

The Concept

The traditional approach to landscape architectural design usually begins with research, which investigates the goals of the client, the parameters of the site, and the needs of potential users. Documentation of this phase is expressed in the form of a *written program*, a *site inventory*, or a *site analysis*. Next in the design process is the *landscape concept*, which embodies a series of ideas about how to improve a specific site. Usually these ideas are a logical outcome of the research, but sometimes they precede the research and are later refined or modified by it.

Concepts are ideas that happen at many levels. Before discussing these different levels of conceptualization, let's explore the creative process a little. Where do these ideas come from, anyway?

Creativity

Too often we find ourselves as individual designers falling back on the easy approaches: "I've seen this before and it seems to work just fine"; "I've used this idea successfully on other projects"; "I am familiar with these concepts, plants, patterns, etc., so I'll use them again"; "These materials are inexpensive and readily available."

There is nothing inherently wrong with this kind of fail-safe design attitude. In fact, we have to rely on it constantly to survive. However, from time to time we should balance it with a creative thinking mode: "How do I come up with something new?"

Many ideas come from the information you will be gathering about the landscape project, from particular aspects of the site and requirements expressed by the users. Research and organize the facts. Try to list the problems as opportunities rather than as limitations. Our experiences from reality form images that we store and recall, but to move from "what is" to "what could be," we need to adopt an attitude of openness, of acceptance, and of willingness to consider the unfamiliar and risky direction. It is necessary to put aside some feelings and attitudes that inhibit idea making. These include:

Fear of the unknown

Fear of failure

Need for a perfect solution right away

Preoccupation with practicality

Try these approaches, which have worked for the author:

1. **Choose Comfortable Surroundings** Set up your design space so that you can be both relaxed and focused, with few distractions. A comfortable chair, the right music, limitations on interruptions from other people, no disturbing noises, pleasant views—all help set the stage for generating ideas.
2. **Consider Creative Improvement** Take a familiar idea and see what can be done to make it better. Consider whether there is a simpler, cheaper, quicker, more efficient, more beautiful, or less cumbersome solution.
3. **Use "What-if" Dreaming** Accept the notion that what has been done before may not be the best solution. Allow images to flow, and accept as a possibility ideas that at first may appear to be unlikely, strange, bizarre, or impossible. To be really effective, the dream has to be a fantasy, such as "What if you never had to mow the lawn?" or "What if plants planted themselves?" Is this ridiculous? Perhaps; perhaps not.
4. **Investigate Process** Visualize moving relationships and processes such as ecological succession, recycling, energy conservation, erosion, and water cycles.
5. **Try Manipulation and Transformation** Take familiar objects or forms and try unlikely rearrangements, combinations, subtractions, additions, or distortions (warp, bend, squeeze, pinch, roll, twist, fold, flatten, expand, contract, push, pull).
6. **Accept Flawed Solutions** Let an idea that at first does not seem workable remain in view. Later evaluations

may spark a similar, more feasible idea, or you can cycle back to approach number 2, creative improvement.

7. Externalize and Communicate Initial Ideas Most of these suggestions relate to the individual designer. Techniques of brainstorming in large groups bring up many other issues that will not be covered here; however, there are advantages to externalizing weakly defined ideas. Even the roughest quick sketch or diagram can become a stepping-stone for your own mind to evaluate, to expand, and to improve on the idea. Talking things over with a colleague or a friend sometimes triggers a related thought in his or her mind that can reveal opportunities otherwise missed.

8. Switch Tracks Try putting the current direction aside and consciously attempting something completely different. Take opposite or negative positions; switch to a different pattern; try a different material, color, or texture. Read more about this technique below in the discussion of lateral thinking.

9. Time Out and Away When I have a complete design block or nasty unsolved problem, I will usually either just drop it and go do something else enjoyable or I will sleep on it. Sometimes, at the end of this time-out, the subconscious mind comes up with a solution. Since this is not a very reliable technique, consider it icing on the cake if it works. Besides, it's difficult to justify billable hours while playing or asleep.

If you are serious about learning practical and effective techniques for creative thinking, it would be helpful to read *Serious Creativity* by Edward De Bono (1993). He coined the phrase *lateral thinking*, which has at its core the idea of setting up a provocation. The key to this notion is making a deliberate attempt to provoke the mind to jump sideways away from the main train of thought as a way of coming up with a new idea.

To be effective, the provocation should be somewhat unreasonable. De Bono lists several sources for setting up such a provocation. The two most powerful techniques that have worked for me are *negating* and *random input*.

Negating

Negating involves escaping from what we take for granted by making a simple statement that is the opposite

of, or contrary to, conventional wisdom. Let's illustrate this by using landscape examples. Here is one from my work.

DESIGN CHALLENGE

A creative idea for an interactive sculpture in a public plaza

PROVOCATION

Mix fire with water (not an expected or practical combination).

RESULTING THOUGHTS

For substance, how about adding rock into the mix?

This is looking like a very sensual experience. Can I build on this by including fragrance?

Now we have stone, fire, water, fragrance.

Perhaps the water can be in vapor form. How about fogging nozzles?

Should the fragrance be combined with the fog or separate?

Where would I put them? Can I use rock segments or cut a big natural boulder into pieces, pull them apart, and make gaps?

Would the fog condense on the stone for a tactile experience?

What if red-orange light were used as a metaphor for fire instead of a traditional flame?

Maybe the fog particles would reflect the light. What about a laser source?

