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**PERSONAL RESTORATION GARDEN DESIGN:
IN SEARCH OF BALANCE**

by

Don Burger

**Thesis submitted in partial fulfillment
of the requirements for the degree**

of

DEPARTMENT HONORS

in

Landscape Architecture and Environmental Planning

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**UTAH STATE UNIVERSITY
Logan, UT**

2006

Personal Restoration Garden Design

In Search of Balance



An Undergraduate Thesis by Don Burger
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Restoration Garden Design: In Pursuit of Balance

A Thesis by Don Burger

Chapter 1

Introduction

Life in today's society dictates that all of us need healing from time to time. Maladies and illnesses take ever higher tolls on our bodies, while work and life-related stress tax our willpower, mental health, and even our souls. The incidence of stress-related illness and fatigue is reaching almost epidemic proportions. The National Institute on Mental Health estimates that one in four Americans is affected by mental illness of some sort. That equates to over 57 million people in the United States alone (NIMH 2006).

Medicine has been used in healing for millennia. Herbs, tree bark, flowers, chemicals, and physical manipulation have all been used to wage war on disease with varying degrees of success. Most of these remedies have been focused on the physical body, since many of the ailments found in man were thought to be of a physical nature.

The mind does not operate the same way as the rest of the body. There are some illnesses originating in the brain that can be attributed to a chemical imbalance which have been the focus of significant pharmaceutical research and development in recent decades, but there are many other causes that are less understood. And while drugs may hide the symptoms of depression, we are uncertain whether any of them cure this disease. It truly is an uphill battle, fighting this war on mental illness.

The concept of mental illness is not new to the world. In some ancient cultures, depression was thought to be a malady of the spirit, not the body, and was therefore treated differently. Grief, sadness, pain, angst, trial; all of these feelings are associated with depression. In ancient Japan and China, Zen Buddhism taught that to overcome the causes of depression, one must reach out of the body through meditation and prayer to find greater inner peace. This process negates the bad feelings, which are natural, and restore inner balance and harmony. All of life is thought to have a balance. Sadness is a necessary emotion, but must be balanced by its counterpart, happiness. When this balance is tipped one way or the other, meditation or other means must be used to bring the pendulum back to center. I refer to this act of re-balancing as restoration.

Many other religions throughout the course of human history have taught the principle of restoration. Christianity, Hinduism, Islam, and Judaism, among others, teach that life is a balancing act, and when life gets out of balance, something must be done to bring it on-center again. Many religions suggest people reach outward, and forget the "self" through service and charitable acts. Other practices encourage inward focus through prayer, meditation, and ritual abstinence from food (fasting). It is taught that subjecting the physical desires and needs of the body to the demands of the spirit or mind will bring a greater level of harmony and balance to both.

While the act of restoring one's inner balance is important in and of itself, the surroundings in which one accomplishes this feat are crucial to success. Among the teachings and tenets of the various world religions, several support this concept of the importance of surroundings. Consider the following examples from some of the primary world religions:

Christ, when speaking of the need to pray, said, "But thou, when thou prayest, enter into thy closet; and when thou hast shut thy door, pray to thy Father who is in secret..." (Matt. 6:5, King James Version). This suggests that one should pray alone, in a quiet, enclosed space, in order to more fully pray to the Father. This particular passage in the Christian Bible further states that the Father, who sees in secret, will then reward the supplicant openly.

In the ancient Hebrew culture, the most important rituals and sacrifices were to be performed annually in the "most holy place", an inner room in the tabernacle of Moses, and later in the Temple of Solomon. The surroundings and ambience of this inner sanctum were so important that the Hebrew God, Jehovah, dictated exactly how the room was to be constructed, what items were to be found there, and even who was authorized to enter the room (see Ex. 26 and Lev. 6, 7, 10, KJV).

Monastic Zen Buddhism taught that in order to have a true meditative experience, all external distractions should be minimized. Therefore, a monochromatic setting was desirable, with either green or grey as the overriding color. Simplicity is critical, with only the essential ceremonial elements in a room or garden present. Minimal aural, visual and even tactile sensation are also important, making it easier for the mind to shut out all external distractions and reach inward to restore the balance that has been lost or disrupted (Rogers 2001, 299).

Some of the precepts of Islam are directly related to the principle of restoration. Islamic garden design was intentionally simple in expression and elements. The *chahar bagh*, representative of the fountain of life and the rivers coming forth from it, was a representation of balance and wholeness. The "rivers" come out toward the cardinal

points of the compass, signifying the issue of life through the entire earth. If one of these streams or rivers were interrupted, the balance and harmony of life would also be disrupted (Rogers 2001, 103).

While religion provides the foundational belief system central to establishing the need for restoration, the idea has become also popular with mainstream secular thought over the past few centuries. The secularization of bringing the body back into sync dates back to medieval Europe. Cloister gardens were found in monasteries throughout the continent. These provided the monks and clerics a place for restful contemplation and communion with God. Around the same time period, walled gardens were utilized by “princes, poets, and lovers” as a “*locus amoenus*, an earthly paradise, a sanctified spot from which the wicked (or uninitiated) were excluded...” (Rogers 2001, 122).

Later generations of English and American landscape designers were intrigued by the concept of nature’s restorative powers. J.C. Loudon, a renowned landscape architect of the early nineteenth century Reform movement, declared that nature was more than a pretty picture or a wild bramble to be tamed and subjected. It was inherently good, and made for the enjoyment and respite of man (Rogers 2001, 318). America’s own Frederick Law Olmstead, while revered for his design of New York City’s Central Park, later left the public eye to discover himself in the Californian frontier. His own design style was that of designing a “rural scenery that evoked a poetic mood lifting one out of everyday care and ennobling the spirit with intimations of the divine. This kind of scenic contemplation was therapy for the overworked paterfamilias, a healthful occupation for women...” (Rogers 2001, 339).

This movement toward therapeutic design is still strong today. Within the American Society of Landscape Architects (ASLA), the oldest organization in the world strictly for landscape architects, there is a standing committee known as the Therapeutic Garden Design Professional Practice Group, for members interested and specializing in therapy design. There are over 150 members of this group, and the numbers are constantly rising (ASLA 2006). Evidently, there is a need for this type of garden in the world.

