



Homeowner Garden Design Series: Creating Outdoor Rooms

September 2017

Michael V. Holmes, MLA

Associate Professor,
Landscape Architecture Program Director

Cheryl Mihalko, MLA, RLA

Assistant Professor,
Landscape Architecture Teaching Faculty

Qing Lana Luo, MLA, PLA

Assistant Professor,
Landscape Architecture Extension Specialist

Oklahoma Cooperative Extension Fact Sheets
are also available on our website at:
<http://osufacts.okstate.edu>

Introduction

When designing residential landscapes, there are many things to consider. Understanding the homeowner's needs and wants; the relationships between the interior rooms and the exterior landscape; climatic conditions; site opportunity and constraints; and budget are some of the issues critical to a successful residential landscape design. Landscapes must be designed to be both functional and aesthetically pleasing. One way to address functional issues is to think about landscape design in the same way as a house. A house is made up of a series of rooms. Some rooms may be connected by doorways or hallways and divided by walls. Walls may offer complete visual and sound separation by running from the floor to ceiling. Doors and ceilings protect occupants from natural elements and further define the rooms. Some houses have an open floor plan where two or three rooms are interconnected, only separated by a partial wall, a change in flooring material or a change in function. A typical example found today are houses where the kitchen, dining and living room have a strong connection.

A residential landscape design works in a similar way where outdoor rooms are generally divided by function or use. This might include gathering, dining, playing, gardening, working, relaxing, etc. Some outdoor rooms are interconnected, while others are distinct and separate. Walls in the landscape can be made of plant material or hardscape elements. An outdoor canopy provides a similar function as an interior ceiling. Instead of doors, thresholds are commonly used, and an exterior pathway serves a similar function as an interior hallway.

Common Outdoor Rooms for a Residential Landscape

Just as there are a standard set of rooms found inside most homes (kitchen, living room, study, bedroom, bathroom

and laundry), there are several outdoor rooms commonly needed or desired by most homeowners. These include an arrival space, an entertaining/living space, a dining space, a space to recreate or play, a utilitarian space for work/storage and a garden space. Though homeowners may have similar desires with regard to outdoor rooms and landscape design, each family's needs vary in the detail required for each outdoor room/space. A family should begin by making a list of their specific needs and desires regarding outdoor rooms. While one family with several children may place a premium on recreation or lawn size, another might desire an extensive outdoor kitchen, but have a minimal need for storage or a work area. This list of functional needs serves as a programmatic checklist for a residential landscape design.

The Ground Plane (the Floor)

In the landscape, the ground plane is the area where people walk, run and recreate. The organization of uses/functions in a residential site is predominately determined by the ground plane, and it generally receives the most wear and tear. The shape, size and material choice should relate directly to the homeowner's desired function for that area/outdoor room. If the desired function results in frequent or intense use, a hardscape material such as a concrete paver patio, a wooden deck or flagstone path are all effective material choices to accommodate outdoor rooms with heavy use. If the use of the ground plane is expected to be light or infrequent usage, a soft material such as lawn, ground cover or mulch is an appropriate choice. For example, a large open lawn is perfect for running and playing, while mulch is an appropriate ground plane material for a secluded area with a small table or bench. Questions a homeowner or designer should ask themselves are: How many people will use the area at the same time? How many times a week will the area be used? Is the circulation directed or open? An example of directed circulation is a 3-foot wide set of steps connecting a deck to the lawn where every user would step off the deck onto the lawn in the same location. This will result in the lawn showing wear in this area and therefore might require a hardscape landing to mitigate the wear. The circulation would have less impact on the lawn if the steps were 12 feet wide, because the same use would be distributed over a wider area, lessening the amount of wear in any one location and eliminating the need for a hardscape landing.

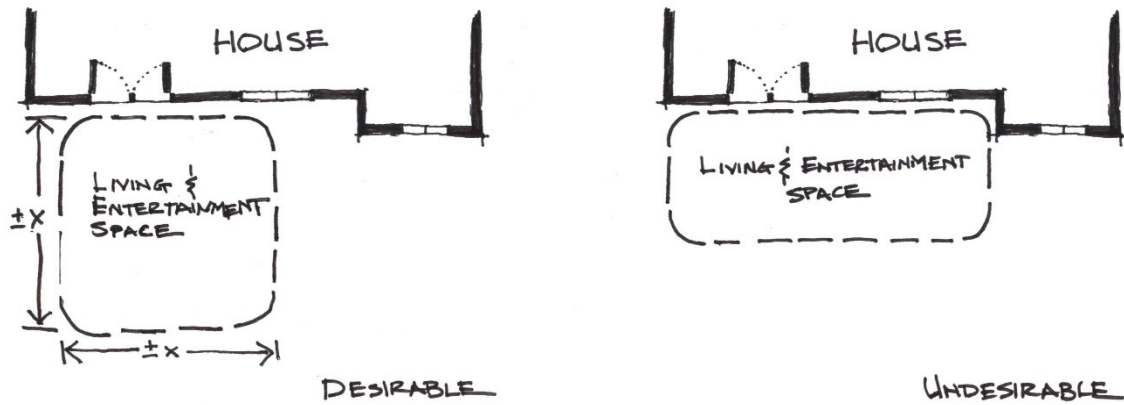


Figure 1. A long narrow space for an outdoor living/entertainment area will not allow for efficient use. A space proportioned closer to square or rectangle with a 2-to-3 ratio is more efficient and desirable.

