Languages of Entrances

By

John Stewart Roberts

B.S.A.D., Massachusetts Institute of Technology, 1975

Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Architecture at the Massachusetts Institute of Technology, June 1978

Signature of Author

John Stewart Roberts

June 1978

Certified by

Wayne Andersen
Professor of Art History
Thesis Supervisor

Accepted by

Chester Sprague
Associate Professor
of Architecture
Chairman, Departmental Committee for Graduate Students

Copyright © John Stewart Roberts, 1978
DISCLAIMER OF QUALITY

Due to the condition of the original material, there are unavoidable flaws in this reproduction. We have made every effort possible to provide you with the best copy available. If you are dissatisfied with this product and find it unusable, please contact Document Services as soon as possible.

Thank you.

The images contained in this document are of the best quality available.
ACKNOWLEDGMENTS

I wish to thank my advisor, Wayne Andersen, and readers Gunter Nitschke and Ed Allen, as well as Chet Sprague, for their time and assistance. Thanks also to Karla Johnson for her assistance in editing my draft and helping with layout and illustrations. Thanks to Phil Dordi for hours spent in the dark room, and thanks to Marcella Roberts for typing and correcting my spelling.
Languages of Entrances

CONTENTS

I. Introduction 6
II. Functions of Entrances 10
III. Spaces of Entrances 23
IV. Meanings of Entrances 36
V. Entrances of Beacon Hill 68
VI. Entrances of Cambridge 136
Languages of Entrances

By John Stewart Roberts

Submitted to the Department of Architecture on May 19, 1978 in partial fulfillment of the requirements for the degree of Master of Architecture

This study undertakes the examination of how one necessary aspect of buildings, the entrance, communicates meanings to us and answers functional requirements. The forms that entrances take may be seen as a vocabulary of readable elements both denotative and connotative, which combine into a readable syntax, to serve tasks, define spatial experience and serve as signs and symbols of higher meaning.

Thesis Supervisor

Wayne Andersen
Professor of Art History
Introduction
INTRODUCTION

This thesis addresses the ways in which architectural form communicates meaning to us. What are the ways in which architectural forms act as signs or symbols to communicate and shape our attitudes toward the environment? And how do these forms relate to the tasks that any architectural system must perform? What forms function as architectural signs or symbols, and what is their relationship to other elements of the architecture and the cultural and functional needs of a society? How are common architectural forms used as a language and what meanings do they convey to us?

This examination of one primary aspect of architecture that all buildings require, the entrance, which finds expression in so many different forms, is an attempt to identify the elements and relationships which make up an
architectural language, expressive of meanings of entrances.

Entrances are a necessary element of all architecture, for buildings to be habitable by people. All buildings must have a point at which the inside and the outside meet. That point of interaction, at the entrance, expresses many meanings connected with both the inside, the outside and the transition between. Architectural elements make up a vocabulary which, when combined together, create a readable whole that is more than the sum of the parts, that expresses meanings which architecture has for us. Architecture functions like a language, with both a readable syntax and semantics. While the structure of verbal language may not apply directly to architecture, we may still draw parallels between the two forms of communication. Architects commonly use such terms as
language, vocabulary, metaphor, analogy and connotation, which all point to the communicative nature of architecture. Architectural forms tell us how to react to certain aspects of the environment in a given context by referring to things that we already know about and to associations we have with certain architectural forms. Such meanings are fundamental to our existential orientation, and necessary for us to understand our environment.
Functions of Entrances II
Since a primary reason for the existence of architecture is to answer to certain pragmatic needs of its users, functional purposes are central to explanations of why architectural forms look the way they do. Architectural forms are designed and built either to enhance or to inhibit certain activities. Those activities or requirements which are influenced by culture have spatial and symbolic implications which influence architectural forms. Examination of functional requirements alone is insufficient to explain the forms that architecture takes.

As Charles Moore has written:

By the 1960's the arrogance of architects imposing a shape on things was under attack on social grounds, and form givers (which means people who shape things) were labeled as cultural dinosaurs. The presumption was either that good things shouldn't have any shape (in the same way a good society would not need any government) or that the shape of the environment would come, without midwifery, out of the
interaction of users and makers. These presumptions, of course, were wrong. They foundered because function, by itself, is inadequate to define a single shape for a building. Since any functional problem can be solved by many different shapes, the choice is bound to depend on the preferences of the makers. ¹

Certain functions have spatial implications, yet the same functional purposes may be served by different forms. Gradually, through time, particular forms may come to symbolize particular functions. To focus upon the entrance as an essential aspect of architecture which not only addresses several functions but also through time has assumed many shapes and has become steeped with symbolic, cultural and traditional significance presents a beginning for the examination of architectural language.

An entrance is the place of interaction between two separate zones. The entrance of any building is by definition the interaction of the inner private domain with the outer public area and, as such, the primary function of entrances is to facilitate the transition of desired movement between the two zones. Since interaction between zones may or may not be appropriate at a given time, entrances function as environmental filters by permitting various degrees of control over interactions between zones. As filters, entrances perform many interrelated tasks at the same time, and any one physical element of the entrance may perform a number of interrelated tasks. The basic element of the entrance, the door, is an element which may serve not only as a filter of people but also as a filter of light and air. The door also may be only open or closed but be shades of each. It may invite
movement or prohibit it.

The interaction of the inner and outer domains itself creates additional tasks such as the need for shelter at the point of entry or the need for connection to public circulation. In order to assist movement through the environment, entrances must function as landmarks to differentiate one entrance from another so that this entrance is distinguishable from that entrance.

Function is, of course, not constant over time. During the course of a day, an entrance must be inviting to guests and secure against burglars. It must keep out snow in winter and let in breezes in summer. Requirements for milk or ice delivery may completely disappear over time, or new requirements, such as parking for automobiles, may appear.

To list comprehensively the vast array of
tasks which an entrance must perform in any given situation oversimplifies the elements involved, since overlap and interdependencies would not be examined.

Serge Chermayeff and Christopher Alexander have examined in detail the functional requirements necessary for the act of entering. In their book, *Community and Privacy*, they base their analysis of the task of entering houses on nine basic categories of functional requirements.² Their categories are:

Accommodation and Land Use
Problems of Protection
Responsibility
Climatic Control
Illumination
Acoustics

²Serge Chermayeff and Christopher Alexander, *Community and Privacy*
Circulation
Communication
Equipment and Utilities

While the above categories do not identify the relationships between various functional tasks, they do provide a basis for observation and classification of tasks that different elements of entrances perform. Functional elements which perform functions of the first category, "Accommodation and Land Use," are primarily those functions which have spatial requirements. Porches, yards, gardens and parking are all examples of such elements which perform tasks that have spatial requirements. Functions which fall under "Problems of Protection" could include the need for security devices which filter desired and undesired elements of society as they attempt to pass through. These devices include such items as
locks and keys, intercom systems, or the need to filter out weather and animals or elements which ensure safety from accidents, such as fire exits. The category of "Responsibility" would include needs for defining ownership of property, territoriality and maintenance responsibilities. Functions under the category of "Climatic Control" include not only the need for control of the climate at the point of entry but also climatic control of paths between entry and public ways. "Illumination" functions require that entrances have good visibility night and day. "Acoustics" includes the need for transition from most noisy public ways to most quiet private domains. "Communication" includes the need for communication between entrances and users to establish identity of entrances. "Equipment and Utilities" recognizes the need for adequate access for goods and services.
All functions from all categories interact with one another, and the provision for one may tend to reinforce or contradict the provision for others. For example, the provision of enclosure at the entrance may reinforce the provision for climatic control. More than one element may perform a task and any element may perform more than one task. Elements and tasks do not always exist in a simple one-to-one relationship.

Tradition and construction practice both are factors which affect the forms we build to serve given functional purposes. Construction practice tends to limit the number of alternative solutions to a given problem by allowing only economical, technically feasible alternatives. It recognizes limited resources and takes into account the ease with which any problem may be solved, promoting solutions which maximize
utility and minimize investment of time and labor.

Tradition, on the other hand, may not promote the most economical solution, but promotes common solutions to common problems. Tradition affects both design and construction practice. In architecture, the forms we construct to satisfy functional tasks are not invented anew each time an architectural solution is needed.