With this said, what are the various types of therapy or restorative gardens? The following chapter examines the variations, and attempts to categorize and clarify differences between them.

Chapter 2

The Spectrum of Restorative Gardens:

Just how many ways can you skin this cat?

There are several different kinds of restorative gardens in existence today. Most can be grouped by function, rather than by form. This means that they exist for a certain group of people to use. The main types of garden under the main heading of restoration are: healing, dementia, cancer survivors', memorial, grieving, meditation, and personal restoration gardens. A discussion of the main concepts driving each of these garden types follows.

Healing Gardens

When the term "healing gardens" is used, often the healing referred to is physical healing. A recent Google internet search produced 613,000 hits for the term "healing garden". Of these, perhaps 70% had references to physical health or healing (March, 2006). Studies have been conducted showing that nature assists in the healing process. Four main factors for assisting healing in hospitals are:

1. Reduce or eliminate environmental stressors. This means to provide appropriate lighting, screen or mask medical equipment, or use appropriate and aesthetically pleasing colors.
2. Provide positive distraction. Include views of nature via paintings, photographs, and views from patient room windows to trees or other naturalistic settings outside.

3. Enable social support. Provide family zones or seating areas connected to patient rooms, and ensure that hospitals are culturally sensitive.
4. Give a sense of control. Simple things like menu choices for meals, volume and temperature control, and private rooms help patients feel more in control of their situation (NIBS 2006).

Another key user group in hospitals is the hospital staff. Nursing and surgery can be very intense and demanding professions, and turnover in some areas of the hospital can be very great. This cycle of hiring and training new staff is very expensive and time consuming. Studies have shown that including a garden space at the hospital that is accessible to staff members can actually decrease the stress related to the job, thus reducing that factor of the turnover cycle.

By far the most research has been conducted on this type of garden. It is nearly universally agreed that nature assists the physical healing process. As a result, most new hospitals being built in the U.S. today have some form of landscape or garden included in the plans. This may be a rooftop garden, an orchestrated view of nature from most in-patient rooms, or just arranging to have plants or atria located within the building for patients to experience.



Figure 2-1

A list of references about healing and hospital garden design, research, and theory has been included in Appendix A. It is not comprehensive, but it will serve the purposes of this treatise, and to the casual investigator to begin their own research.

Dementia Gardens

Closely related to healing and hospital gardens are those associated with dementia, especially Alzheimer's disease. Research is also quite popular in this area of design, as the incidence of dementia is mounting every year (NIMH 2006). Dementia consists of the loss of one's memory and mental function, particularly with the onset of old age. The memory loss comes in stages, with the long-term memory staying the longest and short-term memory being lost most quickly. Because of the staged advance of dementia, most patients are acutely aware of the progression of the disease, a fact that can frustrate and confuse them.

The later stages of dementia are accompanied by some rather extreme symptoms



Figure 2-2

and behaviors. The patients often become very aggressive and can be dangerous as they lash out angrily against the disease and what they are feeling. Dealing with this disease can be very difficult for not only the patient, but their

families. The family still remembers who the person used to be, how they acted, and that the patient also remembered who the family members were. In-home care of dementia patients is draining and discouraging, as the caregiver watches their loved one fall into despondency, aggression, and forgetfulness (Burger 2005).

Garden design for dementia patients and their families must be sensitive to all of these factors and respond to the needs of this very specialized group of people. Current design opinion suggests that dementia gardens should have elements in them reminiscent of the target patients' early lifetimes. For the aged population of today, this might translate into such plants as lilac, honeysuckle, or wisteria, which were very popular during the 1930s, 1940s, and 1950s, when most of today's elderly population was in childhood or early adulthood. Senses stimulated by appropriate plants encourage the recollection of pleasant experiences, and will give patients' family members something to talk about to try and spark their loved one's memory (Palmier 1996, 209).

Another important factor to consider in dementia garden design is safety. As patients progress in their symptoms, they may revert to childish behavior, such as putting objects into the mouth or wandering. Therefore, care should be taken to select materials that are non-toxic or do not pose a choking hazard, and to ensure that if a patient does wander, they will not hurt themselves or accidentally leave the premises (Palmier 1996, 56).

However the garden is designed, the overriding theme is that dementia patients need exposure to nature daily. A recent study conducted by Joanne Westphal and Catherine Mahan in Michigan revealed that when patients spent as little as fifteen minutes each day outside, their symptoms actually improved. Even five minutes a day slowed the progression and onset of symptoms in most patients (Westphal and Mahan 2004). References about firms that specialize in dementia design, as well as some useful texts, are included in Appendix A.

Cancer Survivors' Gardens

Dementia gardens mix memory and healing to bring a measure of comfort and peace to those suffering from dementia, both patients and family members. Cancer survivors' gardens are similar to dementia gardens in that memory is a key factor in them. These gardens do not necessarily claim to assist in physical healing, but they do provide a support platform in which cancer survivors and their families can celebrate their victory over cancer and come closer together. These gardens also serve as a reminder to the community of the toll that cancer takes, and can be a good impetus for fund-raising or other types of community-based action.

To celebrate life after cancer and regained hope, many cancer survivors' gardens are lively, bright, and exude feelings of happiness. Flowering trees are appropriate here, as are other bright colors and fragrant plants. This vibrancy of color and plant selection may not be

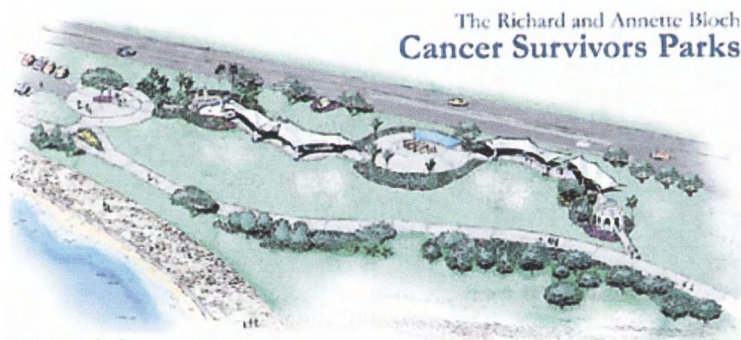


Figure 2-3

appropriate in other types of restoration gardens, which are geared more toward calming and soothing, not necessarily celebration.