IMPLEMENTATION

There came a point where all these questions along with a series of rough sketches began to congeal into one new identifiable idea (Figure 1-1). It was then time to delve into the practicalities of how to make this work. Research followed into rotating stone cutters, pumps, atomizing

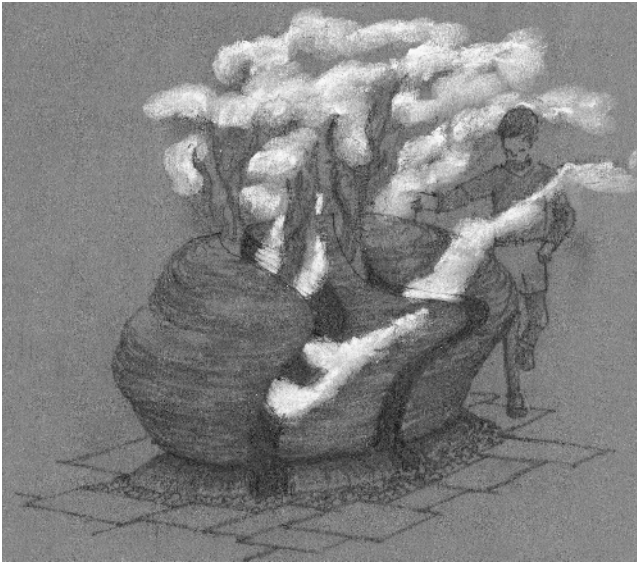


Figure 1–1

nozzles, beam- and fan-shaped lasers, support systems, and of course, costs.

EVALUATION

As of this writing the sculpture has not been built. Does that mean it was not a good idea? Not necessarily. There are some as yet unresolved technical issues. Perhaps it was for the wrong client or presented at the wrong time. Perhaps it cost too much. Some day the idea could be revived and find a perfect fit. Anyway, evaluating your ideas is an important part of the creative process. It takes a lot of energy and discipline to pursue creative ideas. Even if they do not become reality immediately, it is worth a bit more time to keep track of these ideas, reuse them later, or keep them on file as possible inspiration for something a bit different.

Here is another example of negating.

DESIGN CHALLENGE

A new type of landscape fence or barrier

PROVOCATION

Barriers are not aboveground structures

RESULTING THOUGHTS

There is a general principle of controlling the movement of people or vehicles.

What could be on or under the ground—project down instead of up?

Dropoffs, trenches, or moats come to mind.

How about communicating a “no go” line by some other means?

Electronic signals and receivers could indicate forbidden territory and administer disincentives.

Could global positioning systems be used to keep people away?

Would uncomfortable or even dangerous stuff on the ground discourage entry?

This brings to mind uneven or unstable surfaces, swamps, mud, or other goopy material.

EVALUATION

This idea was never taken any further, but there is probably a workable idea in there somewhere. The point is that the negative provocation forced the thinking patterns beyond “what is” (fence or wall) into “what could be.”

Random Input

Random input can be achieved by using word association. From a grab bag of miscellaneous words, select one at random and associate it with a phrase from your design brief. For example:

DESIGN BRIEF

New ideas about paving

PROVOCATION

The word “dog” (randomly selected and not related to the brief)

RESULTING THOUGHTS

“Dog” could be associated with obedience.

An obedient pavement; one that changes on command?

Voice sensors, motion sensors, impact sensors

Folds away or rolls up on command

Changes in reflectiveness, color, or texture on command

Responds to weather changes: heats up automatically to melt ice or cools down to provide a comfortable surface in the heat

Makes sounds when walked on

EVALUATION

With further investigation there may be one or more usable ideas here. It is important to take time at the broad, unresolved concept level rather than to move too quickly to find the practical application. This is where most of the new ideas will come from. It is also beneficial to think in fuzzy loops rather than strictly defined channels. When you get down to some well-defined ideas, they may suggest some different broad concepts. Allow your mind to stay fluid and to go in various directions. Emphasize the exploration of positive opportunities in evolving ideas, not the pitfalls or disadvantages.

If you look at the phrases listed under the previous “Resulting Thoughts” headings, you will notice that there are a series of ideas that flow beyond the provocation. De Bono outlines several techniques that can be used to structure this process, which he calls *movement*.

- Extract principles from the provocation.
- Look at the differences and the advantages in comparison to existing conditions.
- Visualize the provocation as if you’re running a video in your mind.

Let’s take a look at a landscape example.

DESIGN BRIEF

Find better ways to deal with urban run-off

PROVOCATION

Bring back the natural stream

In many urban communities this seems unreasonable because all of the natural flowing streams were modified decades ago and are now in underground pipes or concrete-lined channels, some even covered by urban structures. There is usually strong resistance to undoing something that was once thought to be a good idea. Engineering conventions are also being challenged here.

What principles can be extracted from the provocation?

- Streams are natural systems with their own biological ecosystem.
- Water flow levels in natural streams vary; they may vanish or cause flooding.
- Political, social, and economic conditions would need adjustment.

What are the differences and advantages?

- Streams can be seen, heard, and touched (unlike an underground pipe).
- Streams appear more organic, naturalistic, and more appealing.
- Streams slow down, not speed up, run-off.
- Streams allow percolation to the groundwater system.
- Streams provide some natural filtration.

What pictures can be conjured to visualize the provocation?

- Cascading waterfalls
- Pools and meandering channels
- Raging floodwaters
- A dry creek bed
- Fish swimming
- Birds drinking, swimming, feeding, or bathing
- Insects flying around or floating along
- Plants growing in and around the water
- People interacting with the water

During this process of going beyond the provocation, we are using these techniques to make associations, to find new images, and to search for *value* in the developing idea. Some communities in Switzerland have discovered that the cost of recreating natural streams will be offset by the reduced need for new water treatment facilities. Parts of Germany consider the cost of their “stream reopening program” to be justified in terms of added natural amenity. The Colorado community of Breckenridge has seen increased tourist income from the reconstruction of the Blue River, which was buried by gold-mining activities over a century ago.

A concept can be defined as a general idea or understanding. In practice there are many levels of conceptual thinking, from a broad unifying statement about the project down to well-defined relationships between various parts of the project. This book focuses on the part of the design process dealing with making the transition from these more general ideas to specific landscape shapes and

materials. The various layers of conceptual expression often overlap and flow into each other. We need not be too concerned with trying to distinguish among all these levels. However, in order to discuss where these ideas come from and how they are manipulated, it is useful to put them into two groups: *philosophical concepts* and *functional concepts*.

