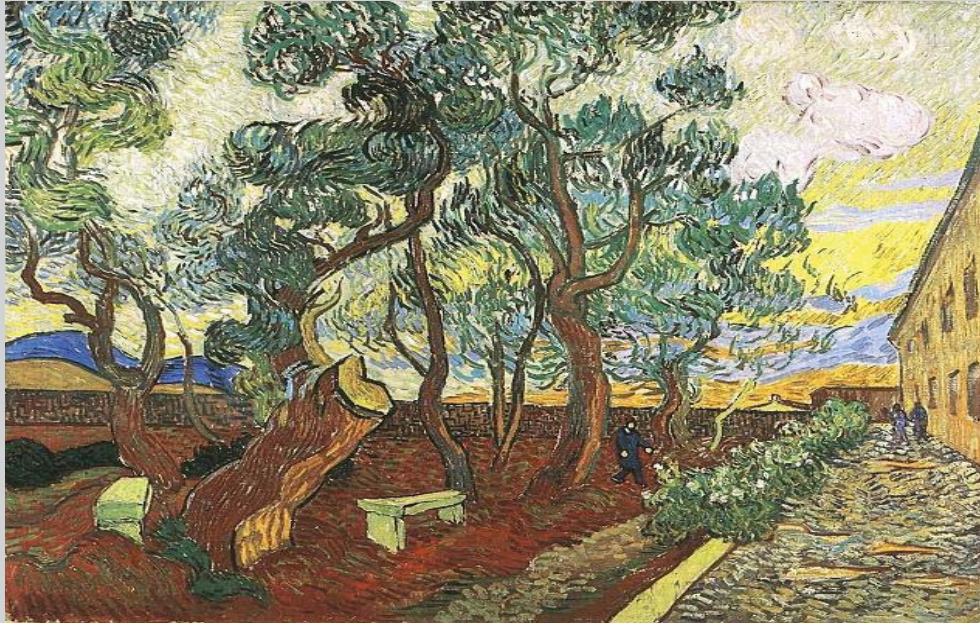# Healing Gardens
Betsy Severtsen

"Garden of Saint Paul Hospital"
~ Vincent Van Gogh

The artist painted the asylum's garden while he was a patient.

Credit: zallio.hollosite.com

Healing landscapes have long been an important aspect of human life. When people first began erecting dwellings, healing places could be found within nature through sacred groves, special rocks and caves. In the Western world, monastic communties supported infirmaries that were based in the use of herbs and prayer and almost always included a cloistered garden. Modern advances in technology towards healing has largely diminished the importance of nature in the healing process and this has been one unfortunate result of the "cure over care" phenomena found within many aspects of the healthcare field.

More recently, there has been a growing interest in the healing effects of nature. The Kaplans and Roger Ulrich have provided much of the literature on how a landscape can be restorative. Providing a sense of fascination as well as a greater extent, separating users from distraction (Kaplans, 1998), reducing negative emotions, holding a person's attention, and blocking stressful thoughts (Ulrich, 1981) have all been shown to occur in natural landscapes. Ulrich has also shown that patients with views of nature have significantly less post-operative stay times, fewer negative comments from caregivers, less medication use and experienced fewer minor post-operative complications than patients with views of a wall (1984). Researchers have also found that nursing home residents with physical or visual access to nature have significantly greater caloric intake and exercise than those without (Cohen and Weisman, 1991).

Based on research by the Kaplans and Ulrich, it could be argued that any garden is healing. However, to be defined as such, a healing garden should give a sense of restoration from stress and have other positive influences on patients, visitors and staff/caregivers. These healing landscapes can be located in or outdoors, but to qualify as healing "gardens" they should have real nature such as plants and/or water features (Cooper-Marcus and Barnes, 1999).

"*Nature is but another name for health...*"
Henry David Thoreau

"*Not long ago, operating rooms had windows. It was a boon and a blessing in spite of the occasional fly that managed to strain through the screens and threaten our sterility...there was the benediction of the sky, the applause, and reproach of thunder...the longevity of the stars to deflate a surgeon's ego. It did not do the patient a disservice to have Heaven looking over his doctor's shoulder. I very much fear that, having bricked up our windows, we have lost more than the breeze; we have severed a celestial connection.*"
Richard Selver

Contexts

Traditional healing gardens are often found within or adjacent to indoor healthcare settings. Healing gardens can be found in mental health hospitals, schools and centers for the disabled, hospices and nursing homes; however, possibly the most popular examples of healing gardens are found within or adjacent to hospitals and Alzheimer's treatment facilities.

