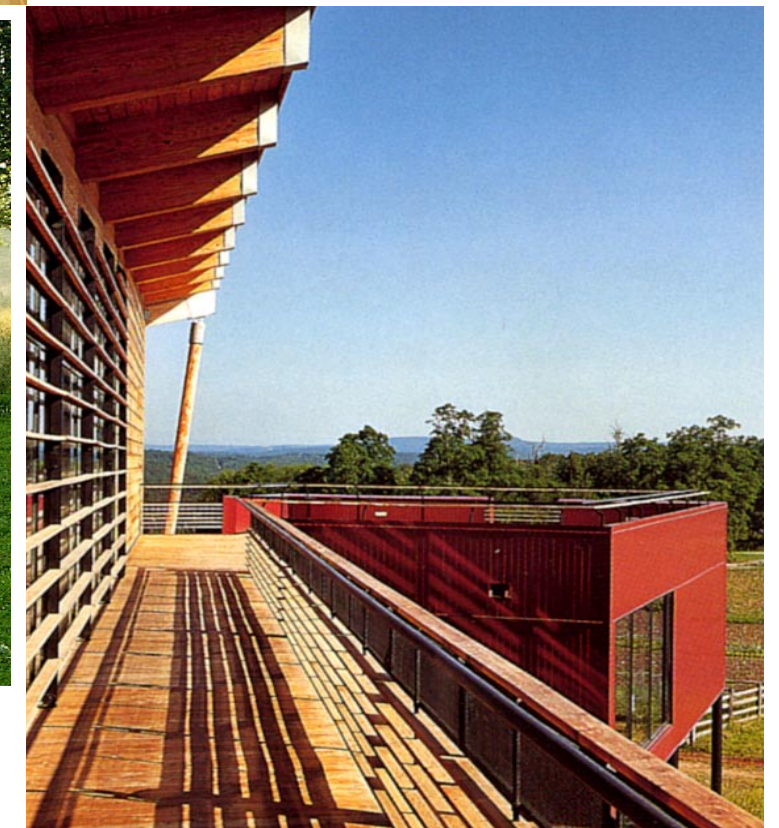
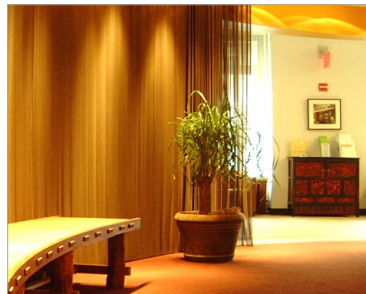


buildings that heal

the use of
energetic criteria
in the design of healing
environments



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buildings that heal: energetic criteria for healing environments

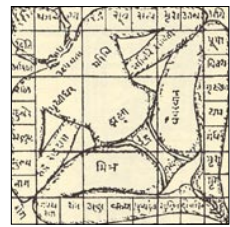
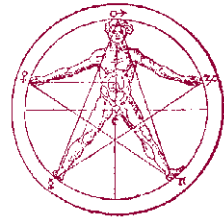
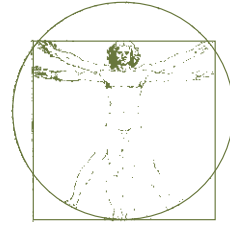


Healing is the process of re-establishing harmony within the organism. Illness implies a loss of this balance and the need for reintegration with the body's natural ability to heal and regenerate. Healing cannot be understood in isolation from the factors that operate in the dynamic life of an individual. These include the self, the family, the community, the environmental context within which life is carried forth, and the world of spirit or essence. Healing is dependent on reestablishing successful relationships and developing reciprocity between these factors. In fact, healing is not a process of curing or fixing, but rather a return to balance between all of these components. Health, therefore, is understood as the presence of this balance; illness is its lack.

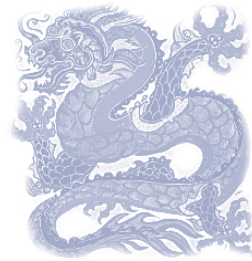
Far from being inert containers, spaces can be understood to be fully participant in the healing experience. It *IS* possible to conceive and create structures that heal. Contrary to established belief, I see technology as only one aspect of this process. Although materials, structure, and equipment are part of this endeavor, equal footing can be granted to the land, the natural world, the community, our ancestors, and the spirit in all of this. Working with the totality of these forces can result in conscious co-creation of spaces that are not only useful, but which are vibrant and alive, and therefore capable of their own contributions.

