both guests and family. In Georgian houses of both England and the United States, added rooms for guest entertainment and family living were provided, such as a Parlor and Drawing Room. Victorian houses expanded guest entertainment and family living areas into the Library, Morning Room and a possible Picture Gallery and Music Room. Modern housing in both England and the United States retained the Hall as a corridor and reception area for guests and a Parlor (later a Living Room) for family and guest entertainment.

The fourth common element to English and U.S. housing
was the development of privacy for activities. Medieval housing did not provide privacy for the family, guests or servants since one room was built for all activities. English Elizabethan and Colonial houses began to provide more rooms, although their functions were not as specific as Victorian houses. English Jacobean and Stuart housing as well as U.S. Georgian houses gave privacy to sleeping by providing separate Bedchambers from Parlors. English Georgian, Victorian and modern housing of both countries separated activities between family, guests and servants, creating more privacy than ever before in houses. The fifth element, activities built into the structure rather than occurring around furnishings in a multipurpose room, became important to the Jacobean and Stuart houses in England. At that time, Wardrobes (as a separate room) and Dining rooms were used instead of a piece of furniture such as a table in a multipurpose room. During the Georgian era in both countries, smaller Closets were employed as service areas. Victorian houses added many other service areas such as a Larder, Pantry and Scullery. Modern houses condensed some of these services into Kitchens for convenience. Therefore, this characteristic was carried through English and U. S. houses.

The sixth element common to the development of houses
in both countries was exterior space use and the seventh, orientation of the houses. All of the houses were oriented towards the guest entry, while exterior space use developed into different functions. The English Medieval house was not built into an exterior garden space, but as a unit within a town. English Elizabethan and Jacobean and Stuart houses as well as Colonial houses did have a more formal lawn to the front for guest entry and rear formal and informal garden areas. Farming was conducted beyond the rear gardens. Georgian, Victorian and modern housing in both countries had developed similar characteristics of separate entries and yards for guests, family and servants.

As shown in the chapters on English and U.S. housing, seven common elements had developed in both types of houses. Service and family living areas gained privacy from the guest entertainment areas by the use of corridors, spaces designed for specific uses, planned service spaces adjacent to activity spaces, and spaces for activities, such as dining rooms, instead of using furnishings within a multi-purpose room. In addition, houses in both countries were provided with exterior spaces to the front for guests, and spaces to the side and rear for servants and family members' use. English houses have not only influenced Colonial houses, but also
they have continued to influence the whole development of dwellings in the United States since the 1600's. This influence can be summarized in the seven elements common to modern houses in both countries.
NOTES


8 Summerson, p. 284.


11 Gallet, p. 94.

13 Plan of the Palace at Versailles (Georgia Tech: Architecture Library Slide Collection, 1976).


16 Montigny, plate 30.


18 Fichera, p. 87.


20 Bemis, p. 265.


27 Neilson, p. 1128.
28 Wood, p. 67.
29 Wood, p. 67.
30 Wood, pp. 67-68.
33 Braun, p. 47.
34 Braun, p. 25.
35 Braun, p. 65.
36 Braun, p. 80.
37 Braun, p. 80.
40 Gotch, p. 181.
41 Neilson, p. 507.
42 Neilson, p. 507.
44 Barley, p. 43.
46 Summerson, p. 326.
47 Barley, p. 57.

48 Braun, p. 94.


51 Kerr, plate 42.


54 Weaver, p. 111.

55 Bemis, pp. 305-315.


57 GM Print (Boston: University Prints), no. 282.

58 Kimball, p. 16.

59 GM Print, no. 293.


61 Albert Simons and Samuel Lapham, Jr., eds., Charleston, South Carolina, 1 (New York: Press of the American Institute of Architects, 1927), no page number.


63 Downing, p. 168.

Downing, p. 40a.


Bemis, p. 313.


Bemis, p. 413.

Bemis, p. 417.

Bemis, p. 420.


Farmer, W. D. *Plan No. 2220.* Atlanta, Ga.: W. D. Farmer Residence Designer.