Philosophical Concepts

Philosophical concepts can express the image, purpose, or underlying essence of the project. They are more broad, global, and contemplative in character. Some are without boundaries—sweeping and expansive. For example, the idea of whether a site has an inherent sense of place is a broad philosophical concept. The Romans called this “genius loci,” the prevailing spirit of a site. The designer is in a position to discover and define this spirit, to find out what is unique or magical about the site, to sensitively interpret the indicators into proposed uses and design form, and thereby to release its spirit.

Other concepts may be more directive and unifying, suggesting limitations and opportunities such as “a landscape that conserves energy.” Either way the designer is attempting to bring meaning to the designed environment.

The Search for Meaning

Must a designed landscape tell a story or have a deeper meaning? Not necessarily. Over several decades of practice, I have found that most of my clients were exceedingly happy with an elegant resolution of their concerns,

needs, and site problems. Their expectations were focused on spaces that were practical and that expressed an inherent beauty in some form or other. However, often there is something special about the site or potential user that calls for a stronger relevance beyond functionality and visual appeal. The additional magic that this brings to a designed space is usually well worth the effort. But how does a designer bring a deeper relevance to the landscape or generate a unique memorable experience for the user?

Consider these ideas when searching for meaning in your designs.

Themes Unifying topics or subjects. One of the easiest routes to meaning is to suggest an appropriate theme. For example, “water conservation” could be an overriding theme in an arid environment. “Connect with the river” was the theme for the landscape renovation shown in Figures 1–2 to 1–4.

Symbols Things or forms that represent something else by association, resemblance, or convention. For example, shrubs are pruned to resemble distant hills or trees are sculptured to recall a revered and rare natural place.

Metaphors Objects or ideas used to designate dissimilar objects or ideas in order to suggest comparison. For example, a flowing pattern of white gravel can serve as a metaphor for water in a stream.

Allegories Dramatic or visual devices in which the literal objects or events symbolize ideas. For example, a peace garden may have disturbing images of conflict, sequenced to tell a moral story about the necessity for peaceful coexistence.

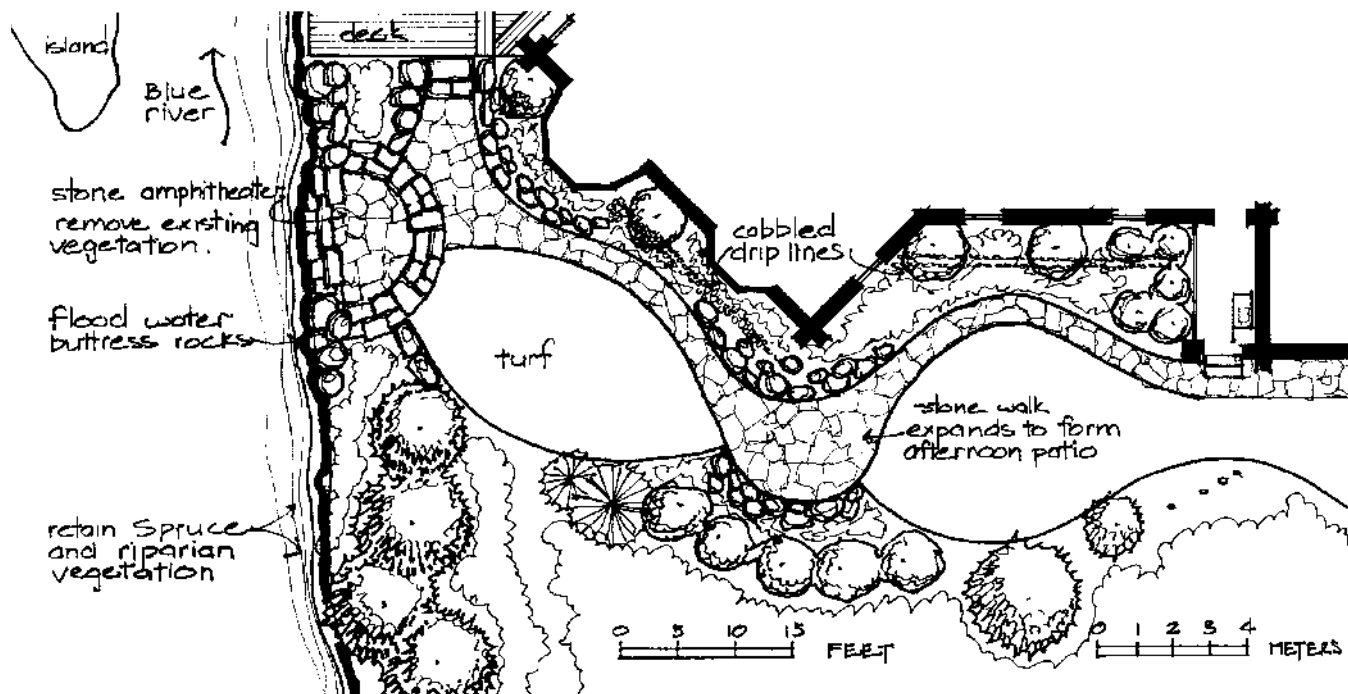


Figure 1-2 Renovation plan



Figure 1-3 Before renovation



Figure 1-4 After renovation

Potteiger and Purinton (1998) identify several techniques for creating landscape narratives:

- Naming places creates an identity, and with it a message of some sort about that name.
- The sequencing of elements, spaces, openness, and enclosure can tell a story.
- Revealing and concealing elements create a feeling of discovery and suspense.
- Places for gathering foster dialogue with the site and between participants.
- Stories can be embedded in the fabric of the landscape (messages imprinted on stones).

