The objective of residential design concerned with supporting American cultures needs to move beyond designing prototypical houses or neighborhoods for ethnic or sub-cultural groups. The character of culture in the U.S. is woven and re-woven from many strands: to fix housing to a programmed life-style is to limit the practice of culture both in its diversity and its temporality. The task for architects and planners is to design dwelling environments with the capacity to provide residents with choices in the use of a place. Through a comparative study of two residential settings, this article identifies three attributes of house form which limit or contribute to choice.

If historians view the built environment as a material artifact of culture, and politicians and social advocates view the house as a tool for promoting particular visions of culture, what should the perspective of the architect be? Rather than serving as a purveyor of popular culture, high culture, or any singular, hegemonic culture, the architect’s role in the United States should be to enable choices for the practice of culture, the generation of ways of living in the conduct of everyday life.¹

This article compares two residential settings that illustrate different design paradigms for addressing cultural practice and house form. In one setting, culture is programmed in a house’s form through a functional specification of ways of living; in the other, culture is embedded as choice — through a capacity that enables residents to choose how to dwell. The first limits resident choices by assuming culture to be static; the second increases choice by recognizing culture as constantly defined and renewed. Through observing how people use spaces, this research identifies three attributes of house design — access, dimension and claim — that architects can use to enable choices.

For designers and researchers exploring links between housing and ways of living in the United States, diversity is a topic of common concern. As in the exhibit “House Rules” at the Wexner Center in 1994, the questioning typically begins with recognition of the need to reconstitute the image of the American household from that of one mother, one father, 2.5 children, and a dog. Curator Mark Robbins asked, “Can the suburban house be reprogrammed to acknowledge and reflect social change?”²
Since a pluralistic reality effectively challenges the common view of the household, it is doubtful the variety of ways in which people live can be addressed simply by "reprogramming" — by redefining household composition and life-style — because culture in America is too diverse and changable. Its diversity arises from the multiplicity of ways in which Americans associate with a national culture as well as with sub-groups based on such factors as ethnicity, race, religion, region, occupation, economic status, and stage-of-life. American culture is also temporal because Americans continually change associations to these sub-cultures.

One important expression of culture comes through the ways in which people dwell. People develop a correspondence between the ways they live and the spaces of a house through choices that express their cultural values and traditions. When it comes to providing options in housing, some think that the task of housing American cultures is solved through providing a variety of types of dwellings — supplying consumer choice. This research proposes that the task is better solved through providing opportunities for variety in ways of dwelling — enabling cultural choice.

There are three salient characteristics that define the approach to choice embedded in contemporary housing development. First, it is market driven: that is, it is interested in appealing and selling to a mass market. Second, it is obsessed with identifying normative life-styles, with differences in ways of living seen as variations from the norms. Third, it is program driven, attempting to match life-styles with houses. This last characteristic involves a process of specifying the activities and spaces of a life-style, determining the appropriate adjacencies, and producing model homes with options and accessories that personalize them. This approach limits the definition of the diversity of American cultures, capitalizing upon the nature and ability of people and households to adapt to defined norms. More significantly, it involves a view of culture that is static rather than temporal, limiting everyday choices and longer-term changes.

The alternative view presented in this article presumes that culture will find its place — if it is allowed to do so. Rather than seeing the task of housing American cultures as prescribing a precise fit between a sub-culture's activities and a house's form, it conceives the design of dwellings in terms of allowing interpretations of the ways in which they are used. This requires thinking about how each household inhabits its home, observing how people live, and studying inhabitation as a continuous expression of choice. For instance, where should each person sleep? How do they sleep — all together or separately? On what should they sleep? What other activities accompany sleeping? Are guests allowed into the sleeping area? Should one sleep in the front of the house or the back, above or below? Where should a guest or new family member sleep? The alternative presented in this article assumes that residents make choices and changes by assessing their ways of living in relation to the basic structure of the house. This research studies how a house's form either constrains or enables a variety of answers to these questions.

STORIES OF CHOICE

In this paper each person's culture is expressed as a story, a story about how individuals as members of sub-cultural groups personalize a house. The stories are encouraged or inhibited by the spaces of a house. Some houses comfortably accommodate the uniqueness of each story; others limit stories to fit a theme. Two neighborhoods, one in San Francisco and one in Clayton, a suburb of San Francisco, illustrate the dichotomy of how choice is constrained or enabled by the form of the house. By comparing the stories of residents of these two neighborhoods, the difference between market choice and cultural choice in housing becomes apparent.