Richard and Annette Bloch are two very well-known proponents of cancer survivors' gardens. Richard Bloch, one of the founders of H&R Block, survived cancer twice, and then suffered severe heart problems due to the intense chemotherapy treatments he had to endure to overcome the cancers (KUMED 2006). He and his wife

established a foundation, the Richard & Annette Bloch Foundation, to promote and provide funding for cancer survivors' parks throughout the United States.

There are currently sixteen of these special parks donated by the Bloch Foundation in the U.S., from Cincinnati to San Diego (Bloch Cancer Foundation 2006). Each park focuses on the theme of commitment and positive attitude. The Bloch's believe that most people who succumb to cancer do so mentally first, then physically. The battle against cancer must first be won in the mind, and then the body can take up the fight and win. Therefore, these gardens have elements that inspire, encourage, and push cancer victims to fight for their lives. Links to several websites describing these gardens are included in Appendix A.

Memorial Gardens

Perhaps the most publicized type of restoration garden that utilizes memory and thought is a memorial garden. Memorial gardens can focus on a person, an event, a

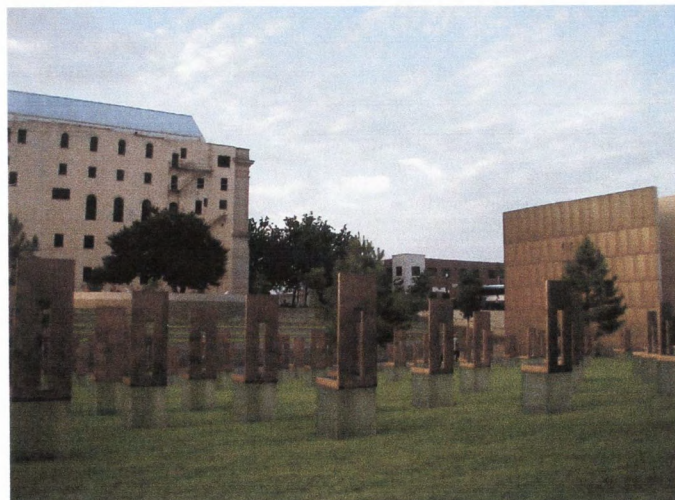


Figure 2-4

principle, or anything else that the designer and client feel should be memorialized. Memorial gardens range in size and scope from the Franklin D. Roosevelt Memorial in Washington D.C. or the Princess Diana Memorial in Hyde Park, England, to the many Veterans of

Foreign Wars memorials throughout the United States or a memorial to Agriculture

students at Utah State University. Major tragedies frequently result in the development of memorial gardens; numerous such gardens serve as a mechanism for public grieving and remembrance of the Holocaust. The site of the Oklahoma City bombing is marked by a memorial garden, signifying that America will never forget what happened that day.

The key to a good memorial garden design is the concept of a narrative landscape. Narrative landscapes tell a story through the elements found in them. These elements may be highly symbolic or very unmistakable in their meaning. One of the most important things to accomplish before designing a memorial garden is to decide what story the garden needs to tell, and then use the elements available to tell that story (Potteiger and Purington 1998, 15).

Memorial design may have a tendency to be highly controversial, especially a public memorial, or one that serves a very large group of people. Case in point is the World Trade Center site, where a memorial design commemorating 9/11 has fragmented the community. Often, what is calming and restorative to one person could be disturbing or even haunting to another. There is a balance to be found in memorial design, and the designer needs to realize that there is no way to please everyone. This delicate blend of needs, wants, emotions, and publicity causes memorial design to be its own type of design, not to be attempted by the faint of heart (Gustafson 2006).

Grieving Gardens

Closely related to memorial gardens are grieving gardens. While the first considers a particular public person or event, a grieving garden is designed for the bereft and mourning loved ones left behind. Grieving gardens can often be associated with

cemeteries or funeral homes, and should be calming. Water is very important in a grieving garden, as are some more secluded areas where a person can go off alone and ponder or attempt to come to grips with the change that has suddenly come into their life.

In a recent interview with a landscape architect who specializes in cemetery and



Figure 2-5

grieving garden design, a couple of key elements and overarching thoughts were mentioned. First, the garden should be designed to not memorialize death, but to highlight the continuum of life.

People do not want to have death thrust into their faces when they return to a cemetery's grieving garden to visit their loved one's grave. Rather, they want to remember the good times they had with that person, and be brought back to a place of beauty and grace, brimming with hope (Ledbetter 2006).

Second, these gardens should feature beautiful flowers and trees, outdoor rooms of varying sizes, and, as stated before, water. Water can be used in many ways to suit the particular needs of the space. Silent, mirror-like pools stimulate reflection. A softly babbling brook gently soothes the anguished soul. In more urban areas where outside noises are a concern, water can be used to provide white noise, screening the sounds of nearby traffic. Water also moderates climate, a feature important in many areas of the United States.

Finally, grieving gardens are highly public areas. Since they are usually attached to cemeteries or funeral homes, many people will come through them, most of them still in the initial stages of the grieving process. Therefore, good design principles are essential to an appropriate, meaningful environment.

The Woodland Cemetery (Skogskyrkogården) in Stockholm, Sweden is a good example of this kind of design. Its design is based on the landscape, and features a thicket of trees on a knoll where one has a panoramic vista of the entire area, yet provides a place to meditate and contemplate the meaning of life and death. The graveyard is located in a grove of evergreens, which muffle sound to provide a deep silence, almost palpable. A church where services can be held is located on the site, as well as other buildings, such as a crematorium and monument hall.

Meditation Gardens

Meditation gardens, the sixth type of garden listed, are very important oases in the hustle and bustle of today's world. Meditation gardens allow a person to disconnect with reality for a little while, to think of things beyond the mundane. Many of these gardens in the world are associated with churches or other religious buildings, since church should also be a place of meditation, prayer, and escape from the temporal aspects of life.