Laurence Halprin's fountain at the Embarcadero Plaza in San Francisco, California (Figure 1-5), contains a cluster of bent and broken rectangular forms. These forms symbolize the chaos and broken urban fabric that might follow a severe earthquake, and serve as a reminder that the city lies on an active fault line.

To develop these areas a designer should be empathetic. It is necessary to identify with and understand the client's or user's situations, feelings, and motives. What are the ideals, beliefs, or values that they may associate with the project and that can be translated into a physical form to become a true reflection of a cultural or personal context?



Figure 1-5

A xeriscape demonstration garden designed by the author (Figure 1-6) contains a looped walk symbolizing nature's continuing cycles of life and death. Its close integration with the scalloped stone wall represents the interdependence of different organisms in a natural ecosystem.

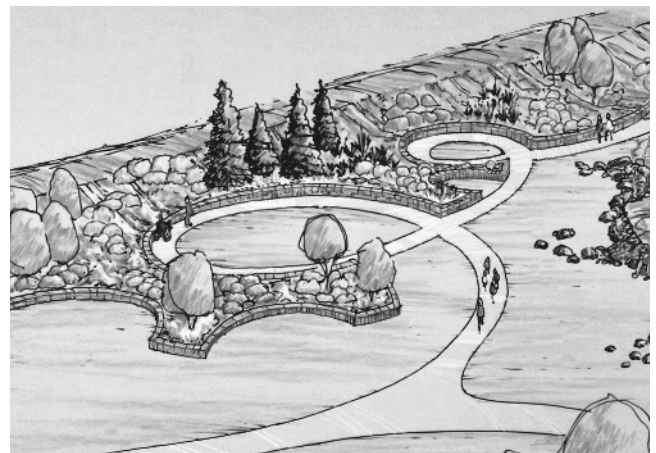


Figure 1-6

The symbolism of the small garden in Figure 1–7 was based on the owner’s pending marriage and the joining of two families in a new house and property. A four-pointed star-shaped garden represented the harmonious blending of four people into one new entity, with the solid rock grouping in the middle symbolizing the central unified heart of the family.



Figure 1–7

Symbolic forms bring a unique dimension to space (Figure 1–8), since they often add mystique and can be interpreted differently by each user. Traditional Japanese gardens are rich with symbolism yet open to a variety of interpretations. Rocks in sand may suggest ships on the ocean to one observer, people floating through clouds to another.



Figure 1–8

In general, Western garden design lacks philosophical depth or symbolism, but it does not need to. There are many opportunities for such concepts if designers search for the spirit of the place and probe for meaning.

What image does the client or designer want to project? For instance, spatial imagery and symbolism can easily be linked to:

- A place that projects an image of power and success
- A space that demonstrates the importance of technology
- A plaza that embraces a river and celebrates water as a joyous, life-giving element
- A neighborhood redevelopment that recognizes the importance of historic values
- A landscape that above all nurtures and protects the natural ecosystem
- An office complex projecting a message that the companies located there are concerned about conservation and protection of natural resources
- A provocative place that shocks, disturbs, surprises, or disorients the user
- A tranquil place for quiet reflection or meditation
- An entertaining environment where fun is paramount
- A place depicting humanitarian or philanthropic values
- A place that projects an image of progress and innovation
- A space that shows a sense of precision, grace, and simplicity

Once the designer identifies the philosophical concepts appropriate to the site or client, then the challenge is to express those concepts in physical form. By idea association and brainstorming, a number of visual images may emerge. High-tech messages may suggest crisp lines, geometric shapes, and a dominance of man-made materials such as plastic, steel, and concrete. Valuing the environment may suggest organic forms and a dominance of soft materials such as grass, trees, and water. Places for entertainment may demand brightly colored moving elements, whereas a tranquil setting may call primarily for muted tones and static elements. Another abstract area of exploration that can add depth to concept development is the idea of mood. What type of mood best matches the more general goal or belief? The appropriate mood could be:

- Serious or frivolous
- Active or passive
- Surprising or obvious
- Introspective or extroverted
- Cooperative or confrontational
- Stimulating or soothing
- Interactive or solitary

Then we can ask what physical form or materials might evoke such a mood.