The size and shape of the ground plane allow each outdoor room to function as desired. For example, the optimum shape for an outdoor entertainment room is proportionally similar to a square or a rectangle with a 2-to-3 ratio. A common mistake is to build a long narrow deck or porch adjacent to the house as the proportional size does not allow for the functional use, making it difficult for a large group to have a conversation or to be interrupted by people moving through the space. (Figure 1) For similar reasons, most interior living rooms are not long and narrow. When planning outdoor rooms, it is as necessary to plan the size of the space with the furniture in mind.

In the landscape, low-growing plants are often applied to cover the ground plane. In some cases, it is acceptable to walk on ground covers. In others, they are intended just to be viewed. When planning the functional areas of the residential landscape, be sure to make a distinction between these two types of areas.

The Vertical Plane (the Wall)

Garden walls create separation from one outdoor room to another. While interior walls are explicit (solid), landscape walls can be explicit or implied. An example of an explicit wall in the landscape is a fence or a solid row of tall evergreen

shrubs that would completely block physical movement and the visual connection between the two areas. Often, walls in the landscape are implied. An implied wall may be a small low planting bed that separates the patio from the lawn. This makes it easy to see the next room, but the low planting area creates a physical barrier. Another type of implied wall is a series of small trees lined up 15 feet on-center. The trees provide the user with mental separation between two areas, while also providing minimal physical separation as users can walk between the trunk and under the tree branches. (Figure 2). Sometimes, the vertical plane will be 100 percent implied and only defined by a change in material on the ground plane. An example is a concrete patio around a pool that meets the lawn on one side. In this case, there is no visual or physical separation except for the line where the grass meets the concrete, but users think about the areas as separate rooms; the pool area and the lawn.

A sense of enclosure is very important in residential landscape design. Users generally prefer landscape areas that have strongly defined vertical planes over areas with more exposure. It is simply that, as human beings, we enjoy feeling protected or having some degree of privacy. Both explicit and implied walls in the landscape are two effective ways to provide this enclosure.



Figure 2. This pathway is defined with explicit vegetated walls and no overhead canopy (left). The trees along this pathway provide an implied edge to the path and an overhead canopy (right).

Overhead Plane (the Ceiling)

In residential landscape design, the overhead plane can be created by an arbor, overhead trellis, pergola, overhead tree canopy and even the sky. The overhead plane has two major roles in defining the space of an outdoor room. First, the overhead plane controls the degree of exposure, and therefore, the quality of environmental condition. The overhead plane can completely block exposure to direct sunlight and rain with a patio roof or awning. If the canopy is partially open, an arbor or shade structure can provide dramatic shadows. Examining shadow patterns and sun angles reveal the percent and areas of a space that will be shaded throughout the day. The overhead plane can also be defined by the canopy of a well-placed tree. This natural canopy provides a distinctly different feeling than a man-made structure. Well defined overhead planes promote use. It is a good idea for a portion of the outdoor entertaining/living room to have some type of overhead element. (Figure 3)

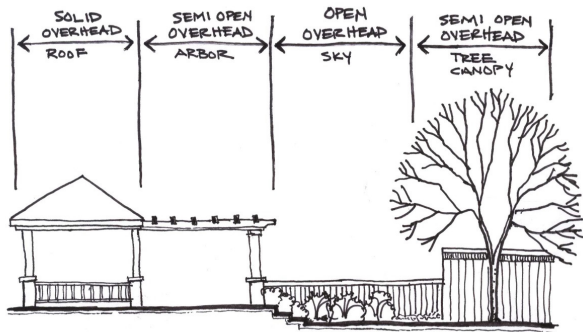


Figure 3. Examples of varying degrees of enclosure as defined by the overhead plane.

The second function of the overhead plane is to influence the feeling/scale of the space. Perceiving space is something humans primarily do without consciously thinking about it. There are spaces humans instinctually find comfortable. If a space is too small or tight, we innately feel it. If a space is too open or exposed, we will not occupy it very long before moving to something more comfortable. (Figure 4) As humans, we usually prefer spaces that provide both prospect and refuge. When you find a space you enjoy spending time in, make note of its size and the arrangement of elements that define it.