Healing Gardens meant for users that are specifically ill or disabled will be useful to the extent that these special needs populations are present and able to physically or at least visually access these sites. However, even within a healthcare setting, healing gardens are often used by a larger population including staff and visitors as well as patients and/or residents.

At a larger scale, some believe that any garden can be a healing garden and that the general population can find restorative benefits from such spaces, regardless of pnysical health needs. Taken at this scale, green spaces with restorative effects should be easily accessible by the surrounding population. Seattle's goal for accessible open space is to have 1/4 to 1/2 acre of usable open space within 1/4 to 1/2 mile of every resident (City of Seattle Parks and Recreation, 2001).

Photos and Plan Credit:
Cooper Marcus, 2001

Case 1: Healing Gardern at Mount Zion Clinical Cancer Center, San Francisco, California

This courtyard garden is bounded by hospital buildings and a commercial property, Thankfully roughly half of the garden still receives direct sunlight at noon. Plants were chosen to provide blooms throughout the year and to provide a variety of green hues. There is a small fountain to screen out noise from a nearby street and many wooden benches, tables and moveable chairs. The garden was once a mostly-hardscaped courtyard, designed by Tommy Church. An artist-patient at the center provided the idea and effort to redesign the space into a more garden-like setting.

During the design process workshops were held where patients and staff provided suggestions on the necessary garden elements. There were also a number of tile-making workshops where patients added their survival stories to tiles with imprints of Asian plant specimens used in cancer treatment. These tiles made up the wall of the indoor corridor that passes by the garden; the tiles are one element of permanence next to a constantly changing garden. This garden has been quite successful with patients, staff and visitors. It is a green oasis within the hospital complex and gains much of its popularity through the community process that is was created from (Cooper Marcus, 2001).
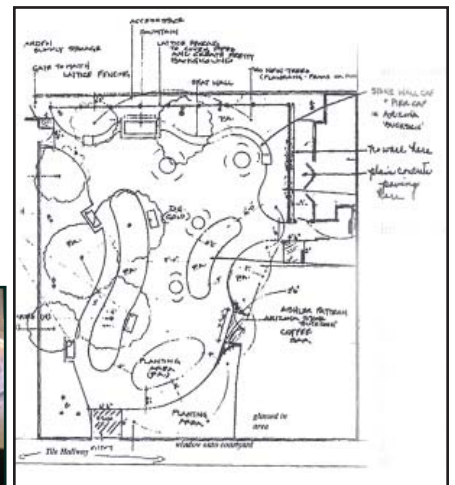
Healing gardens are effective if they foster the following elements:

Sense of control
Patients/residents must know a garden exists, be able to find it easily and be able to access and use the space in an active or passive way. It should also have areas for privacy that are shielded from window views. A variety of types of spaces can aid in allowing users to make choices. Feelings of control can also be enhanced by involving users in the design of the garden.

Social support
Spatially enclosed settings that allow for socializing are often preferred by users. Designing for small as well as the occasional large group (associated with hospital initiated programs and large extended family visits) is important. However, all considerations for social support should not deny access to privacy (which undermines patient control).

Physical movment and exercise
Mild exercise can be encouraged by designs that allow for patient accessibility and independence and provide features such as walking loops. For children, areas that allow for stress-reducing physical activities and play should be included.

Access to nature and other positive distractions
Medicinal and edible plant species and those that engage all of the senses are often a good choice for the design's plant palette, as are plants that encourage wildlife. Poisonous, thorny plants, and those plants that encourage large amounts of unwanted insects (i.e. bees) should be avoided, especially in gardens used by children and the psychologically ill (Cooper Marcus and Barnes, 1999).

Case 2: Gardens at Lucas Gardens School, New South Wales, Australia
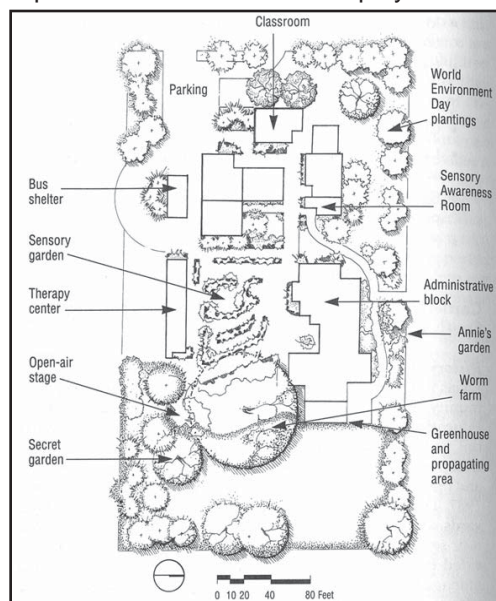
This special education facility is linked to a nearby pediatric hospital. A series of courtyards have been developed into gardens over the years. Most of the young users rely on wheelchairs or cots, and thus the garden is universally designed to accomodate the needs of all.