Architecture relies heavily upon precedent and tradition as a design methodology for finding appropriate formal solutions to architectural tasks. Once an element such as a door or window is invented via trial and error, it is not necessary to invent new physical forms to answer the same functional requirements. Windows and doors of today are almost identical to those used hundreds of years ago.
Precedent and tradition hinge on cultural values and attitudes. Different cultures require different functional accommodation. In Japan culture has developed attitudes toward the significance of interior surfaces versus exterior surfaces, as recognized through the Japanese system of tatami mats. As a surface for living on, as opposed to the Western surface for walking on, they create the requirement that shoes which touch exterior surfaces never touch the clean surface that is lived on. Such a requirement makes the removal of shoes an essential part of the transition from outside to inside, and all Japanese entrances make provision for this and thereby symbolize this task. Symbols of culturally based function are learned. More than one Westerner has been reminded to remove his shoes by the horrified looks of the Japanese as he
walks on tatami with his shoes.

Forms that originally responded to functional requirements may take on added significance through convention and become cultural elements which may appear even after the original functional requirement has disappeared. Robert Venturi has termed such elements "vestigial elements" because they exist merely as a trace of some former function.

Conventional elements in architecture represent one stage in an evolutionary development, and they contain in their changed use and expression some of their past meaning as well as their new meaning. What can be called the vestigial element parallels the double functioning element. It is distinct from a superfluous element because it contains a double meaning. This is the result of a more or less ambiguous combination of the old meaning, called up by associations with a new meaning created by the modified or new function, structural or programmatic, and the new context.  

As an example, the keystone in an arch reappears as a nonfunctional element in a wood arch, thereby emphasizing symbolic meaning instead of structural requirements.
Spaces of Entrances III
Since experience requires existence and man cannot exist without space to contain his body, experience is inseparably linked with the nature of spaces and the nature of our bodies. Spatial relationships in the physical world bring order to our experience because they provide a framework to support certain actions. Fundamental to the goals of architecture is certainly the notion that by controlling space we can control experience. While spaces and spatial relationships in the world we inhabit are made up of relationships describable by Euclidean geometry, there is a conceptual difference between Euclidean space and the space that we experience. The concept of Euclidean space which is, of course, a human construct, is not sufficient to describe experientially the spaces we inhabit. With the
discovery of the theory of relativity, Euclidean space proved to be only an approximation of the physical world. Euclidean space describes a world in a three-dimensional coordinate system in which all dimensions are interchangeable and all space is neutral and homogeneous and depends solely on those three dimensions to give any meaning to that world. Clearly, the Euclidean dimensions can describe one aspect of the world we experience, but because we are human, other dimensions give meaning to the world we experience. As Gerald Allen has pointed out in *Dimensions*:

The three spatial dimensions are, of course, and always have been, of high interest, but not always of the highest. A perfectly proportioned Palladian room, for instance, can stimulate great admiration. But not if it happens to be on fire, or, less extremely, not, perhaps, if it is lit by a blinding beam of sunlight through a small window, or if it is painted pink and brown, or if the person standing in it has an aversion
to Palladio. It is the three spatial
dimensions that make the room, but it
is those three plus all the others
deemed relevant that make a domain. ¹

The spaces that we perceive are not commonly
shared by all but are influenced by motivations
and past experiences of each individual.
Because the body is at the center of the space
that we perceive, even the three Euclidean
dimensions are no longer interchangeable or
equal in value. Our body becomes a reference
for right, left, up, down, forwards and backwards, as well as for size and distance.

In architecture the "above" becomes the
ceiling and "below" the floor which only become
interchangeable dimensions in an amusement park
fun house, and then only as an illusion. But
such an illusion can be extremely unsettling
because of what we have come to accept as an

¹Moore and Allen, p. 5.
appropriate image of the way our environment is ordered, and as such implies that the space that we experience is made up both of space as we perceive it and the cognitive image we carry of spatial relationships.

Christian Norberg-Shultz has put forth just such a theory of existential space in his book, *Existence, Space and Architecture*, which attempts to define more precisely the nature of the space we experience. He maintains that man must both understand spatial relationships and collect those relationships into his conceptual image of the universe to give spatial perceptions meaning.

Existential space is composed of both space as perceived by man and his image of the environment. Such an image is relatively stable and is composed of archetypical elements, cultural bias, and personal idiosyncrasies which, together with
our perceptions, produce our experiences. The image of the environment, which is based upon past experience that we all carry with us, forms the framework to give meaning to our perceptions, and such meaning is the basis of experience.

The image of the environment that people carry with them has been studied in detail by Kevin Lynch in his *Image of the City*. He identifies five archetypical elements which he applies to the environment at an urban scale:

- Paths
- Edges
- Districts
- Nodes
- Landmarks

While Lynch applies these elements at the scale of the total environment, such a spatial

---

vocabulary can also prove useful at the scale of entrances. The most applicable elements of spatial image for entrances would seem to be path, edge, and landmark. However, nodes and districts can become elements of entrance image at a larger scale.

Path is, of course, of primary importance to entrances since the act of entering requires a spatial movement from the public area to the private area. The concept of edge or boundary is necessitated by the need for a separation between the public and private areas. Rarely is one edge or boundary sufficient to make that transition, and the landmark or goal may be seen as the doorway itself which acts as a focusing device for the entrance.

To speak of spatial elements implies that the space has recognizable, readable gestalt and that such an element is somehow connected to a
larger whole. The gestalt of such spatial elements is defined with varying intensity by its bounding surfaces. Defining such spatial elements is one of the goals of architecture. Understandably the treatment of the bounding surfaces and interactions of spatial elements is reflected by its corresponding architectural articulation which in turn makes the spatial element readable. The treatment of such interaction of spatial elements is particularly fruitful in the analysis of entrances. Since the entrance, by definition, is where the inner, private area and the outer public area meet, the entrance primarily becomes the articulation of the interaction of those two domains, and corresponding architectural elements make the spatial interaction of the two zones readable by articulating the bounding surfaces. In the process of transition from public street to
private interior, an entrance may consist of several distinct spatial zones: street, sidewalk, yard, porch, interior. All are spatial elements whose interactions would be defined by the architectural elements of curb, gate, steps, and doorway. It is the sequential experience of these zones from most public to most private which orders the experience of entering.

Norberg-Shultz has also pointed out the difference between the spatial nature of the public and private domain which becomes manifest in the spatial transition between those two zones:

Whereas the city mainly lives by means of its paths, the house is a function of place. In fact, we can follow a logical progression from the domain-dominated landscape over the path-dominated city to the place-dominated house. At the same time we notice a growing precision of form and structure, that is, an increasing tendency towards geometrization. The more man is 'at
home', the more precisely he can define nature.\textsuperscript{3}

One important organizing principle of entrance spaces is that of axially. Axially provides a means of spatial ordering such that the path corresponds with an axis which leads to a clearly readable goal. The architecture associated with the Ecole des Beaux Arts uses the axial entrance with a strength that no other body of architecture has ever achieved. Entire building complexes were arranged symmetrically about an approach axis which would gradually rise up, giving the beholder a constant sense of logical progression of spaces he was to go through on the way to the ultimate goal, which was the highest element located at the end of the axis. This constant revelation of the intermediate and ultimate goal produces an

\textsuperscript{3}Norberg-Shultz, p. 31.
entrance so compelling that one would expect to be drawn towards the main door from miles away. Such an easily readable system of path and goal provides an entrance which may be easily understood and mentally traversed by the beholder and may become a symbol on a higher level.

The antithesis of the axial path could be seen as the guiding path, in which the path does not correspond to a geometrical axis. In extreme cases no goal is visible at the end of the path, but one is guided down the path towards the goal by some continuous device such as a walkway, paving stones, or a wall.

Another major organizing principle for spaces of entrances concerns the use of transition zones. A transitional zone is a spatial zone between the most public and most private domain, which acts as a buffer to insulate one domain from the other. Transitional zones may
lend greater importance to the innermost realm by virtue of the extra layer separation from the outer domain. The depth of such a zone (or zones) often indicates the stature of the building it belongs to. From the small lawn of a nineteenth century worker's cottage to mansions surrounded by acres of land, the depth of the transition serves as an indicator of status. Transitional zones which separate dwelling from dwelling also tend to increase the status of the individual dwelling. Architectural elements which make such transitional zones readable may include streets, sidewalks, plantings, curb, walls, steps, doors, fences, gates and gateposts, or use changes of material to define zones.

The study of spatial elements and their relationships which order our experience of entrances forms a necessary basis for the
understanding of the spatial syntax that makes environmental meanings readable.
Meanings of Entrances IV
Architectural forms may come to have meaning for us on many different levels at the same time and, as such, it is impossible to define "the" meaning of an architectural form. Instead, we must consider the meanings that any one element may convey to an individual at any one time. Such meanings are heavily determined by personal experiences within a culture as well as by the forms themselves. Even meanings about which a culture may have some measure of agreement may change over time. Forms may have meanings which are intrinsic or extrinsic.