This booklet represents an attempt to summarize my findings on the role of planning and architecture in the healing process. I have sought to convey the beauty and joy of my practice as a geomancer and feng shui practitioner through examples in which I have had the good fortune of being involved. I hope that you too may find inspiration and guidance from this.

metaphysical principles



THE ANTHROPOCOSMOS
The structure as a living entity has found many cultural manifestations: DaVinci's man as measure of proportion, a Renaissance ideal of man as symbol of alchemical transformation, and the Vedic Purusha of India. In all, space is the embodiment of cosmic man.



THE GENIUS LOCI
The spirit of place has been represented by many allegories. The dragon is by far the most common; it refers to the changing qualities of this spiritual force in the land. Others include the snake of Pre-Columbians, and the Sovereign Lady of the early Europeans.

■ A healing structure can be understood as a *holographic projection* of the larger cosmos and of its universal laws. This is because personal healing cannot be seen in isolation from the whole. Healing structures must therefore reflect these universal laws, embody their energy, and never stand against them. Holographic thinking postulates that every manifestation of reality is a reflection of the larger totality of existence and that the whole is contained in the part and vice versa. Based on metaphysical principles, holographic thinking is also connected to modern principles in physics and cosmology, most notably systems theory, field theory, chaos theory, and Rupert Sheldrake's morphic resonance

■ A healing structure is an *anthropocosmos*: it must reflect its relationship to the body of the earth and to human potential in its four aspects: body, mind, spirit and feeling. This concept argues that the larger reality is holographically related to the human body and to the body of the planet. It also argues that a structure is like a body: alive, conscious and responsive. Anthroposophy was used extensively by the Greeks. In the Orient it is related to the chakras of the body's energy field and the *Vastu Purusha* of the Vedas. This concept is also related to Da Vinci's, Serlio's and Palladio's notions in architecture, as well as to Pythagoras and therefore to all of sacred geometry. Notions of anthroposophy have ruled city planning and site planning for millennia, most notable in Medieval Europe, China, and Japan. This concept refers to both the form as well as the purpose of the structure and is related to the concept of the holographic universe.

■ Healing is achieved when an individual reestablishes balance within him- or herself and in concert with the spirit of the land, also known as the *genius loci*. The latter is the essence and power of the land. It refers to the energies which are specific to the site and which need to be honored in the process of planning and building. These include rocks, land formations, trees and vegetation, wildlife, and the spirit that animates them. This, furthermore, can only be achieved in concert with the *historical context of the land*. Building on sites that have been used as burial grounds, or which have seen traumatic events such as war, death, suicide, or crimes can have a detrimental effect on health and recuperation.

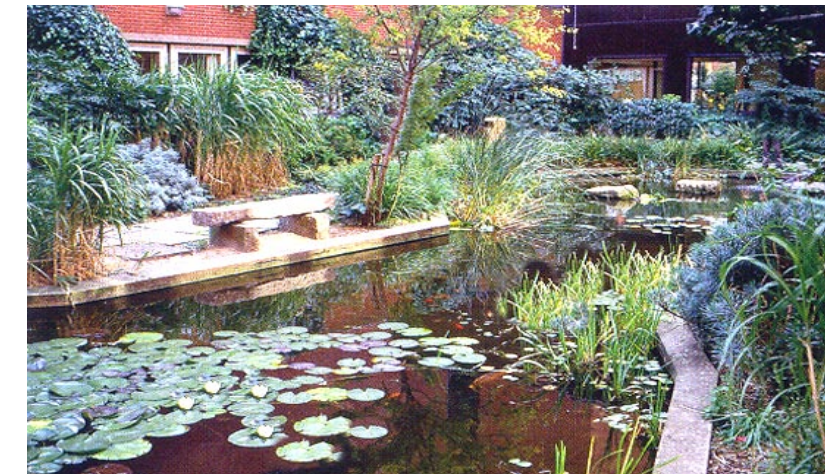
■ Form follows both *function and spirit*. A healing structure mediates between the Material Realm and Universal Reason (spirit or soul). It thus lies at the intersection of technology and spirit, science and compassion. Form must be considered in relation to its sacred and spiritual purposes.