Meditation gardens take on many shapes, forms, and appearances, but they seem to have some things in common, too. For instance, most meditation gardens that I have come across have very basic or plain elements. Simple benches for sitting and pondering, shallow standing water or elements that suggest water, and monochromatic color schemes

make regular appearances in meditation gardens. The reason for this is simple: why distract the mind with the very things that one is trying to escape?

A classic example of a meditative Zen garden, Ryoan-ji, is comprised of a simple 30' by 78' plot of raked sand, with several rock groupings (Rogers 2001, 302). While



Figure 2-6

to the Western mind this may appear bleak and uninteresting, to the practitioner of Zen Buddhism it conjures a sense of tranquility and peace.

For this reason, meditation gardens may not have universal appeal. Not all people will want to visit a meditation garden every day, or even every month. This type of garden is based on the needs of the individual, and exudes almost a timelessness about it that tells people, "It's okay if you don't need to visit often. I will be the same, unchanged, whenever you come." While logic and reason tell us that this is not so, it is nevertheless comforting to know that some things never change, even in the midst of an ever-changing world.

Personal Restoration Gardens

The final type of garden I wish to discuss here is the personal restoration garden. This garden perhaps has the most interest to me, since there is no set way of designing one. As suggested earlier, what is soothing and restorative to one person may not be to

another. With this in mind, I will attempt to discuss in detail some of the things that may be found in personal restoration gardens, and some steps in successfully designing them.

Chapter 3

Personal Restoration Garden Design: Techniques and Elements

Personal restoration gardens are very different from other gardens. One of the primary differences is the scope of the garden. While cancer survivors' or healing gardens are meant to serve a large population of potential visitors, a personal restoration garden is very intimate. Where the other gardens are usually public or semi-public spaces, allowing most anyone to enter, this type of garden is reserved mainly for its owner and invited guests. Because of this focus on the more intimate, private garden, the factors influencing the design and effect of the garden can vary widely from garden to garden. Thus, the gardens themselves can take on many appearances, shapes, and themes.

This said, it may be overstating the fact to separate personal restoration gardens as a type of garden at all. For millennia, landscape architects and designers have found restoration and solace in creating and organizing outdoor spaces. Indeed, it may be said that any visually pleasing garden has restorative qualities. Many prominent landscape architects of the 20th century had just this thought in mind when designing gardens. Jens Jensen, for example, was a firm believer that any truly thoughtful landscape was a restorative one. Reference is rightly made to Olmstead, who said on one occasion, "The enjoyment of scenery employs the mind without fatigue and yet exercises it, tranquilizes it and yet enlivens it; and thus, through the influence of the mind over the body, gives the effect of refreshing rest and reinvigoration of the whole system." (Rybczynski 1999, 228). This suggests that nature, in any amount or form, is therapeutic, and a person

should take time to notice and enjoy it. Following, therefore, are some suggestions that the landscape architect may use in any design, but which should be applied especially in the case of restorative gardens.

Design Process

Even with the challenges presented by having no rubric of set design elements or guidelines for personal restoration gardens, creating one of these gardens can be a most satisfying process. It requires the designer to become intimately familiar with the client's needs and desires, to have frequent meetings with them to ensure that the garden truly meets the client's vision. This level of collaboration is important in the design of any space, but it is even more critical with personal restoration gardens.

When consulting with a client on the design of a personal restoration garden, there are several things the landscape architect should seek to discern. First, what are the client's needs at the present time? What are the specific reasons that the restoration garden is being commissioned? Perhaps the client has just lost their spouse, and is seeking a place disassociated with the cemetery to mourn. Or, maybe the client has an occupation in a high-intensity field, like a stock broker, and needs a place to unwind, relieve some of the stress of their job, and be alone for awhile. The motives for the garden should drive its design.

Second, from what kind of background does the client come? Where was their childhood spent? What are their personal beliefs about life? How do they like to relax? What are their hobbies, interests, or aspirations? These considerations become important. For instance, if the client is a declared atheist, then references to Christ or Mohammed

may be quite inappropriate. An avid golfer may like to see more turf or lawn than wild meadowland, as golfing is a prime means of relaxation for them, and the turf could suggest that state of mind or activity more readily than the meadow.

Third, what kind of sensory stimuli does the client like or dislike? Do bold colors soothe or agitate them? Are pastel colors and feathery plants annoying or pleasing? This type of information will drive the selection of appropriate materials to place in the garden.

A helpful way of conducting a client interview such as this is to have a set sheet of questions which can be answered by the client prior to the designer's arrival. Then the designer can follow up on these questions and get more detail where necessary.

Constructing a good relationship with the client is a crucial part of the design process. As the landscape architect gets to know the client, they begin to understand each other, and a better line of communication is established.

Elements

Due to the highly personalized and variable nature of restorative gardens, virtually anything can be used to create the appropriate atmosphere. As stated above, the client's needs and background will be some of the dictating factors in the elements used. The knowledge, education, and preferences of the landscape architect will also play a large role in materials selection. Following is a set of loose guidelines that can be applied to the various types of site elements. Because the senses play a key role in restoration gardens, the categories of elements will be outlined according to the five senses: sight, sound, touch, smell, and taste.

Sight. The appearance of a restorative garden can vary widely, according to personal preference. One person may find a lush, green garden the most therapeutic setting for their restorative process. On the other hand, the arid feel of red-rock country may provide an ideal place for another person's balancing act. The key is to make the place, whatever its appearance, in harmony with the client's personality and needs.

Color can play a distinct role in relaxation and meditation. Certain colors can suggest different emotions, especially when used in combinations. For instance, red is very warm, bold, energetic, and domineering, while purple is recessive, calm, and controlled. When designing for restorative purposes, selection of the appropriate colors for the situation should be done carefully and thoughtfully. For example, if designing a space meant to cheer and energize, yellow as the predominant color would be a wise choice, with complementing violet as a background color. If seeking a quiet spot that appears balanced and calm, green would be the preferred color. Following is a list of common colors in garden design, along with design characteristics for each.