In examining the ways in which things come to have meaning, Charles Morris has made a fundamental distinction between two levels of meaning: that meaning that something signifies and the significance of the thing. He writes:

That there are close relations between the terms 'signification' and 'signifi-
cance' is evident. In many languages there is a term like the English term 'meaning' which has two poles: that which something signifies and the value or significance of what is signified. Thus if we ask what is the meaning of life, we may be asking a question about the signification of the term 'life', or asking a question about the value or significance of living--or both.¹

In architecture, a cathedral may signify the body of Christ, but its significance may be those values we associate with Christianity.

When we ask what an architectural form means, we must ask both what, if anything other than itself, does it signify, and what values do we associate with it. Architectural forms may have several different levels of signification at the same time and carry different values for different individuals in different cultures. As it applies to entrances, if we examine the most

basic element, the door, by itself, we can say that it signifies the place that we enter and the act of entering, but in relation to other elements of the architecture it takes on additional meanings. By being a particular door, it may communicate a special identity by being different from others. By a particular contextual relationship such as proximity to the public domain, it may have additional meaning by being a front door. If it is a particular style of door, such as a six-panel door, it has meaning by being different from other styles of doors. The door may also be like something else, as is the case with the six-panel door which depicts a cross over an open Bible by its pattern of styles, rails and panels. The six-panel door may call up connotations of patriotism by association with historically significant buildings of the American Revolution. Such
values have been capitalized on by manufacturers in their advertising. All the meanings that a door may carry for an individual are dependent both on characteristics intrinsic to the door, that everyone recognizes, and those cultural meanings that are learned.

Three basic categories have been put forward to explain the ways in which forms refer to their meanings. The first category is those things which refer to their meanings by virtue of certain characteristics of their own, where the form exhibits a structural similarity to the thing to which it refers. Such a relationship may be termed iconic. Robert Venturi has popularised such an iconic relationship in Learning from Las Vegas by the

---

example of a poultry stand which is shaped like a duck. This building becomes a symbol for its function through structural similarities between the building and poultry. Forms become icons when they are like something else, or when there is a direct relationship, intrinsic to the form itself, its function. At the most basic level a door may be seen as an icon for its function as a filter which is either open or closed.

A good example of an entrance with strong iconic reading would be the entrance to an inflatable structure built at Massachusetts Institute of Technology in 1974 for the "Weather" Exhibition, in which the designers wished to promote the impression of a return to the womb upon entering the structure. To achieve this, they designed the entrance to the inflatable structure with an easily readable (judged by comments of people passing by) structural
similarity to female genitalia, and was subsequently nicknamed a "vagina door."

Entrances may also have structural similarities with other entrances nearby and promote a sense of community. Such is the case with many streets on Beacon Hill which promote a sense of unity to the whole area.

Entrances may carry meaning by exhibiting similarity to other known entrances and recalling associations we have with the forms that are recalled. The Sheraton Commander Hotel in Harvard Square attempts to relate its entrance to the historical significance of its site adjacent to the Cambridge Common. The Common itself, an historical site where George Washington took command of the Colonial troops and the spot where Henry Knox delivered the cannons from Fort Ticonderoga, is rife with historical associations, especially for the tourist. Such
11 Sheraton Commander Hotel, Cambridge
tourists, upon arriving at the Sheraton Commander, are symbolically reminded of the American Revolution by appropriately meaningful forms. A canopied entrance leads the arriving tourist straight to the front door and, by its similarity to other canopied hotel entrances and explicit symbolism, serves to emphasize that this is the hotel. But, superimposed on the facade of the hotel at the rear of the entrance court is a three-storied miniaturized replica of Mount Vernon, complete with false-lit and appropriately curtained windows on the second floor. A bronze George Washington greets the arriving party on the front lawn as if to personally welcome his guests to his home. The party proceeds along the path through the front yard over the porch to an appropriately pedimented front door which marks the final transition to the interior. Such an orchestrated set of visual
clues presumably serves to help introduce and orient the tourist to the historical connotations of Cambridge. In such an example, the entrance becomes a series of dependent iconic signs.

The second category includes those forms which come to represent their meanings by virtue of convention, when the form is learned to represent something. Such a conventional symbol is highly dependent on culture as some form of social contract is necessary to establish the meaning of the form. In this case the meaning is extrinsic to the form itself and must be learned. Written language is an example of conventional symbolism and often appears on entrances to convey information to users. Other conventional symbols found on entrances may include house numbers, business signs, logos, etc. Applied ornament on entrances often contains such conventional symbols as busts of
famous people, eagles, or flags (as symbols of the United States), pineapples (symbol of hospitality), cornucopias (symbol of plenty), urns (symbol of eternal life), or cartouches with initials or names of famous persons.

Certain elements of a particular entrance may become learned conventional symbols, as might be the case when the closing of drapes or other signal comes to mean that the person inside does not wish to be disturbed. It seems interesting to note that certain explicit symbols found above entrances of Georgian architecture reappear as motifs above Art Deco entrances. The eagle and the urn are common motifs for ornament in both architectural styles.

The third and last category consists of those forms which come to have meaning by indication through a dynamic or spatial connection with what it represents. Such an indexical
sign indicates an object or circumstance through a physical relationship. Such a sign may be seen to point, like an index finger, to the thing to which it refers. Indexical signs are often universal in nature and common to all cultures. For entrances, indexical signs are any element which points to or leads us to the entrance. The path is the most apparent index of the entrance, leading us to the entrance by means of a spatial continuity. Fences and walls are indexical in that they indicate the boundaries of spatial zones, and are readable to all cultures. Gateposts similarly indicate the intersection of path and boundary.

Any one element may present meanings which are iconic, symbolic and indexical at the same time. A gateway on Mt. Vernon Street on Beacon Hill, for instance, is indexical in that it indicates the intersection of a path and a
boundary, iconic in that its form is a diagram for its function as a filter of people and uses common symbols in its ornamentation. These three categories of meanings all relate to the denotative levels of meaning in that they are all ways that one object signifies something else.

The other level of meaning is the connotative level and deals with meanings that arise from the values we place on things, the significance things hold for us. The values that we place on architectural forms are, of course, personal in nature, based on associations which are different for each individual and may change over time. It has been written that (Charles Osgood measurement of meaning) such connotative meanings are relational in nature and may be measured through the use of a set of opposing scales, such as:
Masculine  Feminine
Ornamented  Straight Forward
Complex  Simple
Beautiful  Ugly
Strong  Weak
Welcoming  Forbidding

Studies have revealed, through the use of such scales, that architectural forms do communicate meanings which are statistically measurable for groups of people with similar backgrounds. Such meanings may be represented by mapping elements in a multi-dimensional grid of opposing axes as Charles Jenks has done with the Classical orders, nineteenth century styles, and different building materials to illustrate graphically the connotative associations he has for those ele-

3 Robert G. Hershberger, *A Study of Meaning and Architecture*

16 Charles Jenks "semantic space" representation of connotations
ments. He has also plotted modern architects against Vitruvius' three dimensions of firmness, commodity, and delight.

Entrances recall associational meanings by playing on our memories. A particular entrance, such as that to one's own dwelling, may be loaded with connotative meanings. Architectural style, building materials, and spatial elements may all be used for their ability to recall connotative meanings. Nineteenth century eclectic architecture recalled associational meanings through the use of different styles. Colonial Revival architecture, as Vincent Scully has pointed out, became popular after 1876 as an expression of nostalgic and patriotic


5 Charles Jenks, *Meaning in Architecture*
17 Charles Jenks "Semantic space" representation of connotations
ideals inspired by our country's Centennial celebration. Ads in building magazines today illustrate the patriotic associations we have for Colonial clapboard siding.

In that entrances function to either expedite or inhibit movement through them, an important dimension of their connotative meaning is the ability to either invite or ward off their use. It would intuitively seem that meanings associated with beautiful, welcoming, controlled, safe, delightful, cheerful and pleasing situations would create an inviting entrance while their opposites would repel.

While many forms carry meanings associated with entrances, a few types are so common that they deserve special consideration. These

formal types all seem to have their origin in methods connected with the necessary task of spanning the opening in a wall at the entrance, and include arched openings, trabeated openings including lintels, aedicules and pediments, and a combination of arch and trabeation in triumphal arch or Palladian motifs.