A sensory garden is the centerpiece of the landscape. It has a series of curved, raised planters that enclose a number of "activity stations" and provide space for sensory plantings. The activity stations allow children to explore different textures and play with water through a splash table.

There are also a number of quieter areas useful for music therapy sessions and family time. Other spaces include: a shade house, compost area, grassy field, outdoor concert stage, potting shed, earthworm bins and a native plant propogation area.

The garden is open to the larger community. Visually impaired and physically disabled students from surrounding schools visit, mildly physically disabled people engage in work experience and a nursing home reading group meets regularly there (Cooper Marcus and Barnes, 1999).

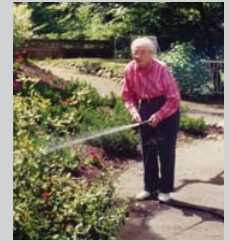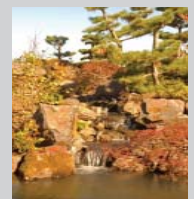Because the garden provides for robust uses, and is community-based it has been quite successful.

Plan of Lucas Gardens School showing: Classroom, Parking, World Environment Day plantings, Bus shelter, Sensory Awareness Room, Sensory garden, Therapy center, Administrative block, Annie's garden, Open-air stage, Worm farm, Secret garden, Greenhouse and propagating area. Scale: 0 10 20 40 80 Feet

Photo Credit:
1- http://www.healingland-scape.com/
2-http://www.eastriding.gov.uk/social
3-http://www.bevan-lodge.com
4-http://www.kuris.com

Credit:
Plan:
Cooper Marcus & Barnes, 1999

Painting and photo:
http://www.lucasgarde-s.schools.nsw.edu.au/

Volunteers constructing toolshed for nursing home garden. Photo credit: http://www.news.cornell.edu/Chronicle/03/5.1.03/garden_

Horticultural therapy
Photo credit: http://www.hort.vt.edu/mastergardener/health.html

Aquisition / Implementation Mechanisms

Many examples of healing gardens were initiated by strong leadership but were implemented through a strong community process. Exterior spaces of healthcare facilities have been overlooked for quite a long time and the budgets alone of these facilities often cannot support the creation of a therapeutic landscape.

Of the case studies I have read, most gardens were funded through private donations and grants, often gained through long fundraising drives. Likewise, the construction of many of these spaces has relied heavily upon volunteer input. Many facilities have implemented the healing garden or gardens slowly by converting left-over or underused exisiting spaces one at a time.
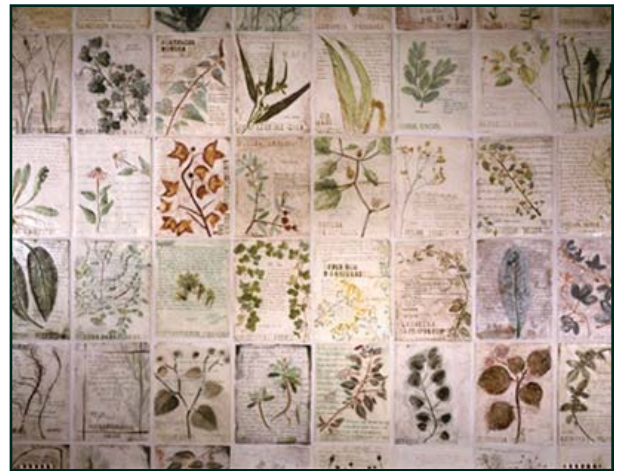
Tile wall created by patients, Mount Zion Clinical Cancer Center
Photo credit: http://www.annchamberlain.net/public%20art/healing%20garden/healing%20garden1.html

Photos and Plan Credit:
Cooper Marcus & Barnes, 1999

Case 3: Graham Garden, Saanich Peninsula Hospital, Vistoria, British Columbia, Canada

The garden for this facility was desired for some time, but was only implemented in the mid-90's. It is located in between the two extended-care wings of the hospital. Approximately 90% of its users rely on wheelchairs, and about half of the population has some form of dementia. The main design philosophy was to create a welcoming space that could be used for exercise, gardening and an escape from the normal nursing home routine.