Leo Lopez owns a six-unit San Francisco Victorian. Of the units, he selected a second-floor front unit for himself. Leo was once married, but is now an avowed bachelor with a grown son who visits on weekends. Leo and his son mostly eat out. If and when they are home, the two enjoy entertaining and watching television. At first glance, Leo's unit might seem most readily occupied as a one-bedroom apartment with entertaining, dining, and food-preparation activities assigned to the front, middle and inner rooms, respectively, and with a bedroom off the front entertaining area (FIG.1). Yet Leo needs two sleeping areas since he and his son do not want to share a room.

Leo uses his space in a way that is similar to his childhood courtyard house in Guadalajara (FIG.2). In that house all the activities and rooms were organized around a central, outdoor courtyard. Although no assigned activity occurred in the courtyard itself, it was the center around which daily activities occurred. Rooms used for sleeping, dining, entertaining and cooking were all accessible from the courtyard, with an internal route between rooms. Several family mem-

![Figure 1](image_url)
bers occupied each recamara, using the rooms for sleeping and entertaining as well.

Although Leo’s current home does not have an outdoor courtyard, he locates his television/entertainment activities in the front room, with two recamaras surrounding it (FIG.3). While others may use this unit as a linear, one-bedroom apartment, Leo occupies it as a centrally organized, two-recamara dwelling.

The second story is about the Changs, who purchased a house in a San Francisco suburb (FIG.4). It is typical for the Changs and their five-year-old son to be together in a room, although they may be engaged in separate activities. As a result, several rooms hold similar furnishings. Whether a bedroom, living room or kitchen, there are books and toys for the son and tables and shelves for the parents. The room designated as a bedroom for their son is rarely used — except as a guest room. Instead, the family sleeps together in one room, using a small trundle bed for the boy.

The Changs complain only about the fireplace and the dining room. Although they would have preferred a house without a dirty, cold and smoky fireplace, they take advantage of the fireplace’s focal location by placing their wide-screen television on the hearth. As for the dining room, it is too narrow to hold a round table with a lazy susan on it. Instead, the Changs had to buy a rectangular table. Now, when hosting a dinner party, they must pass dishes to their guests, rather than serve them directly.

These two homes illustrate two ways in which housing design addresses American cultures. The Changs’ home, designed to meet a particular life-style, supports a limited range of choices; the Changs both impose their way of living on the house and modify their way of living to it. By contrast, Leo Lopez’s home, typical of many older San Francisco houses, supports a wider range of choices for ways of living. The stories show how contemporary functional approaches to housing American culture may limit choice-making by residents because they assume that ways of living are specific and static. For the Changs, this does not necessarily mean that they must live as prescribed, but it does limit — and sometimes frustrate — how they want to live. In order to better accommodate stories of dwelling like that of Leo Lopez, designers need to embed the potential, or the capacity, for residents to make more choices about the ways in which they live.

OBSERVING CHOICE

This research began with the observation that San Francisco is home to many diverse life-styles spread relatively heterogeneously throughout the city. While there are districts that are associated with a particular ethnicity or culture, the distinctions are not so settled as to exclude other groups, and associations have changed over time. Outside the city, the planning of...
Clayton shares many of the characteristics of San Francisco, yet the ways in which its residents choose to live seem more homogeneous. This research questions the uniformity of ways of living in Clayton and the rich diversity supported in San Francisco as more than just a circumstance of history or urbanity.

Houses in both communities are built on rectangular lots, with the narrow ends facing the street. One house is centered on each lot, with a yard and parking in front and a private, outdoor yard at the rear. In Clayton, lots are 40 by 120 feet, with a 25-foot front-yard setback and 5-foot side-yard setbacks (FIG.5). Parking is at grade. The predominant orientation of spaces inside each house is toward the private, rear yard, with side yard-facing windows being used for light and ventilation. In San Francisco, blocks are subdivided into lots that are typically 25-27.5 feet wide by 140 feet deep (FIG.6). A single house is generally located on each lot, with a front-yard setback of about 12 feet and side-yard setbacks of about 3.5 feet. Parking, if available on site, is located half a level below the street. Interior spaces are oriented for light and ventilation either toward the street or toward the private space at the rear of the lot.