Arched forms were probably first used simply for their ability to span large openings in masonry by distributing compressive forces, but through associations they have come to have special meaning for entrances. Arched forms commonly appear non-structurally in other materials such as wood and display the same detailing as they did in stone. Such a vestigial arch indicates the entrance even though it is structurally redundant. Even Buckminster Fuller's prefabricated "Wichita House," designed and mass produced to take advantage of
24 Garden St., Cambridge, vestigial arches
The Wichita House, Buckminster Fuller, vestigial arch
lightweight materials in tension, makes use of a vestigial arch to indicate the door in a facade devoid of any other conventional symbols.

Arched forms may often be found in association with entrances on facades above doors in various applications. Because of the bilateral symmetry of the arch form itself, it is often used to reinforce other symmetrical elements of the entrance or to indicate a spatial axis. Door frames may be arched or arched windows may be set in the door to reinforce such symmetry.

The triumphal arch form, related to the arch type, is a common motif which signifies entrances in Classic architecture. The triumphal arch is itself a magnificent gateway or entrance at the scale of the city which acts as both a landmark and a terminus or gateway.
to an axis, and carries monumental connotations. At the scale of an individual building, it may be set upon the facade to indicate the entrance and act as a local landmark. When embellished with the Classical orders, it carries connotations of refinement and grandeur. It may be reduced in scale even further and appear as a Palladian window above the entrance. It is often used to indicate some spatial axis, whether a grand boulevard, an approach to a building, or the centerline of a gable. Like the arched form, the Palladian motif is often used in a purely vestigial and structurally redundant way to signify entrances. Trabeated elements such as lintels and aedicules serve as frames that surround doorways and serve to further enclose and mark the entrance. Such frames give added status and importance to doorways by either functionally or symbolically enclosing
23  
Palladian Window

24  
1010 Mass. Ave.  
Arthur H. Vinal,  
Palladian entrance
and protecting the entrances. In extreme cases multiple layers of frames surround other frames to heighten the importance of the entrance. Aedicules have been traditionally used as means of marking special places and may function as landmarks. A baldachino is a monumental example of the simple frame used as a marker of the altar, the most sacred of places. Charles Moore has written of the use of aediculas as markers of special places:

From the earliest times, four posts, generally surrounding a hearth, have marked this spiritual center. In the huts of primitive man, this four-poster hearth was surrounded by nooks devoted to the storage or use of specific implements. Later the four-poster, with a roof added, became the symbolic house, the aedicula, in which, for instance pharaohs were crowned, and later still, altars or statues of saints were enshrined.\(^7\)

Four posts with a sheltering roof is still one of the most powerful indexes of enclosed space and marker of a special place.

Related to aedicules are another formal type, pediments, which recall by structural similarity facades (and entrances) of Greek temples. They indicate enclosed space underneath their roofs (through an iconic relationship) and also suggest possibilities for human occupation. Charles Moore wrote of the symbolic aspect of pediments in his book with Kent Bloomer:

A row of columns could form a front porch of unusual power. In early Greek cities it was reserved for the head man and used by him when he was dispensing justice. Some centuries later, by the time an extensive set of otherworldly powers and connections had been assigned to the ruler/or deity, his position in the porch was moved (upward, of course) to a window of appearances suitable for personal occupancy or for a surrogate in marble. The triangle end of a gable
roof (the pediment) above the columns, had also been from earliest times a sign of power. It marked the house of the head man, and apparently, like the columns, was reserved for his important appearances as well as for other functions of civic urgency.

Many examples of explicit symbols may be found in pediments, wreaths, busts, pineapples, urns, horns, coats-of-arms, etc. The pediment often serves as an identifier for the space beyond.

The pediment becomes further abstracted by being depicted in relief only and, therefore, a pure symbol. Pediments, because of their bilateral symmetry, are often used in places on facades that reinforce symmetry, and in combination with other bilaterally symmetrical elements, such as arches or Palladian windows. Pediments may have sloping roofs, arched roofs, pilasters.

or exhibit a break in the middle adorned with scrolls. Visually, pediments may be supported upon columns, piers, brackets, or appear to float free from any means of support.

Robert Venturi has synthesized several formal types into one whole on the front entrance of his well-known house for his mother in Chestnut Hill, Pennsylvania. The whole facade can be seen as a broken pediment while the entrance opening itself is spanned by an articulated lintel with an applied arch in wood moulding above. Furthermore, the interior is derived from a Palladian motif in section. As he describes it:

(The outside form) ... is simple and consistent: It represents this house's public scale. The front, in its conventional combinations of door, windows, and chimney and gable, creates an almost symbolic image of a house. . . .

9Venturi, pp. 118-120.
Venturi House, Venturi and Short, 1962, Chestnut Hill, Penn,
What have been discussed so far are simply the elements which carry meaning in various ways. Such elements never appear in isolation, but are always related in interrelated ways to either reinforce or contradict the meaning of other elements. Like pieces in a chess game, the relationships between meaningful pieces affect the totality that we perceive, and the shift of one element can change the meaning of the whole board. Individual architectural elements may be built up into meaningful totalities, which structure our experiences. Such a study of the parts is a necessary starting point for the study of the relationships of the whole, even though the totality is often more than the sum of the parts. Even the recognition of an element as an object is as much dependent on context as on the form of the object itself,
as Lynch has pointed out. Fundamental to the meanings that entrances convey is the relationship of the entrance and its elements to other spatial elements. Architectural forms of the architecture, entrances may be combined with other architectural elements which may reinforce the importance of the entrance. Special windows or groupings of windows above entrances may serve to emphasize the location and importance of the entrance. Oriel windows on Beacon Hill town houses or Palladian windows on Georgian houses may serve this purpose.

The meanings of entrances may be shaped by contextual relationships to urban spaces. Entrances which are adjacent to important public spaces such as Commonwealth Avenue in Back Bay may take on additional associative meanings on

10 Lynch, p. 85.
the basis of the context. The same element in a new context takes on new meanings, as is the case with Venturi's vestigial element.\textsuperscript{11} The presence of similar elements, each in the context of the others, may enhance each other and define and give meaning to certain districts, as the storefronts and sidewalks of Newbury Street in Back Bay define the limits and character of that shopping district, or as the Georgian Revival architecture of Harvard helps to make its boundaries readable and establish its character.

The varied meanings that entrances communicate to us can be both denotative and connotative. By playing on our knowledge and memories, the relationships that architectural totalities exhibit may create a whole which has

\textsuperscript{11}Venturi, p. 44.
meaning for us on a higher level than the elements alone can have, just as the meaning of literature is more than the sum of the meanings of its words.
Entrances of Beacon Hill V
The spatial image that most people seem to have of Beacon Hill\textsuperscript{1} is that of a very distinctive district, which itself serves as a symbol of Boston. The hill (originally three separate hills) has two distinct parts (a front and a back), divided down the crest in a lengthwise direction. Major streets run in the lengthwise direction with a minimum number of cross streets. The gradient of the hill itself provides the streets with an additional differentiation in directions making ascending the hill a different spatial experience than descending. In addition, no streets provide views through the hill and thus all streets appear to lead either up or down the hill.

The housing on the front side and that on the back side of the hill were built to serve two

\textsuperscript{1}Lynch, pp. 160-173.
different programs and sociological groups, the upper-class single family dwelling on the front side of the hill and the lower-class tenement on the back side. This dichotomy is made apparent in the architecture of the two sides by a variety of elements at both the urban scale and the scale of architectural detail. Lynch has pointed out some of these elements and hinted at their meanings:

The visual sub-areas on the hill are each rather clearly delineated by visual characteristics of space, gradient, use, floor, vegetation, and such details as doors, shutters, and ironwork. Normally these characters occur together reinforcing the distinction. Thus the front side is an area of steep gradient to Charles Street; of intimately scaled street corridors; of ornamented, highly maintained structures saying upper-class; of sunlight, street trees, and flowers, brick sidewalks, black shutters, and inset doorways; of maids, chauffeurs, old ladies, and fine cars on the streets. The back side grades down to Cambridge Street, with darker canyon spaces bordered by bare poorly maintained tenement
structures, dotted with corner stores, its streets dirty, its children playing on the pavements.²

The two areas were intentionally separated by the layout of connecting streets by making only one intersection of Pinckney between Joy and West Cedar Streets. This intersection at Anderson functions as a gateway between the two areas. The result of the lack of connections between the two areas today is that it is almost impossible to drive from one side to the other without first descending the hill. After living at the corner of Pinckney and Anderson for five months, I knew of only two possible routes for driving to that intersection through the complex of one-way streets that make up Beacon Hill.