Red: Red can represent boldness, courage, vitality, love, and energy. It makes spaces seem smaller than they are, since red advances toward the eye. Red should thus be used sparingly, and be balanced by calmer colors, so as to not be overwhelming. A well-placed mass of red flowers as a focal point would be suitable, as would a red mass on either side of an entryway to the garden.

Yellow: Yellow often reflects or suggests happiness and stimulation of the mind. It can help in learning gardens, and reflects the color of the sun and its energy. It can lift depression, instill optimism and confidence, and boost self esteem. It is wise to use

yellow in uneven masses, and to use a variety of textures and shapes. This will prevent it from jumbling together and blurring the edges of the space.

Blue: Blue seems to be the most successful color in hospitals and places of true physical healing. It is a tranquil color, and in many cultures is the color of Deity. Blue is restful, and encourages people to calm down and get some rest, which is often the most needful thing when healing. Blue in a garden also increases the perceived size of the space and directs the eye skyward.

Green: Green is the color of life, growth, and balance. Japanese gardens use monochromatic greens to achieve balance and aid meditation. Green is also the color of hope and renewed life, and the ancient Egyptians would bury their dead with a green charm to ensure their passage into the Afterworld. Green also enlarges space, and can denote stability. In healing gardens, green can reflect the ability to cope with stress or move past a difficult situation. Green is an excellent foundation color, a backdrop against which many other colors can be displayed.

Orange: Orange is the color of optimism. This color can promote feelings of joy and well-being, as well as a release from everyday cares and worries. Orange is well-received by children, and can be used in learning gardens to promote resourcefulness and independence, and to break down feelings of hostility and competition. Orange tends to foreshorten a space, and therefore should be used carefully, much like red.

Purple: Purple is the color of royalty, knowledge, wisdom, and power. It has connotations that link it with grandeur, and can be used in boosting self-worth. Purple can be restive in its lighter shades, but most often is associated with promoting ambition. It

should be used to highlight or accent themes in a garden, since large masses of purple can tend to be dull.

Sound. The types of sounds found in a garden are very important to how effective the garden can be. Many people are made uncomfortable by the sounds of a forest at night, with wolves howling, coyotes barking, bats and owls prowling, etc. These sounds can have very negative connotations. However, if a person grew up in the woods, loved the animals in it and the cycle of nature found there, then those sounds would be soothing, suggesting better times past or future. One set of sounds that could have near universal appeal is the sound of water. Whether it is rushing, trickling, babbling, or lapping gently at the banks of a pond, the sound of water has the tendency to soothe and comfort the troubled mind. Each level of intensity of sound is fitting in different settings, of course. Perhaps rushing water is needed to screen traffic or neighborhood noises, or maybe nearly still water could induce a person to reflect on their life. The point is water is very apropos in restorative garden situations.

Birdsong is another set of sounds that are conducive to restoration. Legends abound of nightingales or doves being kept in Persian pleasure gardens because the sound of their cooing soothed the minds of the royals. In a study done at Humboldt State University, it was found that birdsong is one of the most relaxing sounds in nature (Duncan 1998).

There are a bevy of other sounds that can be soothing. The rustling of leaves or the sound of snow falling, rain hitting hot pavement, or the gentle crunch produced by

walking on a graveled pathway, all these sounds produce relaxing or pleasant feelings in people. In the song "My Favorite Things", from the Sound of Music, Maria sings about some of the things that comfort her. Some of her "favorite things" are sounds: doorbells, sleigh bells, raindrops on roses. Sounds have the capacity to calm the mind when perhaps nothing else can. Providing a situation in which some potentially therapeutic sounds can exist is an important function of a personal restoration garden.

Touch. Tactile senses are essential in everyday life. Embedded in our skin are billions of nerve endings, allowing us to feel everything from the sweet whisper of a spring breeze on our cheeks to the sharp pain of touching a hot iron. Some tactile opportunities cannot be planned for with certitude, such as feeling the perfect breeze on our skin, but some can. For instance, plants exist with many different tactile characteristics. The Woolly Lamb's Ear (*Stachis byzantium*) is noted for the fuzzy, soft feeling of its foliage. Roses are famous for having velvety petals and painful thorns, a dichotomy which has been the subject of many forlorn love songs.

Different textures are present in different kinds of paving or non-plant materials as well. For example, a bench constructed primarily of wood has a much different feel than one of steel or polished granite. The smooth, cold stone or metal can feel unforgiving, or it can feel solid and constant, while the wood may be a warmer material, but it is also less permanent. One can be wounded by the wood more easily, too, as splinters can arise if the bench is neglected.

Smell. The scents found in a garden can suggest much to a visitor. For some people, the smell of rain on a summer day is refreshing. For others, it can be odorous and unpleasant. This can be the case with many of the fragrances and olfactory stimuli that present themselves to our noses.

It has been found that our sense of smell is one of our most powerful senses, and also very sensitive. Aromatherapy is the science associated with causing different reactions and changes in mood based on the scent or aroma presented to the subject. Through this science, several scents have been found to be relaxing, and many more of them to be generally therapeutic. The smell of citrus, for example, is invigorating to many people, while mint or lavender are very soothing and relaxing.

Aromas also suggest different memories to some people. As mentioned in the section on dementia gardens, the smell of a lilac or wisteria bloom can remind a person with Alzheimer's disease about something from their childhood, providing comfort in that way. When sage is crushed and the aromas released, I am often reminded of a happy day in my youth when I first received a bicycle and rode through a vacant lot full of sage and creosote bushes. These happy memories can bring joy and comfort for many years to come, and only need the slightest hint of a scent to bring them vividly to mind.

Taste. Closely associated with our sense of smell is that of taste. Perhaps the greatest evidence of the close relationship between these two senses is the common cold. When a person has a cold and their nose is stuffy, their ability to smell is impaired. When that person eats something extremely flavorful, the taste is often deadened because they

cannot smell what they are eating. The food becomes bland and plain, instead of the lingual delight they anticipated.