Houses in both communities are representative of many processes affecting residential development: land acquisition through subdivision, building traditions and degree of industrialization, market forces, technology, and life-style expectations. The San Francisco Victorians typified American housing of the early twentieth century: they included a parlor or double-parlor with alcoves for the display of family possessions; they offered “commodious” work spaces for the kitchen, with large pantries, which could be shared by several women; and they contained bedrooms that were large enough to serve as sitting rooms where friends and family could visit.9

As the century progressed, however, household sizes decreased, as families became smaller and servants were replaced with technological conveniences. The formality and separation of some activities were replaced by open living areas. As many of them moved into the workplace, women also no longer viewed the house as their only domain. In general, an overall concern for functionalism and efficiency emerged, in which the design of the house could be approached more scientifically by defining appropriate activities and their required spaces and equipment.9

The Clayton houses, built within the last decade, typify contemporary housing. Here household activities are separated from public view by a garage; entertaining, cooking and dining spaces are open and interconnected; and sleeping areas are conceived as rooms separate from other household areas (one is larger with an attached bathroom, and two are smaller and share a bath). The living room is typically two stories tall, configured so that upper-level activities look down on lower-level spaces. Each activity of a life-style has an appropriate space, and each space of the house is designed for a specific activity.

These two case studies exemplify design paradigms for functionalism and efficiency emerged, in which the design of the house could be approached more scientifically by defining appropriate activities and their required spaces and equipment.
regarding culture: in San Francisco, an embedding of capacity to house multiple and changing ways of living; and in Clayton, a functional programming of life-styles that fixes a way of living. While the houses in each setting were developed to accommodate ways of living representative of their times, the San Francisco houses have absorbed many new ways of living that functionally efficient, post-World War II houses have not.

In order to explore the link between house form and choice, this study uses plans documenting household artifacts, photographs of interior and exterior spaces, and interviews with the residents to observe how people use household space. This method combines place-based, morphological studies of housing with cultural-use and spatial-pattern studies. In particular, this research draws upon the work of H. Caminos, S. Muratori, S. Anderson, and S. Kent. These methods of observing places share two premises regarding people and the environment: that the relationship of people and the built environment over time can be analyzed through the study of physical form; and that form, while not deterministic, is influential to behavior and use. The latter point, the interpretation of house form for use, is critical for this research. The form of a house — its configuration, size, position, and assemblage of materials — suggests a range of possible uses. Decisions on how to use the spatial form of the house are made by each household in relation with their cultural background. While the methodologies in the works of Caminos, Muratori and Anderson describe the experiential form of places, the documentation of use is either omitted or generalized at an urban scale. Kent studies the use of the house, comparing a particular household’s patterns with those of similar cultures. Her work is descriptive, but limited to single houses, without studying the larger setting. The method in this research combines Kent’s descriptions of use with the experiential description of the forms of dwellings as places. Because this research is directed toward the design of residential settings, the observations of inhabitation and descriptions of house form and choice lead to propositions for attributes of design that enable a variety of ways of dwelling.

CAPACITY FOR CHOICE

In the Clayton setting, the general choice, location and layout of the activities within each house can be anticipated before entering. Typically, the only variation in ways of living between the houses is in the kind and arrangement of furniture selected by each household. Despite the fact that each of the houses in San Francisco shares a similar plan, the choices of inhabitation made by residents are less predictable.

In comparing the inhabitation choices of households with a range of spatial attributes, one can observe the capacity of housing to enable choice. The capacity of a house should not be confused with its program, or the specification of the activities of a life-style. A program is static; it states that a “break-fast nook” is required of certain area or dimension to hold a certain number of people. Capacity is the ability of the spatial form of the house — through its configuration, dimension and position — to contain or suggest a variety of uses without having to undergo architectural changes. It extends the functional requirements of a program by holding multiple configurations of inhabitation and receiving multiple associations. For example, a bay window at the edge of a living area defines a territory for individual activities within the larger room of the household. It can hold a seat, a table, a work area, or a “break-fast nook,” as selected by the resident.

The concept of capacity, while broadly used and understood, needs to be further defined to be useful for design. In this research, several attributes of house form were analyzed by mapping these factors over the observations of places and their inhabitation. Three attributes proved more influential in enabling choice: access — how people move through a house; dimension — the structure of the sizes of activity spaces; and claim — how people establish control over a space.