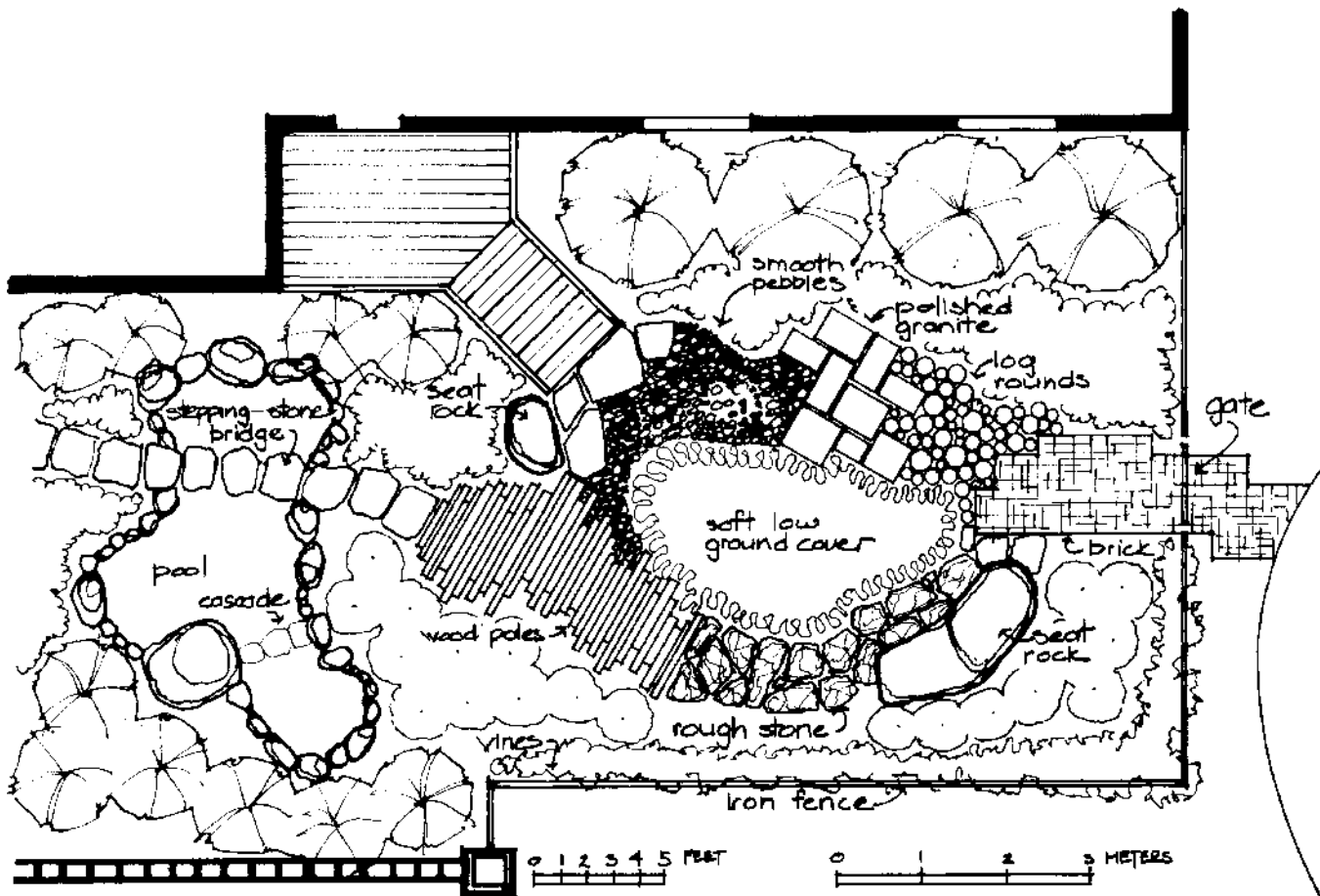


Figure 1-9 Barefoot garden

The following chapters contain many specific form suggestions adaptable to particular abstract ideas and to designed spaces that evolve from a philosophical basis. Most conceptual planning emphasizes the visual realm. Some interesting ideas, however, exploit the other senses as well. Consider the possibilities of engaging the sense of touch. A multitude of tactile experiences can be provided by including textures that are rough, smooth, soft, sharp, moist, hot, dry, or bumpy. Although textures are particularly appropriate in spaces designed for the sight-impaired, they are too often ignored in all outdoor design. Figure 1-9 shows the design by the author for a "Barefoot Garden," to be experienced primarily through the soles of your feet.

Olfactory, auditory, and kinesthetic experiences in the landscape also deserve more attention. Fragrances have a powerful impact on mood. Sounds, especially if manipulated by the user, add an interesting dimension. Moving elements and bodily motion have tremendous potential for adding excitement to the landscape experience. Can the nonvisual senses become part of the designed landscape imagery? Do they inspire design ideas?

Functional Concepts

In every project there are always functional issues to deal with. Some of these issues are more general in nature and may not lend themselves easily to spatial diagramming. They are important design determinants nonetheless, and should be listed early in the design process. It is helpful to consider these as conceptual objectives. Here are some examples:

- To maintain security
- To minimize maintenance
- To keep within a budget
- To reduce vandalism
- To retain the historic character
- To reduce erosion
- To eliminate poor drainage
- To conserve water
- To enhance or block views
- To create privacy and intimacy
- To recreate or protect an ecosystem
- To reduce noise disturbance
- To save energy
- To control damage by animals
- To provide informational or directional signage
- To create lighting for safety and aesthetics

The most common functional constraints and opportunities are those that relate to the spatial use of a site. These are easy to diagram and are the dominant focus for form development discussed in this book. Again, they should be listed as part of the program or design brief. Here are some examples related to the design of private and public landscape spaces:

- Specific activity zones—entertaining, play, sitting and relaxing, recreating, viewing, shelter, food and flower growing, commerce, education, performance, hobbies, pets, picnic, etc. (Think of these as outdoor rooms arranged in a manner to encourage a predominant use or multiple uses.)
- Pedestrian circulation—entries, pathways, stepped areas, bridges (Think of these as linkages between the outdoor rooms.)
- Vehicular circulation—driveways, turnarounds, parking
- Screens, barriers, and gateways
- Storage zones—trash, personal belongings, community assets, snow
- Focal elements—water, sculpture, structures, signs, botanical, etc.
- Wildlife attraction areas
- Conservation, restoration, and protection zones
- Public restrooms

Use areas and activity zones can be shown as amorphous blobs or bubbles, but before they can be drawn, their approximate size must be established. This step is important because when activity areas are manipulated within a scaled site plan, their quantitative values must be in correct proportion to each other. For example, for a parking lot for fifty cars (see Figure 1–10, top illustration), a quick approximation of spatial requirements for that many cars should be made.

Then the spatial needs can be abstracted into a bubble, easily manipulated by eye into one wraparound shape or split into two bubbles.