While taste may not be the most obvious sense in the garden to try to stimulate, it can be very effective in a therapeutic or restorative setting. Having plant material with edible parts, such as fruits or berries, can be an excellent idea, especially when those fruits are associated with a client's childhood or suggest to them a happy memory. For example, a dear friend of mine grew up on a peach orchard, and one of their favorite memories is sitting in the dirt under a peach tree in late August and sinking their teeth into a juicy, perfect peach. This event was not confined to their childhood, as they repeated this ritual every year into their late teens. The taste of the "perfect peach" still conjures up this memory. This person has mentioned to me several times that if they ever have a restorative garden, two rows of "perfect peach" trees will be key elements in it. This memory helps restore their personal balance.

These are just a few suggestions to help guide the designer in their quest for restoration gardens. Following is a series of case studies, five in total, which will showcase examples of some of the principles highlighted here. Bear in mind that no list or set of elements will ever be exhaustive, due to the nature of the subject matter. This is just a start.

Chapter 4

Case Studies

Case Study 1: Gerald Bol Bamboo Sanctuary, Sebastopol, California.

Gerald Bol (d. 1996) was known to friends as the Great Bamboo Man. In the late 1960s he bought six acres of land in Central California to turn into his garden retreat. With a background in fine art (sculpture and painting) and a knowledge base in botany, he transformed a neglected and desolate gravel pit into a lush garden filled with over 300 different varieties of bamboo.

His passion for the land and for the plant medium that he grew to love was his most healing place, the environment where he found the most solace and restoration.



Figure 4-1

Over the years, the Bamboo Sanctuary grew in renown until it was a much sought-after destination.

There are several aspects of the Bamboo Sanctuary that are therapeutic. The first, and perhaps the strongest, is the relationship that Gerald shared with his garden. This was his place of respite, an escape from the world into something he loved. When he was diagnosed with cancer, the garden was his solace. To quote his wife: "The garden was a place of love and tranquility for Gerald. He looked at it in photographs when he was in the hospital, and later from his oval window in the house. When he got better he'd use the

walker or his canes and we'd go down into the garden....In this way, the garden was healing." (Murray 1997, 142).

Some of the other therapeutic components of this garden were the private sitting areas included throughout the garden. These often were located in the far-flung reaches of the garden, and provided a place to sit and ponder, while viewing the bamboo forest in

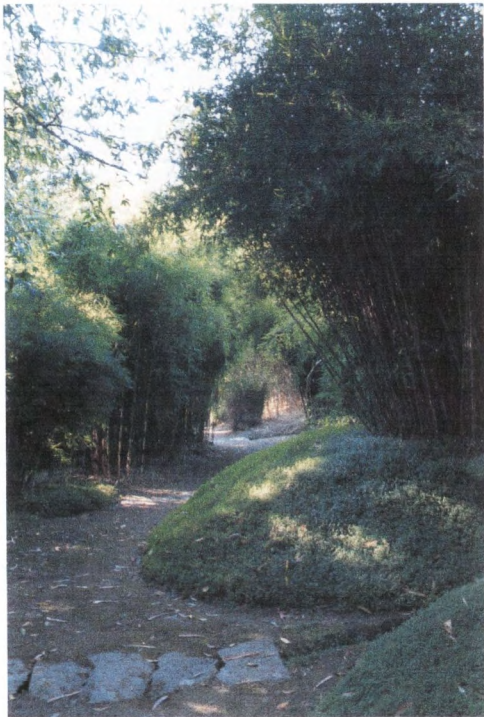


Figure 4-2

created a very natural, Japanese garden feeling.

the distance. Birdsong from the many species of birds making their home in the Sanctuary added to the restful nature of these areas.

One of the constraints of the site was the perennially muddy ground. Due to the garden's previous life as a gravel pit, adequate drainage was lacking. Gerald solved this problem by cutting shallow channels in the ground throughout the site, then placing flat stones over them to act as bridges. This allowed the water to drain, but

Since Gerald's death in 1996, the Bamboo Sanctuary has been opened to the public, so that its restorative scope and influence can spread and be felt by many more people. It is a truly remarkable place, and one worthy of the name "Sanctuary".

Case Study 2: Mark Brown's Personal Gardens of Tranquility, Varengeville, France.

This series of seven gardens is attached to the personal residence of Mark Brown on the Normandy coast of France. The overarching theme of the gardens is transition: transition from the busy world outside the garden walls to quiet, peaceful, and beautiful gardens inside. Many of the gardens are Japanese in style, with lanterns and small stone basins. The garden is designed in such a way that the large ornamental grasses intrude



Figure 4-3

on the path, thus concealing the destination and providing for a sense of discovery.

Visitors to the gardens have noted a certain aroma associated with the garden. One person described it as “a complex blend of woody, damp, sweet greens” (Murray 1997, 90). Since the gardens are located in the north of France, rainfall is quite frequent. When light and rain collide, the effect is a moving garden. Mr. Brown allows the grasses to reseed and spread themselves throughout the garden spaces, letting the gardens determine their own shape and form. This feeling of natural vitality is very refreshing, and the visitor can be invigorated and enlightened in body and soul through it.

Case Study 3: Abby Aldrich Rockefeller Garden, Seal Harbor, Maine.

Abby Rockefeller, wife of John D. Rockefeller, purchased the site of this home in 1910, and worked with landscape architect Beatrix Ferrand in 1926 to create a garden that incorporates landscape symbolism from Asia and Europe. One of the key concepts in this garden is respect for the surrounding landscape and nature in general.

The house itself is located on top of granite bluffs surrounded by woodland and



Figure 4-4

provided with beautiful views of islands in Seal Harbor, Maine. The natural landscape includes granite outcroppings, balsam firs, mosses, lichens, paper birch, lakes and rivers, which are all complemented by the ocean's salty

breeze and waterfowl. The region possesses one of America's most stunning and impressive natural settings, much of it preserved by the designation of Acadia National Park.

The inspiration for the garden is the Rockefellers' love and appreciation for Asian art and culture. A red brick wall surrounds the garden and is topped with golden glazed tiles from the Imperial Palace in China. Traditional round gates penetrate the wall in several locations, allowing function and beauty to connect. The entire garden has a tranquil feeling to it. Rock pathways lead to significant statues, calm reflecting pools, and flower gardens. The plants in the garden are largely indigenous to Maine, and enhance the harmony and solitude felt there.