CAPACITY OF ACCESS

Access provides ways of moving between, into and through spaces; it is the connection between activities. As such, access organizes space for use. For example, if a space is accessed at its edge, the entire area available for use is most commonly read as one unit (fig.7). If a space is accessed at its center, the area can be read as one single space or two equal spaces, separated by the access. If the space is accessed at another increment — for instance, two feet from an edge — again the area can be read as a single space or as two unequal spaces: one for a primary use, and the two-foot zone that holds personal choices for use. The position and dimension of the access changes the capacity of a room or house.

The overall patterns of access in these two case studies are similar. To reach the house, one turns 90 degrees away from the public sidewalk and street, moves through a front yard and then into the house. Proceeding through the house, one moves through the interior areas, eventually reaching a private, outdoor space at the rear of the lot. Beyond this general progression from a public front to a private back, the presentation of choice to the residents is quite different.

To enter the house in the Clayton setting, one first must walk on the driveway and then onto a path that leads around
TDSR 9.2

TDSR 9.2

Front of the house. Other entry sequences provide access at grade, or half a story below grade to the level below a plinth, typically to commercial, parking, rental or office spaces. The house has the potential to operate as a single unit or as multiple units. After passing through an entry, the reading of choice again differs between the two settings. In Clayton, the access can be characterized as a single path, either linear or circular, that provides a way to all the activities. Despite an open plan without halls, the path of circulation through spaces is clearly implied as a route to and from activity areas. The access itself has minimal form and dimension; it is located at the edge of most of the activity spaces, maximizing the area for a specified activity and minimizing the potential for other activities or choices.

In San Francisco, the access is both dimensioned and positioned to increase interpretations for use. The primary access within the house is clearly delineated in the form of a hallway, especially in the front half of the house, providing access to rooms along its length as well as activity areas that are parts of the movement sequence. This hallway is typically located 3.5 – 4 feet away from the exterior wall that runs the depth of the lot. As in the example of the room, this position of the hall organizes the primary activities on one side of the house with service and personal activities in the four-foot zone. Not only does this zone hold permanent changes such as half baths, closets and stairs, it also increases the capacity of the hall for personal choices (in some houses the passageway holds a sideboard and seats; in others it serves as an entry hall or even a dining area).

Unlike the singular path of the Clayton houses, some of the San Francisco houses have a parallel path that is independent of the hallway access system. For instance, the front room is connected with an adjacent room — originally the “double parlor” — through a four- to six-foot wide opening. Since access to subsequent activities deeper in the lot is already accounted for with the hall, the choice to move between these rooms is made by residents, depending on their reading of the spaces and their lifestyle needs (FIGS. 10, 11).

The lesson here is not that hallways provide choice. There are many examples of hallways whose dimensional and formal meagerness make them dreary, offering little choice but to move through them as quickly as possible. The lesson is in the need for a capacity to be embedded in the organization, dimension and form of access that allows it to be inhabited by residents to suit their changing needs.

**DIMENSIONAL CAPACITY**

Dimension refers to the sizes of activity spaces and the structuring of those sizes. As in the earlier example of the room with the bay window, the room’s dimension can be read in two ways. The room can be used for one activity, or it can...
be read as having two areas: a large zone that holds a primary activity of dwelling such as entertaining, dining, or sleeping; and a smaller zone configured by the bay window that provides capacity for personal activities such as writing, reading, informal dining, or working.” In this way, each room holds the potential for one or several activities to take place simultaneously.

In the Clayton houses, dimensions are laid out according to a program (Fig. 12). For each specified activity, dimensions are selected from a standard range of spatial and furniture configurations. When “efficiency” through minimal sizes is the objective, the number of possible configurations is intentionally limited. These activity dimensions are then structured, or ordered, according to adjacency requirements of the program. The size and organization as well as fenestration and construction of a house reinforce a room’s specificity of use as master bedroom, child’s room, formal living room, and so on. Since the form of the house in Clayton is generated from a program of activities, unprogrammed interior space is eliminated by intention. One activity determines the size of each room or space. When dimension is tied solely to a program, a resident’s choices are limited, at best, to furniture and its arrangements.