On the back side of the hill, building masses usually go to the edge of property lines to produce streets which are channel-like in

²Lynch, p. 167.
Steep streets, topography, and street cross sections

Bow fronts and ornamental ironwork

Inset doorways and brick sidewalks

Landmarks and commercial uses

Image maps of beacon Hill, Kevin Lynch, THE IMAGE OF THE CITY
section. The streets on the front side of the hill are wider than those on the back and provide longer vistas down the hill and of the Charles River. The narrow and often darker, more canyon-like streets of the back side are often blocked visually by vertical curves or building masses. Cross streets are more prevalent on the steep gradient of the back slope. In general, the longer and wider streets of the front side give them a stronger directional character than the streets on the back side which are interrupted more often by cross streets.

On the back side of Beacon Hill, where circulation results in blocks, between Phillips Street and Revere Street, that are deeper than on the front side, a special type of entrance was developed to accommodate access to the interior of the block. Long, straight alleys
lead from the street to houses (originally intended for artisans and tradesmen) in the center. These culs-de-sac lead one from the sidewalk, often through a semiprivate gate, down their length to a visible goal such as a facade or, in the case off Anderson Street, an arched brick wall. The most interesting, Rollins Place, leads one between two buildings toward a Greek Revival false facade, which is functional in that it provides an entrance porch for the two houses on either side at the end. This facade not only serves as a visible goal at the end of an approaching axis but also gives Rollins Place its charming character, establishing it as a special place on the back side of the hill.

In general, the front side of the hill exhibits more variation in the basic spatial theme with special places carved out of the
basic channel-like streets. Transitional zones between sidewalk and front door appear more frequently on the front side of the hill.

A sense of continuity ties the image of Beacon Hill together. Consistent repetitive elements, such as old streetlamps, the use of brick, stone lintels, and shuttered windows, all contribute to the image of Beacon Hill as a district. But within the vocabulary of the district, certain spaces become special and are given additional meaning by the distribution of certain elements. Streets on the front side are more likely to have special elements which set them apart from other streets, giving them a special identity. A concentration of bay windows makes Pinckney Street special and contributes to the sense of character that Pinckney Street has. Front yards behind a continuous iron fence give Mt. Vernon Street a
special character, while arched inset doorways contribute to Chestnut's distinctive character.

Each street in Beacon Hill projects a different image, as A. McVoy McIntyre has written:

Of the grid of streets that partition Beacon Hill into a pattern as straight and rigid as if laid out by a puritanical theologian, one must agree with Henry James that Mt. Vernon Street is the most proper. Beacon is grand; Chestnut beautiful; Pinckney characterful; West Cedar intimate; but Mt. Vernon expresses that "long view" which a Bostognian likes to take as well as see.³

While repetitive elements unite individual buildings into larger totalities and give them special character, building style may differentiate individual dwellings and give individual buildings special character. Three distinct styles of house design may be found on the hill, each carrying different connotations. The

39
44-46-48 Mt. V
Federal style
1-3 Chestnut St.
41
Greek Revival entrance

42
Victorian entrance
Federal style, popular on the hill from 1800 to the late 1820's, was promoted by Bulfinch and Asher Benjamin's pattern book, inspired by English Georgian architecture. Arched entrances are characteristic of the Federal style. The Greek Revival was popular from the 1830's through the 1850's, characterized by post and lintel doorways. An eclectic mixture of heavy scaled entrances, often of brownstone, may be found on Victorian examples from the 1850's through the 1890's. Different styles carry different connotative meanings and help establish the character and identity of individual facades.

The most dramatic spatial element of Mt. Vernon Street is certainly the row of mansions on the north side of the street from No. 57 to No. 89. The second Harrison Gray Otis mansion at No. 85 was the first mansion on the block.

4 McIntyre, p. 5.
Otis and subsequent builders along the street simply came to a gentlemen's agreement on a thirty-foot setback determining the pattern for this portion of the block. The entrances which front Mt. Vernon were originally formal entrances with a service entrance from Pinckney Street. The front entrances are well kept and finely proportioned. The Greek Revival entrances are set well behind a buffer of green vegetation and an iron fence. The path to each doorway is clearly marked with brick paving and leads directly to the entrance on an axis perpendicular to the facade. A continuous iron fence runs along, binding the mansions together in a group. Because the facades are set back from the sidewalk and can be seen more easily than many Beacon Hill facades, elements of the facade may serve to reinforce the entrance, such as the

5McIntyre, p. 36.
arched window of No. 63 or the oversized window of No. 73 or the balconies above Nos. 89 and 87.

Individual steps and gates serve to mark the transition between the public sidewalk and semiprivate path for each individual entrance. The gate and gatepost may identify an entrance by being special, such as No. 61 or No. 59. The fence serves to establish and clarify boundaries of ownership. Gateposts and corner posts receive extra care with elaborate ironwork, complete with symbolic iron pineapples.

Other functional and decorative ironwork on Mt. Vernon includes hitching posts, lamppoles, handrails, footscrapers, and balconies. The hitching post and footscraper have both lost much of their functional meaning, but their presence still contributes to the "proper" character of the street. The setback and the
Ornamental ironwork, Mt. Vernon St.

Ornamental ironwork, Mt. Vernon St.
77 Mt. Vernon St. 1836
61 Mt. Vernon St. 1837
care given in establishing such a hierarchy of spatial elements lend additional status to these entranceways.

The facade of No. 65 has unique Gothic window detailing and a pointed Gothic arch to establish its own special identity. A sign above the entrance bears the name "Cabot," the most sacred and proper of Boston Brahmin names. If "Lowells speak only to Cabots, and Cabots speak only to God," it seems strangely appropriate that their mansion should be the only Gothic of the block, perhaps as symbol of their role as mediator between God and ordinary men, through associations with church architecture.

The other doorways all have openings which are of the post and lintel family. No. 61, a somewhat Victorian entrance, has an entablature which is broken forward on two Tuscan columns.
Proportions follow Vignola's rule which fixes the height of the columns at seven times the diameter.⁶ Next door at No. 63, another Victorian example, a roof supported on brownstone brackets provides enclosure for the entrance under the large arched window.

An exceptionally fine Greek Revival entrance at No. 59 was built by a mathematical instrument maker and its proportions reflect the Pythagorean harmony of simple number ratios found in the best of Greek Revival entrances, the height to width being in a ratio of 3:2. The graceful Ionic columns and pilasters with a frieze of laurel wreaths, and the pedimented lintel create an elaborate but refined entrance based on an example in Edward

83 Mt. Vernon St. 1836

79 Mt. Vernon St. 1836
Shaw's pattern book.\textsuperscript{7}

The other facades of the block, Nos. 73, 71, 77, 79, and 83, while Greek Revival, don't seem to have the same quality of proportions as No. 59. They all frame the doorway with columns or pilasters supporting an entablature. Some actually provide an enclosure, while others only symbolically represent enclosure. Entrances with similar dimensions down the street at No. 94 and No. 96, which are located directly on the street, seem adequately scaled while, set back thirty feet, the entrances at Nos. 77 or 73 seem slightly lost on the large facade.

Further down the street, the second Harrison Grey Otis mansion by Bulfinch, No. 85, and its two neighbors at Nos. 89 and 87 set a new spatial pattern for the block. While set back from the street by thirty feet like the other

\textsuperscript{7}McIntyre, p. 36.
85 Mt. Vernon St. 1802, Charles Bulfinch
examples, the green transition zones and axial pedestrian paths have been replaced by high walls, planting, and vehicular paths which lead directly to the entrances. The suggestion that people who arrive at these entrances will come by carriage lends them additional importance and drama. Nos. 89 and 87 share a circular drive and both have Doric porches which front the drive and doorways with sidelights and a fanlight. A flagpole reinforces the twentieth century Georgian entrance of No. 89 which replaced a twin to No. 87 designed by Bulfinch for his own use until forced by financial considerations to sell it.\(^8\) First floor windows of these three mansions are all set in arches, a device which serves to unite their identity.

\(^8\) McIntyre, p. 30.
The entrance to No. 85, another Doric porch on the back corner, replaced an earlier one in the middle of that facade in the 1850's. It is said that owners at the time moved the granite porch from their old residence and grafted it onto this house out of sentimental attachment and Boston thrift. The iron gate, the granite paving, the length of the drive, and the suggestion of a garden in the rear all act to set this house and its entrance apart from the surrounding pattern and give it added importance.

The particular spatial conditions of Mt. Vernon Street, as well as certain signs and symbols, serve to convey a sense of wealth, care, status, and drama to give the street its distinctive proper connotations. While the suitably proper front entrances of this block

9 McIntyre, p. 37.
on Mt. Vernon present the public face, the service entrances in the rear, although still functional in some cases, have been suppressed to the point of being completely invisible today along Pinckney Street.