All of the elements in the site are very simple. Benches are made from a single slab of granite each. Pathways are made of the same material. In some areas, the color scheme is very monochromatic, with varying shades and hues of green and grey. In other areas, maples and other deciduous trees give splashes of color to pique the visitor's curiosity and interest, and to lift the spirits. It is a very restorative place, and was Ferrand's precursor to Acadia National Park, which she helped to design through the sponsorship of John D. Rockefeller.

Case Study 4: Private Residence, Oakville, Ontario, Canada.

Virginia Burt's landscape architecture firm in Ontario, Canada, has a design focus on healing and restorative gardens. Ms. Burt's primary portfolio of work is located in Ontario, and features projects from private residences to institutional master plans. One of the smaller designs that she has done is a private residence in Oakville, a small suburb of Toronto. This residence features many interesting site elements that can be found as therapeutic.

First, a smoothly curving wall is placed in the garden to separate an outdoor dining terrace from the rest of the area. This curving wall embraces the dining area, and



Figure 4-5

has a close, nestling feel about it. Ms. Burt points out that she designed the wall to be in proportion to the Golden Ratio of 1:1.618, which is thought to be a mentally pleasing relationship (Burt 2006).

A second feature in the garden is a water sculpture that incorporates both moving and still water. This juxtaposition of movement and stillness creates a variety of opportunities to feel invigorated or put at peace, depending on where one sits and how the fountain is viewed. The water also creates an atmosphere of calm, even when the water is running. It was meant to look like a cluster of mountains surrounding an alpine lake, a scene that many people find relaxing and inspiring.

Finally, planting beds provide broad splashes of color, complementing the entire garden and creating a sense of fun and adventure, while not obligating the visitor to participate. The colors are not busy, nor do they appear to be randomly placed with no thought to order and reason. Everything in the garden makes sense and works together to accomplish the greater whole.

Case Study 5: Sandi Burger Therapy Garden, Bear River City, Utah.

The final garden to be examined here is one of great personal importance. In February, 2004, my father was killed in an accident on the freeway. His loss came unexpectedly, and was a great blow to my family, especially my mother, who found herself widowed at the age of 46. At the time my father passed away, he was in the middle of battling cancer for the second time in five years, and thought that it might take his life this time. The entire family was caught up in the turmoil and uncertainty associated with my father's sickness, and with his passing, discovered a new depth to grief and loss.

In a way, my father's death is the reason for this thesis, as it became the stimulus for my interest in therapy design. As I became more interested in this area of landscape

architecture, my mother asked me to design a restorative garden for her attached to her home. She dedicated a half-acre parcel of land to this purpose, and I began my planning. With the advice and help of many members of the USU Landscape Architecture Department, and through research of my own and interviews with my mother, I developed a plan that was therapeutic in nature, and very simple in design.

My mother is from Northern Indiana, and she often recollects with fondness about the fall colors and wildflowers found in her childhood home. She also has a deep appreciation for the Rocky Mountains, especially the mountain valleys with a mixture of montane meadow and deciduous forests. Therefore, the theme of her garden is a meadowland, full of wildflowers and native grasses. Superimposed on the meadow is a modified deciduous forest, full of the fall color she loves. There are also some flowering

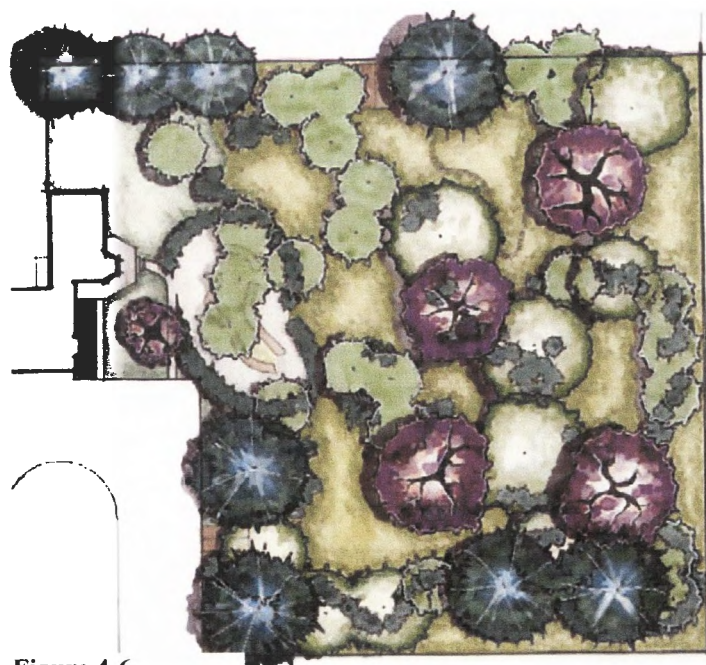


Figure 4-6

cherry trees, a tree my father cherished. These trees are symbolic of renewed life in many cultures.

The form of the garden is one of conceal and reveal. The main feature is a hidden garden room surrounded by trees and shrubs, with a bench to one side and a flowering cherry tree in the

middle as a focal point. This is where my mother can go to get away from everything and enjoy the beauty of the earth. Connected to the hidden room is a flower bed full of tulips,

some of my mother's favorite flowers. Every spring, these bulbs emerge from the soil, showing bright hope for the year to come. During the rest of the year, other perennials bloom and hide the fading tulips, but the tulips bloom first every season. The flower bed also allows my mother to work the soil and physically work out her frustrations and feelings, something that is very therapeutic for her.

Through the goodwill of the USU Student Chapter of the ASLA and local businesses, this garden was installed 14 months after my father's passing. Its presence is a reminder that life goes on. It has taught me and my family much about life and coping with all the challenges that life throws at us. In a way, it is my means of saying "I love and miss you" to my father.