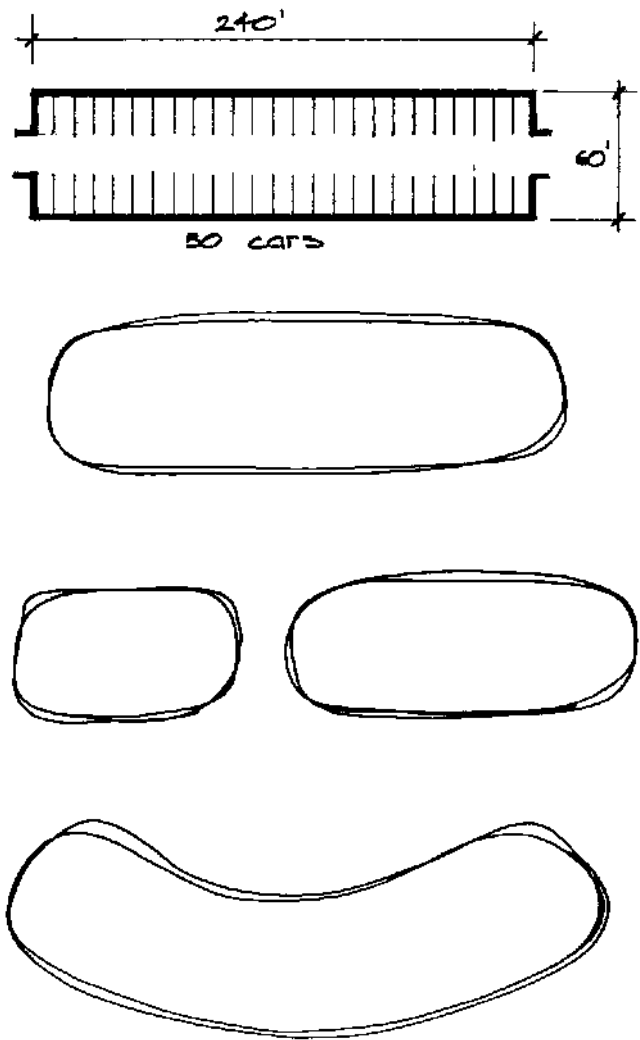


Figure 1–10

Simple arrows can designate corridors and other directional movements (Figure 1–11). For clarity these arrows might have a hierarchy of size or shape to distinguish between major and minor corridors and different modes such as pedestrian and vehicular traffic.

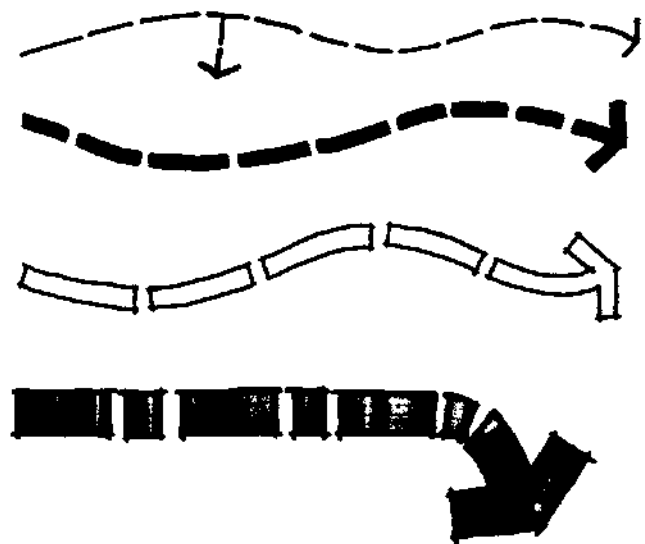


Figure 1–11

Star or cross shapes can represent important focal points, activity nodes, potential points of conflict, and other compact elements with a high degree of significance (Figure 1-12).



Figure 1-12

Jagged or articulating lines can show lineal vertical elements such as walls, screens, barriers, and embankments (Figure 1-13).

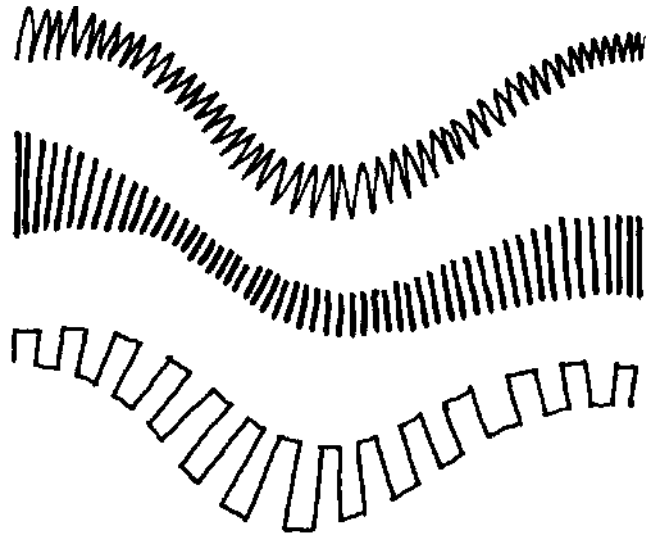
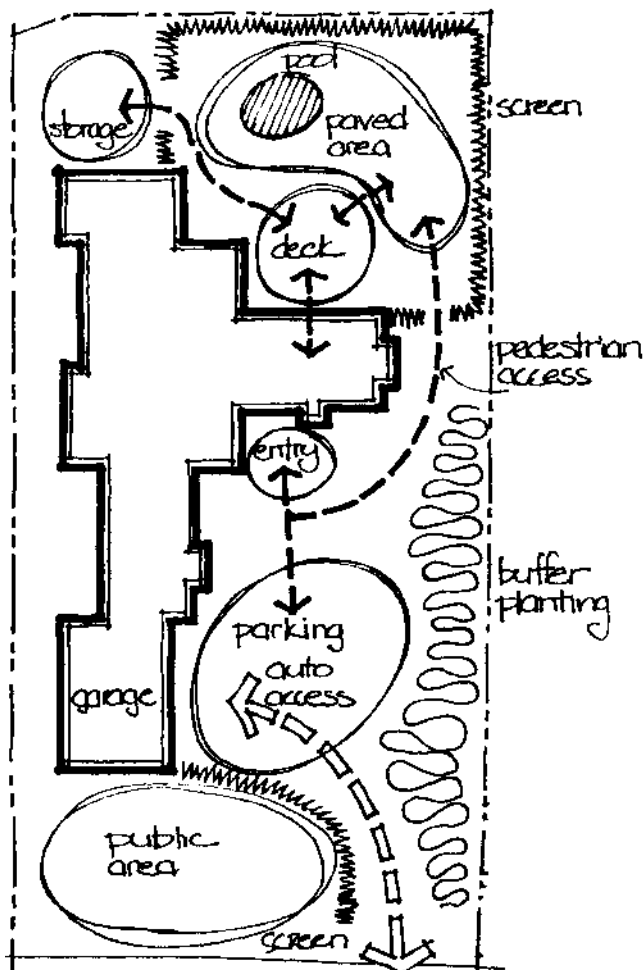