We arrive in Louisburg Square. Just off Mt. Vernon is the most distinctive space on the hill, the thing people remember most about Beacon Hill. The square itself is a symbol of Beacon Hill and, in a larger sense, of Boston. It is a popular subject for both postcards and posters of Boston. The square has its conceptual origin in a Bulfinch plan of 1796, but by 1826 the square had been moved westward, reduced in size, and rotated ninety percent. The square is the largest open space on Beacon Hill. While the square

10Lynch, p. 162.
11McIntyre, p. 95.
You don't know beans 'til you've been to Boston!

Postcard with Boston baked beans and Beacon Hill as symbols of Boston.
may be seen as the major public space of the hill the green space, the park itself, is semipublic in nature, surrounded by a distinctive iron fence and claimed by statues at either end. The implied private nature of the parks and the change of pavement textures from asphalt to cobblestone differentiate the cross streets running through the square, and make them seem more private than other streets. Different patterns of brick paving claim portions of the sidewalk in front of the mansions. The square is one of the only spaces on the hill not dominated by a vertical gradient up or down the hill. The square seems to be at rest, as opposed to the movement created by the slope of the other streets. Entrances are set directly on the sidewalk with only a slight transition implied by the bow fronts and front steps. On the west side of the square, Nos. 8, 18 Louisburg Sq. 1836
61
10 Louisburg Sq. 1835

62
20 Louisburg Sq. 1836
63
12 Louisburg Sq. 1835

64
14 Louisburg Sq. 1836
10, 12, 14, 16, 18, 20, and 22 all have bow front facades with projecting porches and stairs. A transitional zone, which is mainly symbolic, separates sidewalk from facade and provides a servants' entry to the basement level, as well as full-length basement windows. The main living floor is set just high enough to give a teasing peek at fine woodwork and crystal chandeliers inside.

These Greek Revival entrances seem in much better scale than similar ones on Mt. Vernon. The proportions of these entrances all exhibit simple whole number ratios. The door establishes a modular proportional system in which the door is composed of two squares, one unit on a side. The width is two units and the height is three units. Pedimented doorways appear on No. 14 and No. 8, while the rest are all post and lintel Greek Revival, with the exception of
a Federal fanlight on No. 22. Facades are all similar but set apart by cornice lines and other details such as drainpipes, shutters, and window lintels.

On the east side of the square a different type of entrance prevails. Steps lead from the sidewalk level up to enclosed entrances framed by Greek Revival post and lintel entrances. Only No. 17 is pedimented. It also carries additional symbols which refer to the convent for which it serves as an entrance. Decorative but nonfunctional iron balconies both unite and identify separate facades. Service entrances are direct from the sidewalk level down to the basement level.

Just down from Louisburg Square on West Cedar Street is a row of late Federal style town houses which remain much as they were when built in 1826 to designs of Cornelius
68
13 Louisburg Sq. 1836

69
11 Louisburg Sq. 1836
70
7 Louisburg Sq. 1835:

71
7 Louisburg Sq. 1835
72
85-83 Pinckney St.

73
9 Louisburg Sq. 1835
Coolidge.\textsuperscript{12} The entire block was composed as a single continuous mass with only a break in the cornice line and the entrances as clues to the individual identity of each dwelling. Entrances are set directly off the sidewalk, with only a shallow enclosure under their stone arches. A single step is the only transition from the sidewalk to the door. All of these entrances are basically the same in configuration, with a semicircular arched light above and two narrow sidelights on either side of the door. Proportions of the opening are two squares surmounted by the semicircular arch. In contrast to entrances on Mt. Vernon, which are set back from the street with different facades and different entrance styles to differentiate one entry from the rest, these entrances are basically similar.

\textsuperscript{12}McIntyre, p. 66.
and set on a continuous facade. They use smaller details, now visible from the sidewalk, to establish character and identity. Detailing of the arched light and sidelights, different colors and materials, as well as door knockers, mail chutes, door handles and footscrapers, become the elements which distinguish one entry from the rest. Within this level of detail can be found a wealth of elements which serve as local landmarks.

While these entrances create a streetscape that is harmonious and unified, they make a special place of their own by virtue of their simplicity and similarity. They carry none of the grand connotations of the entrances of Mt. Vernon or Louisburg Square.

A rambler's first impression is the pleasing homogeneity of the street scene. Observed more closely, the unbroken frontage is a composition of quite individual facades. Within

2 West Cedar St.
80
3 West Cedar St.

81
8 West Cedar St.
82
4 West Cedar St.

83
10 West Cedar St.
a short block may be seen three
distinct styles of house design.
Here, as in no other city, the
development of this country's
urban architecture is documented.
There are telltale characteristics.
The arched entrance defines the
Federal style, an adaptation of the
English Georgian which flourished
from 1800 to the late 1820's. The
post-lintel doorway bespeaks Greek
Revival, an American expression from
the 1830's to midcentury. The
heavy scaled, large proportioned
portal describes the Victorian,
an eclectic potpourri current from
1850 through the 1890's.13

While the first impressions of Beacon Hill
are of a continuous and homogeneous district,
further examination reveals subdistricts and
special features which give special character
to certain places on the hill. Even the
seemingly uniform rows of facades are broken
down by the use of different stylistic charac-
teristics to help give each dwelling its own

13McIntyre, p. 5.
identity. Three distinct styles of house design may be found on the hill. The Federal style, popular on the hill from 1800 to the late 1820's, was inspired by English Georgian architecture and promoted by Bulfinch and the pattern books of Asher Benjamin and others. Arched entrances are characteristic of this style.

Chestnut Street is memorable for its beautiful and refined Federal architecture. The character and coherence of Chestnut Street is due largely to the repetitive use of recessed, arched entrances which seem friendly without being pretentious. As A. McVoy McIntyre has expressed it:

We have found Chestnut Street architecturally laden--its Federal style closely related to that historical period known as the era of good feelings. The
ambiance of that era seems yet evident.\textsuperscript{14}

A typical Federal entrance on Chestnut Street elaborates on the previously examined entrances of West Cedar Street. Entrances at No. 50 Chestnut or No. 12 Chestnut illustrate the same basic Federal style of a semicircular light over a door with two sidelights. However, now both the scale and proportions have changed. The door itself is now wider as are the sidelights. The door is recessed further into the facade to provide a functional enclosure and transition. Steps lead up one half flight to the door. The entrance seems more important and more formal by virtue of its new position and size. Iron railings bounding the approach up the steps reinforce the directionality of the path and serve to

\textsuperscript{14}McIntyre, p. 62.
emphasize the transition from sidewalk to the door.

The proportions of these entrances are determined by whole number ratios described by Asher Benjamin in *The American Builders Companion*:

(The illustration) . . . is a design for a Venetian entrance calculated for a brick house, where a great deal of light is required. The pilasters may be made fifteen or sixteen diameters high; make the architrave in width the same as that of the pilasters; and the sidelights in height two thirds of the height of the opening.¹⁵

The illustration Benjamin published may be shown to correspond in every dimension to a grid sixteen diameters by sixteen diameters topped by a semicircle with a diameter divided into sixteen segments along both its diameter and circumference. Within this grid the door

¹⁵ Benjamin, p. 70.
Federal Style fan light entrance, Asher Benjamin, with proportional system
88
48 Chestnut St, 1822
Ephraim Marsh
becomes two squares, sixteen diameters on a side, and the sidelights become eight squares, four diameters on a side. Even the lead in the glass sidelights conforms to dimensions of two and four diameters. With respect to its proportional system, this entrance may be seen as an icon for concepts of Pythagorean harmony. While such proportional relations may or may not be apparent to the casual viewer, such proportion does carry certain connotations of harmony and refinement. The entrance also bears an iconic relationship to the triumphal arch or the Palladian motif.

Another type of Federal style entrance is characterized by elliptical rather than semi-circular lights above the door. Such a "fanlight" has proportions in which its height is two-thirds of its width. While the door and sidelights have the previously mentioned
91 Federal fan light entrance
proportions of sixteen diameters in height and width, examples of this type may be found at No. 48 Chestnut, flush with the facade, or at No. 37 Chestnut, recessed back to provide an enclosure.

Both types of Federal entrances have cast lead ornaments to embellish the lights depicting fruits, flowers, faces, and sunbursts.\(^{16}\) Asher Benjamin's example showed a face which was located at the center of the arched light, much the same way as a bust appears in broken pediments of Classical architecture.