One major element in the garden is a dry stream with a wooden bridge; this compnent gives visual depth to an area that must be level for accessibility. Other elements include: a fire pit, wheelchair accessible planters, sculptures that reinforce wayfinding for confused users, a pergola walk, and a gazebo resembling a country market stall. Seasonal plantings encourage people to get outside when weather pemits. The design highlights rural views of small wild ponds and mountains.

The advantages of this site include the design's reference to the larger landscape and features that emphasize comfort and accessibility for all users (Cooper Marcus and Barnes, 1999).
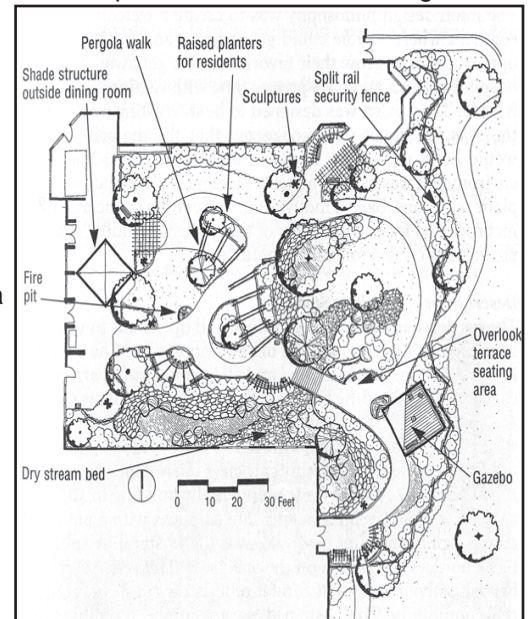
Spatial Layout Pattern:

Healing gardens depending on their accessibility by the general public, could provide necessary open space for users living 1/4 to 1/2 mile away, the minimum area from users as specified by the City of Seattle.

Ideally all healthcare, extended-care, and disability-focused centers should provide some form of a healing landscape. Since many ill, disabled and elderly users may not be able to physically use the space during the colder months in Seattle, care should be taken in the siting. Integrating indoor and visually accessible outdoor spaces (that can be physically accessible in warmer months) is often the best choice. Paying attention to the location of seating as it relates to the elements, especially sun and wind within a site is likewise important.
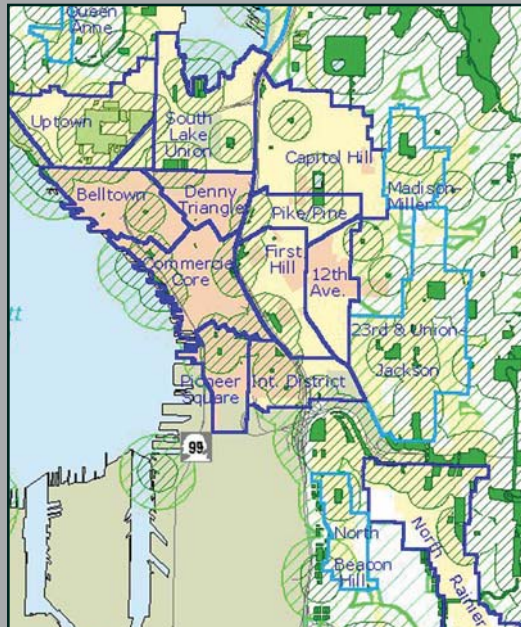
Indoor restorative environments linked to exterior spaces is important for wintertime use

Photo credit: http://www.members. aol.com/jdjandsje/greenwich/ around_hospital/

Resources:

City of Seattle Parks and Recreation. 2001. "An Assessment of Gaps in Seattle's Open Space Network". website: http://www.seattle.gov/parks/open_spaces/ gap_analysis_report.htm.

Cohen, U. and G. Weisman, 1991. "Positive Outdoor Spaces" in *Holding onto Home: Designing Environments for People with Dementia.* (pp. 73-79). Baltimore: John Hopkins University Press.

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Lucas Garden School website: http://www.lucasgarde-s.schools.nsw.edu.au/.

Ulrich, Roger S. 1981. "Natural Versus Urban Scenes: Some Psychophysiological Effects." *Environment and Behavior*, 13 (5): 523-553.

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"One of the most delightful things about a garden is the anticipation it provides."
W.E. Johns

"Nature trail" at Lucas Gardens School.

Photo credit: http://www.lucas-garde-s.schools.nsw.edu.au/mobility.htm