Figure 1-13



CONCEPT PLAN

Figure 1-14

At this stage of design development, it is important to keep the symbols abstract and easy to draw. Being able quickly to reposition and to reorganize helps to focus on the primary purpose of this process, which is to optimize the functional relationships between different use areas, resolve location problems, develop an effective circulation system, and answer questions about where things should be and how they might work together. Generalized spatial quality—whether sunken, raised, walled, canopied, sloped, or bermed—can also be explored in this functional concept phase.

Conceptual graphic symbols can be adapted to any scale. A residential example is shown in Figure 1-14.

A further example of conceptual planning, a development for a community center, might have the following guidelines as a simplified written program:

- Locate the three major building elements in order to minimize disturbing the existing stream and vegetation.
- Include parking for one hundred cars.
- Keep the automobile parking entrance as far away from the intersection as possible.
- Provide easy pedestrian access from adjacent streets.
- Include a multiuse plaza or amphitheater to accommodate occasional performances, outdoor classes, relaxation, art shows, sculpture displays, and so forth.
- Locate a sign to identify the facility.
- Provide an open grass area for unstructured recreation.

Such guidelines can be quickly and easily diagrammed, beginning with a base plan of the site drawn to scale. Although not shown here, two important steps in the design process should precede the concept diagram: a site inventory, which records all the existing conditions; and a site analysis, which records the designer's opinions and evaluations of these conditions. A sheet of tracing paper taped over the scaled inventory and analysis plan is an efficient way to initiate the concept diagram. Such a procedure allows the information about the site and the written program to be considered together.

Figure 1-15 shows the existing site conditions of the future community center site. Figures 1-16 and 1-17 show two alternative concepts for its development. For both concepts, all of the program requirements have been satisfied and the existing site conditions recognized, yet the concepts are very different from each other. A careful comparison of the alternatives reveals the advantages and disadvantages of each and allows an informed choice of the better scheme.