Chestnut Street also has many beautiful Greek Revival entrances characterized by post and lintel doorways. Early examples on the street are Nos. 13, 14, and 17 designed in

1806 by Bulfinch. Delicately proportioned columns carry an entablature that is as wide as it is high. This particular entrance is like the one Bulfinch used on the side entrance of the third Harrison Grey Otis house on Beacon Street. These entrances use the columns and entablature as an iconic symbol for enclosed space, while Nos. 31, 35, and 46 Chestnut Street provide actual enclosed space. The later examples have Classical orders of "correct" proportions of Vignola, Benjamin, and others. The Doric order of No. 31 and No. 35 calls for a column which is eight diameters in height. At No. 35 the architrave and frieze are missing, while the cornice is proportioned so that its height and width

17 Benjamin
18 Benjamin, p. 39.
17 Chestnut St. 1808
Charles Bulfinch
95

96

35 Chestnut St.
are equal. These Greek Revival porches can be seen as aediculas which are both indexical of the entrance and act symbolically, enhancing the importance of the entrance while providing actual enclosure.

The Federal fanlight doorway and the Greek Revival enclosure are beautifully wed at Nos. 22 and 24 Chestnut Street in an entrance of subtle proportions. The pilasters of the door jambs again form an opening which is proportioned as a module of two squares. The door and sidelights form a square made of four modules and the cornice forms a square of nine modules. The Doric columns are then "correctly" proportioned for a cornice of that height, and the dimensions of the lead in the sidelights and the panels in the door become one half, one quarter, or one eighth of the side of a module.
100 22 Chestnut St.
101 22 Chestnut St.
proportional system
Most entrances on the south side of Chestnut Street are set directly on the sidewalk with only a few steps to separate the sidewalk from the front door. At No. 22 and No. 24 the entrance is set on a facade which is continuous. Only the entrance and small scale elements, such as window boxes and footscrapers, establish the separate identity of the two entrances. Many entrances on the north side of the street are set back and employ iron fences to define front yards which contain plantings, as at Nos. 37 and 35, or yards which are mainly symbolic, as in No. 17, to give extra status to the dwellings. Iron balconies are also used on many of these entrances, set back from the street, as elements to further increase status. Entrances which differentiate between formal and servant entrances with the same "Upstairs, Downstairs" dichotomy as
Louisburg Square examples may be found in the Greek Revival houses at Nos. 19 and 21, the only bow front examples on the street. While Chestnut Street is not marked by the quality of spatial elements that Mt. Vernon Street or Louisburg Square possess, its finely proportioned and detailed entrances give it a character that marks it as a special place.

As we have seen, Beacon Hill is a memorable district which is both unified and homogeneous, marked by special places and individual facades. The entrances to houses on Beacon Hill compose a readable language of signs and symbols which mark special places both personal and communal, establish identity and character of districts and facades, and contribute to a coherent spatial environment.
107
19 Chestnut St.

108
Entrances on the front side of the hill communicate different meanings and fulfill different functions than those on the back side of the hill.

The entrances form a language in which spatial elements of path and goal become indicators of social status, and the urban fabric serves as the context for the expression of individual identity. Architectural elements form a vocabulary and combine to give meaning to special places, or contrast to promote special identity. Elements of doorways are often combined in syntactically rigid proportions, determined by harmonic ratios which lend a refined character to the streetscape.

Beacon Hill is meaningful to us at all levels from the regional scale, as a symbol of the city, through special places like Louisburg Square, to the scale of door knockers on West
Cedar Street. This language of entrances on Beacon Hill communicates meanings to us and affects our behavior toward those entrances.
Entrances of Cambridge VI
Cambridge, Massachusetts, has grown sporadically from a small village of scattered wood frame buildings and cow pastures of the seventeenth century to comprise what is now a collection of diversified neighborhoods. Whereas on Beacon Hill a consistent urban vocabulary served both to unify the districts and indicate special places, the growth of Cambridge allowed each dwelling to express meanings through a diversity of elements and relationships. Mathematically proportioned elements found on Beacon Hill entrances appear on Cambridge facades in relationships which disregard harmonic ratios and explode the elements to cover the entire facade. Pediments, arches, and posts and lintels used to indicate entrances comprise the vocabulary of all the historical styles, but each style has its own
Cambridge, Mass. 1900
syntax for combining elements into a readable language. The different styles which comprise the languages of entrances in Cambridge are being presented here not as a comprehensive study but as a survey of types to present the diversity with which different styles and time periods have dealt with that fundamental requirement of architectural form, the entrance. Entrances will be examined in roughly chronological order of stylistic development from Georgian architecture to modern architecture, to document the evolutionary phases of the languages of entrances of Cambridge.

The most well-known example of Georgian architecture in Cambridge is certainly the Vassall-Craigie-Longfellow house, built in 1759 by John Vassall. This house, rich with historical associations, has additional meanings which qualify it as a major landmark.
of Cambridge. The house is set behind a large front yard separated from the sidewalk by a fence. An axial path leads from the sidewalk through a gate with large fence posts, through the front yard to a second fence with three short flights of steps to the entrance. Such a pattern with its abundance of clearly marked transitional zones serves the status of the house. Its facade reinforces the symmetrical entrance by breaking forward a central bay containing the front door. This bay is emphasized by flanking giant pilasters which rise to support a gable which is treated as a Classical pediment with an arched window. The entire center bay acts as an index for the central entrance and serves as a goal in scale with the long path from the sidewalk.

The frame around the front door derives from Plan No. 32 of Batty Langley's The City
and Country Builder, 1756. Its carefully proportioned doorway is sheltered only by a shallow cornice supported on brackets. The entry admits light only through two small windows in the door, as fanlights and sidelights were introduced to New England only after the Revolution. The symmetrical entry and the spaces leading to it give this house its unmistakable importance in relationship to the neighborhood.

Next door to the Longfellow house, at 101 Brattle Street, a Greek Revival home built by Oliver Hastings in 1844 originally had its


2 Bunting and Nylander, p. 81.
113 101 Brattle St., 1844
Oliver Hastings builder
main entrance in the elliptical bow of its
front bay. This form, which may be thought of
as a Palladian motif in plan, reinforces the
symmetrical facade and the importance of the
front entrance, reminiscent of the original
axial approach which was functional.

Another Greek Revival house, one of the
most memorable in Cambridge, also sits back
behind a deep yard at 5 Dana Street. Its facade
also is organized around a central arched
element, this time the central dormer which
reinforces the symmetry of the entrance. Again,
the approaching path is not axial but is moved
to one side.

Its next-door neighbor represents the next
stylistic phase of the nineteenth century, the
Gothic Revival. Its facade is symmetrical, but

3Bunting and Nylander, p. 96.
115 7 Dana St., 1841
Nathaniel Virgin housewright
its entrance is located off-axis and its Gothic arches and bargeboards appear unexpectedly on Classical columns instead of a Classical pediment. This unexpected clash of Gothic with Classic, and symmetry with asymmetry, works as an oxymoron which heightens the poetic quality of its entrance. The narrow front yard is densely planted with trees and shrubs, partially masking the facade and increasing its sense of casual mystery. Its location in relationship to the neighborhood has been noted as creating a focal point for the surrounding buildings.  

Another picturesque Gothic Revival, at No. 85 Brattle, also holds on to a symmetrically balanced facade while presenting an off-center entrance. Its front door and steps lie a short distance from the sidewalk through a gate and

---

4 Bunting and Nylander, p. 96.
along a slightly winding brick path. Its gate has a three-ringed motif which relates iconically to the windows of the center gable and is also a common symbol for the Trinity in Christian architecture. Two gables are centered over the door which has a slightly pointed arch, and a large lantern completes the symmetry of the doorway.

A third Gothic Revival at 338 Harvard has an entrance of the aedicular type, with a vestigial wooden pointed arch which is iconic with arches of churches and carries Christian connotations.

The aedicular frame with vestigial arches is common on houses of mid-Cambridge and may be found on several eclectic styles at Nos. 14-16 Clinton and Nos. 22-24 Lee, both Italianate bracketed duplexes. Nos. 14-16 Clinton has a central pediment and double arched windows to
119
14 Clinton St.

120
22-24 Lee St.
indicate the entrance, while Nos. 22-24 Lee Street has two windows of Palladian inspiration. On the Clinton Street example, the vestigial arch is supported on vestigial brackets and has a vestigial keystone. Both entrances on each facade have separate flights of stairs that lead to separate porches so that territorial boundaries and ownership are firmly established.