In San Francisco the dimensional analysis reveals bands of six-foot zones arrayed through the depth of the site and three-foot zones parallel to the access of the house (Fig. 13). Rather than structuring sizes solely according to function and adjacency, these dimensions are also arrayed to increase a house’s capacity. These dimensional zones can be read in at least two ways: each zone supports one activity, or combinations of zones may hold an activity. It is also important to note the sizes of the dimensions of the house: three feet, six feet, and then ten to twelve feet. These sizes, alone and in combination, are compatible with particular activities. The reading of the dimensions for use is left to the residents.

Dimensional capacity is concerned with how a form is used in a cultural practice, not in specifying a way of living. In Clayton, the dimensions are generated to fulfill a house’s program; in San Francisco, the sizes and structure order the setting as a dwelling fabric into which programs can be read and re-read, increasing the capacity and range of choices for residents.

CAPACITY IN CLAIM

Claim is the control over habitation and access that can be exerted by an individual or a group over a territory. The ways in which people both claim territories and read claims are cultural, informed by experiences. As a guest in a house, a person may be able to enter an area, yet something about the form of the access — an open or closed door, the nature of the threshold of a passageway, the quality of light at the end of the hall — is read as an indication whether to go further. Likewise, if residents want to indicate their claim over a space, they will accentuate their control — by opening or

**FIGURE 10.** Though their furniture arrangement the residents in the house on the left chose to block access between the front and second rooms; the residents in the house on the right chose to connect the two rooms.

**FIGURE 11.** In this house in another San Francisco neighborhood the household is comprised of three unrelated people. In this case they chose to make the three front rooms individual — closing the doors between the two front parlors and arranging the furniture as if there were no opening.
closing curtains, doors or gates, by turning on a light, or by
the positioning certain activities next to each other to exclude
or welcome. As before, the question is how house form influ-
ences interpretations of claim.

In Clayton the pattern of claim is the same from house-
hold to household occupying the same model homes (FIG. 14).
The open plan of the living, dining and cooking areas excludes
private activities from that part of the house. Likewise, indi-
vidual spaces are smaller, cellular, and separated from the rest
of the house to provide privacy, excluding shared household
activities from this part of the house. When coupled with the
functional specificity of the rooms — for example, as a bed-
room (by dimension, by access to bathroom and closets, and
by light and view) — the form of the house suggests that
sleeping is a private, individual and isolated activity. Yet, for
some people sleeping areas are shared spaces for family mem-
bers and guests and do not require isolation from the rest of
the house, as in the first story of Leo Lopez.

In the San Francisco houses, there is a public-to-private
gradient based on the position of a space either toward the
street or rear yard. The rooms have similar sizes, shapes and
orientations, eliminating function as the only reading of a
room. While these rooms were built to accommodate partic-
ular activities and claims of the early twentieth century, cur-
cent residents can also interpret the forms of the rooms to
suit their particular requirements and claims (FIG. 15). Thus,
while one resident may claim the front room as a living area
overlooking the street, another household may elect to place
the living area at the back of the house, overlooking the yard.

The overall pattern of claim varies from house to house based
upon choices of what activity is private and what is public for
each household.

The front exterior zone of the houses can also be assessed
regarding choices of claim. In both settings the garage occu-
pies a majority of the front width of the lot, leaving only
enough dimension for access to an entry. By positioning the
garage at grade in the Clayton development, dwelling activities
are separated from the front yard. By default, not choice, the
household is isolated from the street. In San Francisco, the
garage is located half a level below the main level of the house,
allowing a person above the garage to look upon the street, with privacy ensured by the change in level. A household can choose the degree of connection or separation to be made with the street through their inhabitation of both the bay window and the front yard.

In this San Francisco neighborhood there is a common way of inhabiting front yards: low curbs and shrubs demarcate areas of each household’s claim while still inviting visitors through open visual and physical access between the street and house. This is a choice, shared by several residents, that is made apparent by the contrast of the middle and the rear.

Again, the lesson for design is not to mimic San Francisco Victorians by making all rooms the same size and configuration, but to avoid the over-segmentation and over-specialization of spaces for use or claim. Whether on a room-by-room basis, or through a range of claims throughout the house, the form of a house can enable the choice of claim to be made and remade by residents.

Providing Choice

There is broad consensus that personal choice in housing is fundamental. Contemporary approaches to providing choice include prototypical homes, flexible homes, and custom homes. While all these strategies provide options, they assume selection and adaptation as the modes for accommodating differences and change in culture. An argument for the form of dwelling that enables use and association over time is still a necessary complement to all the above approaches.