Thresholds (the Doors)

A designed landscape might occasionally have a door or gate separating two outdoor rooms, but most of the time that is not the case. It is more useful to think of a transition of outdoor space from one area to another as a threshold. A threshold may literally be a gate or door in the designed landscape, but may also be a small trellis the homeowner walks through when leaving one outdoor room and entering another. (Figure 5) A threshold may also be defined by plant materials on one or both sides or by a tree branch you walk underneath.

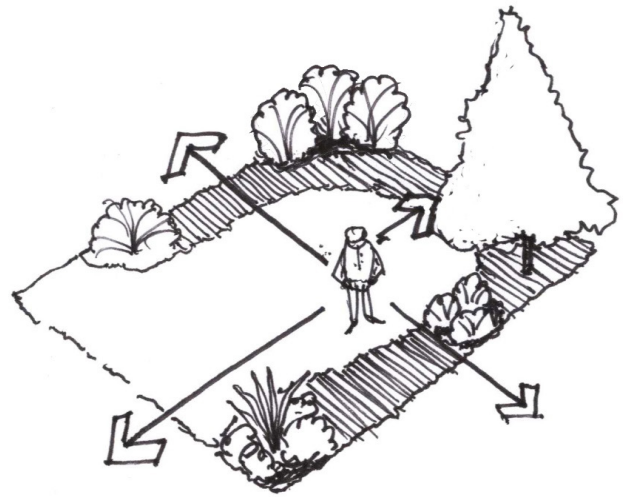


Figure 4. A space that is primarily defined on the ground plane can feel open or exposed.



Figure 5. An arbor can be used to define a threshold connecting one space or area to another.

Other Things to Consider

Planning for the long term: It is important to keep in mind that outdoor rooms can change dramatically over time, if plant material is relied on to define the space. When the plant material is first installed, there may be gaps between the plants. When the plants mature, they will grow together to define a more solid edge. After plants mature, there comes a time when the plant is at the end of its life and it begins

to decline. It is important to plan for these changes. A large mature tree might provide the overhead canopy and shade for a significant portion of the yard. If that tree began to decline due to injury or age, it might take 10, 20 or even 30 years for a replacement to grow to a size where it will provide a similar canopy.

Planning for the Seasons: It is important to design outdoor rooms that function in more than one season. To temper the elements, a patio needs shade in the summer and sun in the winter. Deciduous trees are one way to accomplish this. An exterior entertainment area may be comprised of multiple spaces. One space may be covered by an arbor for shade in the summer. Another space could be open and become the primary area of use when the sun is shining in the fall, winter and spring. Keep in mind that the sun angle changes throughout the year. In the summer, the sun is high in the sky, and the shadows are shorter when compared to the winter, when the sun angle is lower and the shadows are longer.

Private vs. Public Spaces: Issues of public and private outdoor landscape areas should be considered when planning for outdoor rooms in a residential landscape. As a general rule, the front yard is considered public or semipublic and the back

yard is considered private or semiprivate. In most cases, the front yard has less definition on the vertical plane. Planting beds or low open fencing along the street or entrance will cause the space to change from feeling public to semipublic. To create a semipublic landscape, it is not necessary to obscure the view of the house or front door. Restricting movement across the lawn and defining a strong threshold are mechanisms that increase the feel of privacy in the front yard.

Most homeowners desire the backyard to be private or semi-private. To achieve a private backyard, all of the boundaries should be designed to restrict both access to, and views of, the backyard. The vertical plane should be strongly defined by the use of fencing and/or tall evergreen plants exceeding the view to adjacent properties (generally at least 6 feet tall). A semi-private backyard landscape can be achieved by decreasing the edge definition--using a combination of low and tall plantings, transparent or low fencing/walls. Restricting views OF the backyard can also restrict desirable views FROM the backyard. Careful planning and study will identify both desirable and undesirable site lines and appropriate locations for vertical elements.

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, and Title IX of the Education Amendments of 1972 (Higher Education Act), the Americans with Disabilities Act of 1990, and other federal and state laws and regulations, does not discriminate on the basis of race, color, national origin, genetic information, sex, age, sexual orientation, gender identity, religion, disability, or status as a veteran, in any of its policies, practices or procedures. This provision includes, but is not limited to admissions, employment, financial aid, and educational services. The Director of Equal Opportunity, 408 Whitehurst, OSU, Stillwater, OK 74078-1035; Phone 405-744-5371; email: eeo@okstate.edu has been designated to handle inquiries regarding non-discrimination policies: Director of Equal Opportunity. Any person (student, faculty, or staff) who believes that discriminatory practices have been engaged in based on gender may discuss his or her concerns and file informal or formal complaints of possible violations of Title IX with OSU's Title IX Coordinator 405-744-9154.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President for Agricultural Programs and has been prepared and distributed at a cost of 20 cents per copy. 0917 GH.