Chapter 5

Conclusions

In the immortal words of Henry David Thoreau, "Nature is but another word for Health." (Torrey 1906, 395). We all have need for healing, whether it be physical, mental, emotional, or spiritual, or a mixture of all of them. The daily warfare we call life is fraught with dangers and risks, and we cannot help but be wounded in one way or another. If, as Thoreau believes, "nature is but another word for health", then we should all strive to retreat to it occasionally, so as to gain a respite from the grind of living day-to-day. However, as Frederick Law Olmstead noted during the construction of Central Park in New York City, not all people can afford to go to the back country, the woods or the mountains. Some people live out their lives in the middle of a city, working, playing and living in the midst of concrete, glass, steel and asphalt (Olmstead and Kimball 1970, 46).

Olmstead pointed to the need for city parks, peoples' parks, where anyone could go to recreate and get away from the city, even while surrounded by the city. Even a front or back yard in the suburbs can be a place of refuge from the storm. The key is to spend time in nature, to make these places our own therapy gardens, to take a break from life. So many of us are concerned about our vitamins and supplements. We acknowledge needing to get our "Recommended Daily Allowance" of beta carotene or Vitamin D or calcium. We know that these minerals and vitamins will supply us with much needed fortification against disease, old age, or other ills. But what about getting our "Recommended Daily Allowance" of fresh air and sunshine? What about meditating,

praying, or other forms of lifting our mental or spiritual selves above the concerns of the day, reaching a higher plane where we can truly come back into balance in preparation for the next challenge we will confront?

As outlined in this discussion, there are so many ways that nature offers to help us heal or prepare for life's challenges. From healing and dementia gardens attached to health-care institutions to cancer survivors' and meditation gardens for preparing our minds and spirits to tackle the next obstacle thrown in front of us, restoration gardens are present to help us cope with life. We even have memorials and grieving gardens to help us deal with loss or a significant event in our lives. We use nature to pull together as a community or a nation, to give us a sense of identity, to give us pride in our homes and our nations. Why not let it heal, restore, and uplift us on a daily basis? It is my hope that we will all once again find ourselves by getting lost in our own backyards.

To again quote Thoreau's *Walden*,

"I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, to discover that I had not lived. I did not wish to live what was not life, living is so dear; nor did I wish to practice resignation, unless it was quite necessary. I wanted to live deep and suck out all the marrow of life, to live so sturdily and Spartan-like as to put to rout all that was not life, to cut a broad swath and shave close, to drive life into a corner, and reduce it to its lowest terms, and, if it proved to be mean, why then to get the whole and genuine meanness of it, and publish its meanness to the world; or if it were sublime, to know it by experience, and to be able to give a true account of it in my next excursion."

May we so live.

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Appendix A: Additional References and Resources

One of the premier resources for any research or information on therapeutic design is the Therapeutic Garden Design Professional Practice Network of the American Society of Landscape Architects (<http://host.asla.org/groups/tgdpigroup/>). In conjunction with this Professional Practice Group is the Therapeutic Landscapes Database (www.healinglandscapes.org), which includes extensive lists of landscape architects affiliated with therapeutic design, references, gardens, and related links. This is an excellent starting point for any investigator of therapeutic garden design.

A. Healthcare/Hospital Gardens

- a. An excellent resource is Healing Gardens: therapeutic benefits and design recommendations; Clare Cooper Marcus and Marni Barnes, eds. (1999, John Wiley and Sons, Inc (New York)). This multi-disciplinary reference book has chapters by many leaders in healthcare design.
- b. The Healing Garden: Natural Healing for Mind, Body, and Spirit. Squire, David. 2002. London, Vega.
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B. Dementia Gardens

- a. Jack Carman (Design for Generations) is one of the most well-known landscape architects associated with dementia design. His website (www.designforgenerations.com) is an excellent resource for those interested in this area of design.
- b. Joanne Westphal, PhD and MD, at the University of Michigan is another leading expert in dementia design. Her students recently completed a low-cost dementia garden near Ann Arbor, Michigan. Dr. Westphal's recent work focuses on the need for post-occupancy evaluations to gather the scientific data required to bring therapeutic design into better standing with the scientific world.
- c. Design for Dementia: Planning Environments for the Elderly and Confused. Calkins, M.P. 1988. National Health Publishing

C. Cancer Survivors' Gardens

- a. There are several cancer survivors' gardens sprouting up all over America. They are not always easy to find, but stumbling across one can be a very pleasant experience. Here is a partial list of cities that have cancer survivors' gardens: Baltimore, San Diego, Kansas City (MO), Goshen (IN), Columbia (SC), Greenbrae (CA), Philadelphia, Omaha, Houston, New Orleans, Indianapolis, Bakersfield (CA), Columbus (OH), Rancho

Mirage (CA), Chicago, Cleveland, Dallas, Phoenix, Santa Rosa (CA), Jacksonville (FL), Wichita (KS), Minneapolis, Sacramento, Tampa, Tucson....the list goes on.

D. Memorial Gardens

- a. As stated, memorial gardens are very popular for commemorating important events in public history. They range from the very small to the grandiose, and can be found in nearly every city in America. The top five memorials to see or read about are, in my opinion:
 - i. Franklin D. Roosevelt National Memorial, Washington, D.C.
 - ii. Vietnam War Memorial, Washington, D.C.
 - iii. Korean War Memorial, Washington, D.C.
 - iv. World Trade Center Memorial (9/11), New York City
 - v. Flight 93 Memorial, Somerset County, Pennsylvania

E. Grieving Gardens

- a. CPRA Studio, in Littleton, Colorado, is one of the leading design studios for cemetery and grieving garden design (www.cprastudio.com). Their projects range from large cemeteries and crematoria to smaller ones in small towns. Geographically, they range from Denver to Sacramento.
- b. Other excellent cemeteries to visit are Arlington National Cemetery in Virginia, Gettysburg National Cemetery in Pennsylvania, and Pere LaChaise Cemetery in Paris, France.

F. Meditation Gardens

- a. The Japanese Zen Buddhism tradition is strong in Japan, America, and Canada. Japanese gardens are perhaps some of the best gardens to visit for learning and experiencing the meditative potential of nature. Some of the best to see are:
 - i. Kokedera Temple, Kyoto, Japan
 - ii. Buddhist Meditation Garden, Los Angeles, California
 - iii. Betty Ford Alpine Gardens, Vail, Colorado
 - iv. Mount Holyoke College Meditation Garden, South Hadley, Mass.