While selecting a model home is a kind of choice, it is a consumer-based selection that reflects one’s immediate projection of life-style. Each space has a functional designation; each activity for a way of living is fulfilled on a space-by-space basis. In this way, the form of the house is said to be efficient. But increasing choice — through the formal structuring of capacity of access, claim, and dimensions — is hardly an inefficient alternative. A house designed with the capacity to accommodate choice still fulfills a given program, but it also holds the potential to extend, change and hold alternative programs as well. Moreover, increasing capacity does not inherently increase the size of a dwelling. If one designs dwellings on a programmatic basis, adding capacity on a room-by-room basis does add area to each activity. But the design of capacity is not programmatic, it is formal and spatial. In the long run, embedding capacity in housing is more efficient and more sustainable.

The flexible home provides an overall framework for subsequent personal decisions to be made by the resident. An argument for flexibility, defined as an unimpeded set of spaces that are sized to accommodate many changing activities, is not an argument for choice. A flexible space allows for a loose or ambiguous fit between the form of the house and its potential activities by minimizing design features. Too often, the design of flexible spaces removes character and intensity from the form of a house, leaving neutral, empty shells. While many activities may fit, none seem to fit well. Residents no longer make choices in concert with the environment. Choice requires more than flexibility — it requires that the form of a space be able to evoke different meanings, associations and actions for residents over time or for different households.

A third way of tailoring choices into housing is through user participation and custom house-design methods, in which the projected or the actual users participate in the design process, making choices before the completion of construction. While participatory approaches support choice-making during the design stage, the danger again exists in limiting subsequent and everyday choices if capacity is not embedded in the house form. In any participatory process, decisions about form still need to be made.

While San Francisco is representative of both a Victorian building style and typology, and Clayton is representative of contemporary development, this comparison does not make a case for urban or suburban dwelling, for typological or prototypical design. Instead, it argues for the need to embed a capacity into the design of houses that absorbs diversity, not specificity, in ways of living. There is nothing in contemporary residential development and design that precludes supporting culture as diverse and temporal except to require capacity in the performance of our housing.

The analysis of the case studies shows that while the formal attributes of housing are not deterministic, they are material in enabling choice in everyday living. The form of the house has the potential to convey and receive impressions, to inspire a dialogue between place and inhabitant that is rich with a range of interpretations over time. While there is no single design formula, method or pattern to achieve this dialogue, it begins with a disciplined way of seeing choice in form, of understanding form and use, and of structuring choice in a way that is experiential rather than programmatic.
REFERENCE NOTES

A version of this paper was presented as “Cultures and Settings: Supporting Variations in Residential Design” at the 1996 TASTE Conference, “Identity, Tradition and Built Form: The Role of Culture in Development and Planning.” I would like to thank the residents who kindly opened their doors and shared their stories. In addition, my gratitude goes to L. Bracamontes, G. Urban, C. Wardell, and the students of Arch 118AC and 209A at U.C. Berkeley. All resident names are fictitious.