The aedicular frame with vestigial arches also commonly appears on porches of mansard houses. No. 13 Bigelow Street has an entrance similar to the Italianate example, but now a tower is placed symmetrically over the entrance to increase the axiality of this entrance and firmly indicate its location as do the arched windows and arched tower cornice.

A more elaborate example is found across the street at No. 22 Bigelow Street. Symmetrical elements of the round upper window,
122
Disneyland City Hall

123
22 Bigelow St., 1870
Palladian motif of the tower windows, and the slight arch of the second story window all reinforce the axial entrance. Its Second Empire mansard features carry grand connotations, making this style appropriate for public structures as evidenced by city halls from Disneyland to Boston.

No. 26 Clinton, another Second Empire mansard in Cambridge, has an asymmetrically placed tower and unexpected Federal style fanlight doorway. The fanlight is purely vestigial, a wooden panel having been substituted for the glass of the fanlight, but the arch is still retained for its symbolic qualities. A frame, depicted in relief, merges into an arch above the fanlight and is topped by a gabled end to synthesize the arch, the frame, and the pediment into one entrance.

Other examples on Bigelow Street include
No. 8, No. 17, and No. 18 where the arch is replaced by a beam with hints at an arch because of its brackets and vestigial keystone. The columns have abstracted but syntactically intact orders. The capitals of No. 8 are vaguely Ionic and the entablature vaguely Doric with mutule and guttae. The houses and entrances of Bigelow Street, by proximity and similarity to one another, create a street of unusual harmony for Cambridge. Entrances are all held at a uniform height above the sidewalk and separated by a half flight of granite steps transversing a narrow front yard. Roof lines and setbacks are maintained to help create a coherent streetscape.

The next major stylistic development, the Queen Anne, is based on principles which were radically opposed to the formal academic
tradition of the mansard style.\textsuperscript{5} Novelty, variation, and individuality form the basis for expression of these entrances. The semantic connotations of the Queen Anne style have been exploited commercially on the front of the Nature Valley Granola package to communicate nostalgic meanings of wholesomeness and country charm.

Garfield Street in Cambridge is lined with Queen Anne houses built between 1883 and 1891.\textsuperscript{6} Building lots average sixty feet by one hundred feet and deed restrictions required a ten-foot setback. While the houses are all very eclectically individualistic and create the impression of "bewildering diversity and

\textsuperscript{5}Bunting and Nylander, p. 107.

invention," their proximity to one another reinforces the total image to create a memorable whole. A sense of variety and individuality is expressed by their massing which is comprised of various configurations of hip, gabled and mansard roofs, towers, bay windows and porches proposing a busy and irregular outline. While these houses all have very individual characteristics, they also have certain common features which give the streetscape a memorable coherence. All these houses have deep porches which run across the facade. The entrances are all indicated by gabled hoods which, by their shape, recall pediments. At Nos. 31-33 Garfield Street, a cartouche with a woman's head appears in the gabled end. A short path leads perpendicularly from the sidewalk to a flight of steps.

7 Downing, MacDougla, and Pearson, p. 107.
leading to the porch. The porch is now much larger than earlier styles, and it functions as a habitable outdoor area instead of just an entrance enclosure. The porch now becomes a place to sit on warm summer nights and, by association with such activities, may summon up past memories or pleasant connotations. Turned posts and brackets serve as columns. Brackets may be iconic with naturalistic or anthropomorphic references as is the case at Nos. 31-33 or 36, or grow in size as at No. 39 to become vestigial arches. Porch balusters vary from simple at No. 74 to elaborate at No. 28 or No. 45. Spindles also form a fret-work just under the porch roof at Nos. 28, 45, and 31-33 to create a play of light and shadow.

At No. 45 Garfield, a circular bay above the entrance is surmounted by an attic window, reminiscent of a Palladian window, to reinforce
133
44 Garfield St.

134
28 Garfield St., 1886
John A. Steadman
the symmetry and axial approach in the same way that Second Empire mansards do. However, in this case, a skillfully placed circular turret is located on one corner to upset the symmetry and lend a much more informal character than its symmetry otherwise would.

A similar tension between symmetry and asymmetry is maintained in the other examples. Houses at Nos. 28, 39, and 74 have large gable ends facing the street, which imply an axis of symmetry. All have attic windows which reinforce this symmetry, while the entrances are asymmetrical. At No. 36 Garfield the entrance is located symmetrically and is indicated by a symmetrical porch which overlaps the facade to maintain its symmetry. The asymmetrical massing of the house itself, accented by the skewed corner tower, contradicts the symmetry of the entrance. In these houses a symmetrical
entrance appears on an asymmetrical facade or an asymmetrical entrance appears on a symmetrical facade.

A return to symmetry is characteristic of the Colonial Revival, as evidenced by the example at No. 3 Sacramento. The axial approach to a symmetrical entrance across a yard separated from the sidewalk by a fence has been revived. The facade is organized around the entrance by increasing the size of the central windows to strengthen the entrance while symmetrical window arrangements flank either side. The porch is large enough for a bench to sit on, and its closely spaced Doric columns create a columned porch with an unusually strong sense of enclosure. A relief with vegetation motifs appears in the pediment over the porch, the central element of this composition being a single acanthus leaf not historically used as a
136 3 Sacramento St., 1888
Hartwell & Richardson
common symbol but used here in a symmetrical composition to embellish the pediment.\textsuperscript{8}

Another Colonial Revival entrance at 340 Harvard Street has a symmetrical entrance plan on a slightly asymmetrical facade. Its Ionic porch with a bowed entablature is surmounted by a Palladian window. The plan of the porch can be read as a Palladian motif and also acts to reinforce the entrance. Broken pediments appear above the dormer windows, with the central pediment symmetrically dominating the group through its size and shape. Garlands decorate the entablature of the porch and window frames and carry additional connotations of refinement.

A convincingly correct Georgian Revival house at No. 3 Craigie Circle, with a large

3 Craigie Circle, 1910
Albert G. Hall
Palladian window and Doric porch, is set at the end of a long approach. Its elements make a direct reference to the work of Samuel McIntire in Salem and recall associations and memories of the houses on Chestnut Street in Salem.

Its neighbor across the street at No. 8 Craigie Street uses a broken pedimented doorway on a symmetrical facade which attempts similar "Colonial" messages with less fluency. A sadly appendaged garage looks like an afterthought and has little functional relation to the ceremonial front entrance.

Among the most noteworthy modern examples in Cambridge is No. 9 Ash Street, built by Philip Johnson in 1941 while he was a student at Harvard. A high wall surrounds the perimeter of the site and a roof spans across the wall at the rear of the enclosure to create living space and an outdoor enclosed patio. The introverted
139 Craigie St.
plan has a rigidly diagrammatic quality. While exhibiting no conventional symbolism except, begrudgingly, the house number, its form is strongly iconic with its spatial conception. No transition is made between the front door and sidewalk, and the only index of the entrance is a change in material and color of the door. The transition is made from outside directly from the sidewalk with a minimum of clues as to what lies beyond the door. What does lie inside the door is a unique spatial zone which is at once "inside" yet "outdoors." Delightfully "private" from the inside, yet somewhat forbidding from the outside, its entrance refuses to fraternize with others on the street. It stands out against its Victorian neighbors. The very abstention from symbolic elements carries an inescapable meaning through its semantic opposition to the meanings of such
eschewed symbols.

The dwellings in Cambridge were built of many diverse styles over a long period of time, but together they formed a collective image of Cambridge neighborhoods. Areas such as Garfield Street or Bigelow Street are defined by similar elements which, in proximity to one another, create districts with special character and meanings. The styles which carry different semantic connotations help define the character of neighborhoods or individual houses.

The syntax of the language of a particular dwelling may be "rigid" and "geometric" as in Georgian architecture, or "loose" and "original" as the Queen Anne architecture. The massing of the individual houses may affect the connotations of entrances by being "large" or "small," "regular" or "irregular," "simple" or "complicated," as well as many other semantic oppositions.
Transitional zones between house and sidewalk may indicate status as in the Longfellow house, or define a coherent neighborhood as with Bigelow Street. While each style comprises its own language for expressing its entrances, all of the historic styles rely on a vocabulary of pediments, arches, and posts and lintels to indicate and lend importance to their entrances.

Entrances of Cambridge communicate meanings to us through a diversity of elements and relationships. In contrast to entrances of Beacon Hill, the languages of entrances of Cambridge houses are based on a vocabulary of elements within different historic styles which combine those elements together with a different syntax to convey their environmental messages.
BIBLIOGRAPHY


---