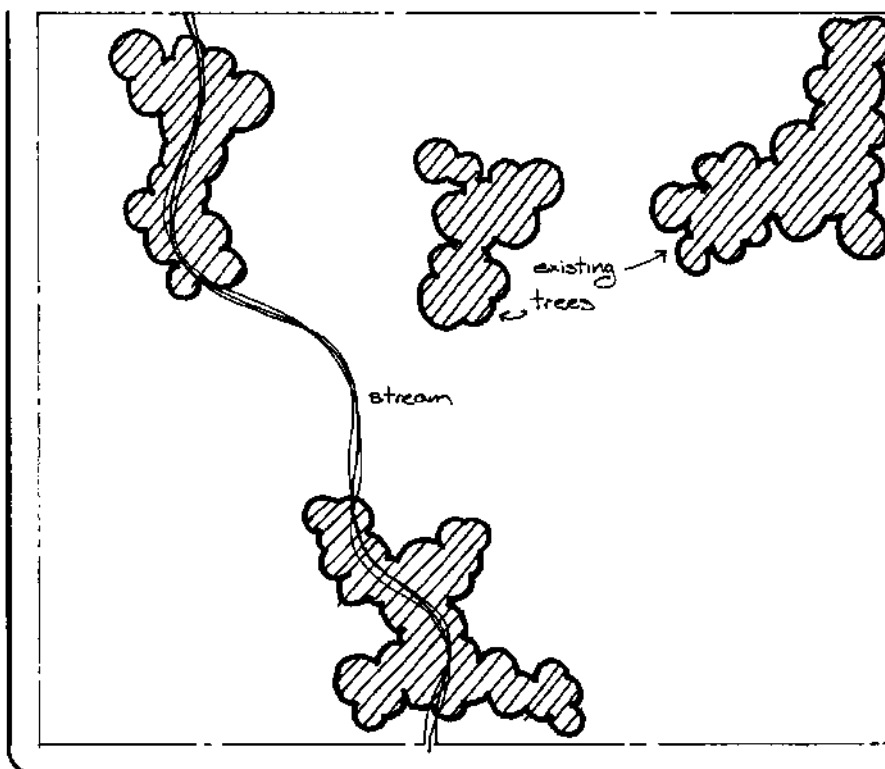


Figure 1-15

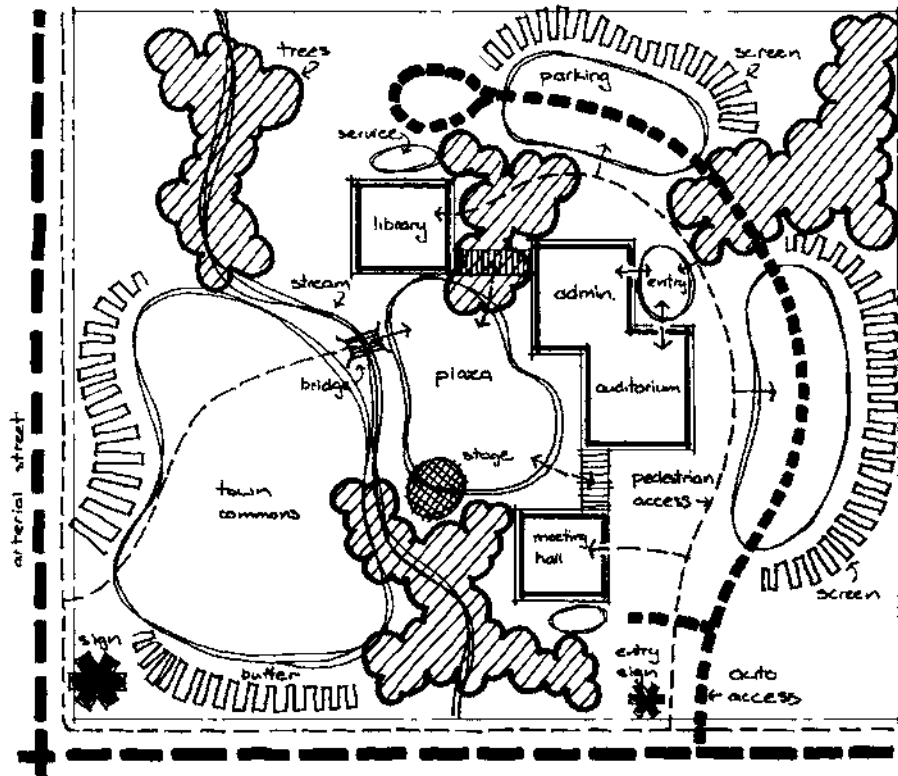


Figure 1-16

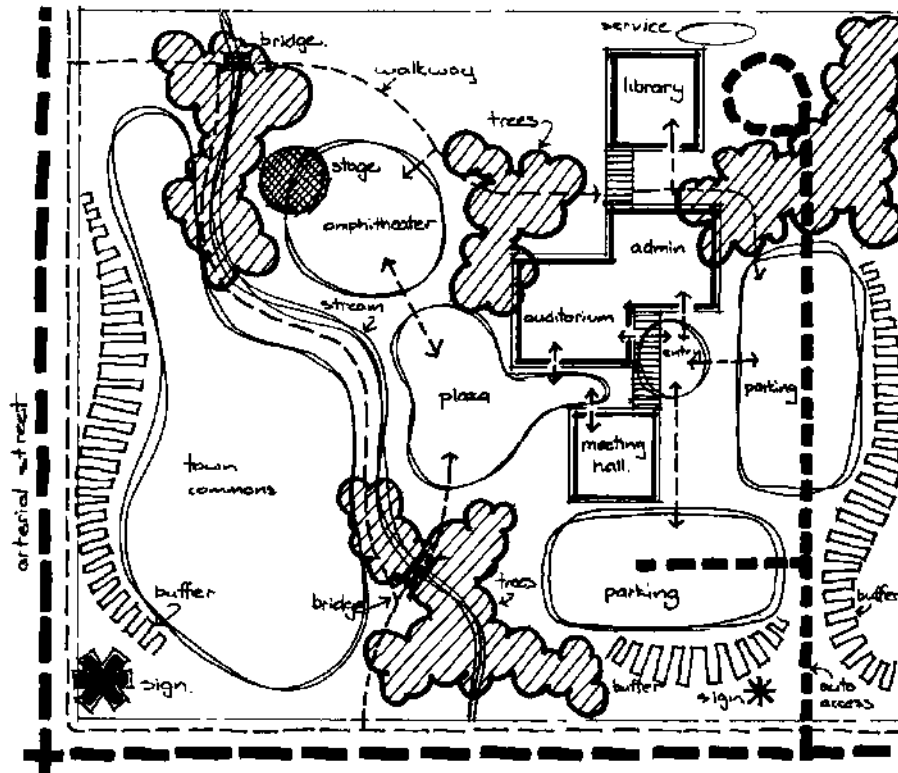


Figure 1-17

It is best to avoid the temptation to introduce specific forms and shapes when developing the concepts. At this stage, the lines of the amorphous bubbles represent the approximate limits of a use area (for example, a multiuse plaza), not the exact edge of a specific material or object. The directional arrows represent corridors of movement, not the edge of a walk or roadway.

At this planning stage of the design process, the first conceptual level of organization has been applied to the site. There can be an indication of types of surface-covering materials such as hardscape, water, open turf, and planted areas, but there is no need to get sidetracked into details of color, texture, pattern, and form. If part of a site demands more complex treatment, it may be necessary to refine the concept plan for just this portion.

The next two chapters explore a variety of forms along with the process that evolves from the conceptual scheme. The process of form development draws upon two different ways of thinking. One is based on the use of *geometric forms* as guiding themes. The components, connections, and relationships follow strict laws of order inherent within the mathematics of the various geometric shapes. Using this approach can result in powerful unified spaces.

But to the pure romanticists, geometric forms may appear dull, boring, ugly, and oppressive. Their way of thinking is to bring meaning to the design through the imagery of more random *naturalistic forms*. Shapes may appear erratic, frivolous, or whimsical, but they will likely have more appeal to the pleasure-seeking, adventurous side of the user.

Both modes have inherent structure and need not be distinguished from one another by structure alone. For instance, part of the joy of randomness is the pleasure of seeing some aspect of pure order, like the circle, but not being able to totally resolve the variety, as in a randomly circular cluster of bubbles (Figure 1–18).

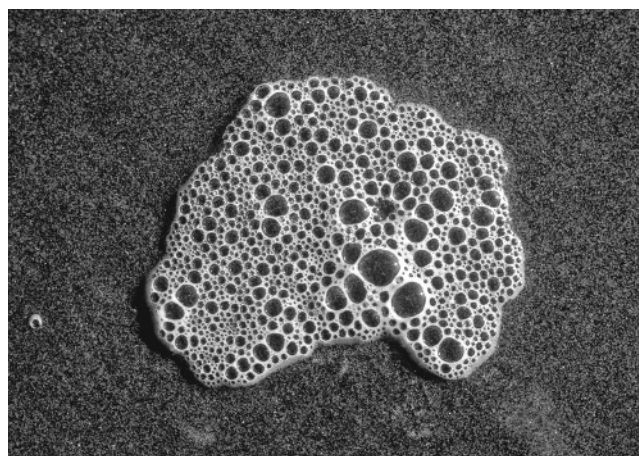


Figure 1–18