5. This story is based upon an interview conducted by the author in the Spring of 1995. The family name is changed.
6. This central reading of a predominantly linear house form occurs frequently in San Francisco houses. Further examples can be found in Figure 6.
7. This story is based on interviews conducted by the author in the Spring of 1996. The family name has been changed.
9. G. Wright covers the social, technological and economic events surrounding the transformation of the house from the Victorian period through the World Wars. C. Wilson, in “When A Room is the Hall,” Mass: Journal of the School of Architecture and Planning, UNM, Vol.2 (Summer 1984), formally describes the transformation of Hispanic houses of the Southwest as a result of functional specialization.
10. H. Caminos with J. Turner and J. Steffan, in Urban Dwelling Environments: An Elementary Survey of Settlements for the Study of Design Determinants (Cambridge, MA: MIT Press, 1969), describe the physical characteristics of places at several levels, of which the documentation at the “dwelling group” and “dwelling” levels reveals the relationship between occupant and house form.
11. S. Muratori, in Studi per una Operante Storia Urbana di Venezia (Roma: Istituto Poligrafico dello Stato PV, 1959), documented Venice as a fabric and reconstructed its changes over time.
13. S. Kent, in Analyzing Activity Areas: An Ethnoarchaelogical Study of the Use of Space (Albuquerque: University of New Mexico Press, 1982), describes the use of space as “subliminal and conscious decisions we make every day concerning locations at which a diverse range of activities will be performed. Such decisions are based on the spatial patterning that is learned in childhood through socialization.” Kent’s method includes mapping the artifacts of a household and their location within the house for analysis.
14. The concept of capacity and the phenomena of form to take on multiple uses is discussed by many architects. N.J. Habraken, in “Control of Complexity,” Places, Vol.4 No.2 (1987), pp.3-15, discusses the concept of capacity at many environmental levels; Anderson, in “People in the Physical Environment,” describes environmental latency; H. Hertzberger, in Lessons for Students in Architecture (Rotterdam: Utgeverif, 1991), describes the polyvalent nature of form to be “read” or used in a variety of ways, depending upon what the individual brings as an association; and R. Venturi, in “Contradictory Levels Continued: The Double-Functioning Element,” Complexity and Contradiction in Architecture (New York: Museum of Modern Art, 1977), questions multifunctioning flexibility — a “both-and” problem — and advocates the double-functioning element.
15. In this broader study of sixteen settings, conventional design attributes of housing — dimension, containment, construction, light, access, and claim — are studied systemically over several houses to discern the contribution of a particular attribute to the whole. For this paper on the capacity in housing for choice, three attributes emerged from the broader study as being most relevant — dimension, access and claim — and are discussed later in the text. Some attributes, such as construction (the position of load-bearing and non-load-bearing walls), have more influence over capacity for adaptation, but less influence on choices of inhabitation.
18. In this study, the capacity of a house to hold a variety of activities is identified by comparing two sources of dimensions. The first is a set of dimensional standards for activities derived from American standards books. The second source is identified from the field documentation. In each setting the area of primary activities for a household is identified and compared to the normative standards. Other arrangements for the same activity are compared to the highlighted area. Areas of additional activities selected by residents are then identified, if there are any. These territories are toned and their dimensions also compared to normative standards. Other places of personalization, as seen through personal effects, are also toned. Finally, the resulting map is analyzed as to the structuring of primary and optional activities.
19. These zones of dimensional capacity are also
interesting to study in terms of the adaptational choices that have been made in them by residents. In many cases, kitchens, baths, closets and stairs have been added in these zones. An analysis of dimensions of activities, completed for a variety of individuals and cultures, reveals that certain dimensions for zones of capacity are more useful than others. This argues against a random generosity of size, but for a more formal way of embedding capacity.

20. One model home in Clayton has a front room which has intentionally been left ambiguous for resident choice. It is programmed to be “unprogrammed” — or for the use to be designated by the resident.

21. “Dwelling fabric” is a term used to describe the built environment as a continuously experienced structure of spaces in which the everyday activities of living take place. It describes relationships from room to house to street to neighborhood, as well as relationships from rooms to rooms and houses to houses. This concept of a dwelling fabric is discussed by the author in R. Chow, “Representing Dwelling,” in Architecture and the New Geographies of Power (Proceedings of the ACSA West Regional Meeting, 1997); and “Phenomena and Practices of Dwelling: Suburban Alternatives,” in Proceedings of the 84th ACSA Annual Meeting and Technology Conference (ACSA, 1996).

22. R. Lawrence, in Housing, Dwellings and Homes: Design Theory, Research and Practice (Chichester: John Wiley and Sons, 1987), describes research in housing choices in relation to privacy and territoriality. K. Herdeg, in Formal Structure in Islamic Architecture of Iran and Turkistan (New York: Rizzoli, 1990), graphically depicts the overlapping domains of a city fabric as experienced by people of various social and religious positions. Anderson, in “People in the Physical Environment,” graphically maps a public-to-private gradient of claim over the fabric of Paris to study the potential reading of spaces. The term “territorial claim” is also used to describe the process of controlling a space. When increasing possibilities for choice, the terms need to be uncoupled, since claim over a territory should be part of choice, changing on a day-to-day basis or from resident to resident. Therefore, territory refers to the space, and claim refers to the control of activity. In this study, the parties that claim are grouped in various combinations of individuals: public (any visitor), community (nearby residents, daily visitors, and guests), neighbors (residents who live in contiguous arrangements), household (any combination of individuals who reside in one dwelling unit), and individual (any person/couple who share in exclusion of other household members).


All drawings are by the author.