■ A healing site is by its very definition a *sacred site*. Design should reflect this truth. The participation of spiritual forces in the healing process can be invoked through the construction of chapels, shrines, labyrinths, monuments, fountains, or pagodas.

■ *Sustainability* has spiritual as well as technological dimensions. Buildings hold a responsibility to Nature, Universal Reason, the *genius loci*, and the community's values. They should not cause damage through intent, ignorance, neglect, or inertia.

■ Therefore, a healing structure holds responsibility to:

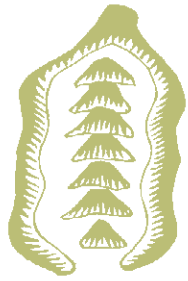
- (1) *The Community*: to educate, to inspire, and to act as the repository for wisdom into the future generations;
- (2) *Nature*: to preserve and care for all of life and its material resources;
- (3) *Spirit*: to exalt all that is highest in human aspiration and intellect.
- (4) *The Site*: to preserve and honor the land and its ancestry.



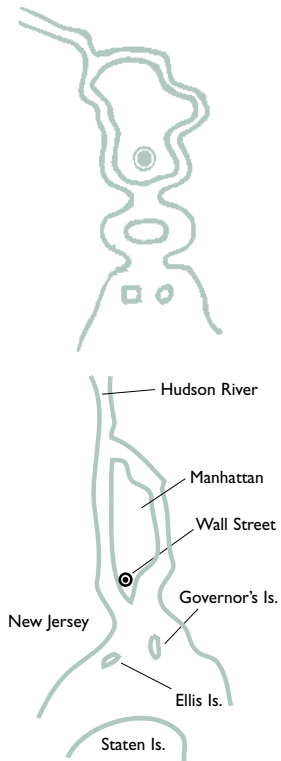
All of the spaces illustrated here have one thing in common: the ability to heal their users. They achieve this through a combination of design, intent, and geomancy.
From top: Trellised walk in Ayurvedic farm, Valle de Bravo, Mexico; Healing garden and pool, St. George Hospital, London; Therapeutic horse riding stable, The Center for Discovery, Harris, NY; Healing garden, Kartause Monastery, Turgau, Switzerland; Retention pond at the Patrick H. Dollard Discovery Health Center.



site evaluation & planning



THE EARTH DRAGON
Ancient Chinese manuals categorized superb sites ("dragon nests") according to poetic names: the one above is called "ascending ladder to the sky" and represents seven or more mountains surrounded by a protective range.



THE WATER DRAGON
Analysis of a site includes both land form and water patterns. In the example above, a diagram from a feng shui manual for an auspicious river site is compared with Manhattan Island in New York Harbor. The Chinese diagram, known as "running water collects spirit" and published hundreds of years ago, identifies the precise location for the most powerful spot: Wall Street.

- All sites are not created equal: the site itself must partake of the healing power. The notion that healing is independent of the land is based on a misunderstanding of the role of the earth and nature in healing: because we are creatures of nature, the environment is a fundamental component of the healing process. This includes not only the qualities of the air, water, and light, but also that of the earth itself.
- Learning to evaluate the relative qualities of the land for healing purposes is of primary importance in the process of site selection. The healing potential of the site is a function of topography, orientation, earth energy, surface and underground water, and their interaction with building form. Site planning is therefore concerned with land form and massing; rivers, lakes, and ocean patterns; movement of underground water, wind, and light; and movements of energy within the landscape (see following pages).
- The healing potential of a site is finite: the first user capitalizes on the lion's share. This is a consequence of the cycles of generation and degradation in Nature. Just as crops require rotation to preserve the power of fertility of the land, so architectural development must learn to respect the processes that preserve the natural healing potential of a site.
- Honoring the *genius loci* (spirit of the land) is a fundamental part of site planning. This is achieved through conscientious building practices, building rituals & earth healing. Building rituals have been part of the building trades for thousands of years. It is important therefore to bring back these forgotten components into contemporary practice.
- Excesses that draw from the site rapidly deplete its power to heal. This is at the heart of the rise and fall of institutions and civilizations. A healing structure that is overburdened with excessive excavation, construction, electromagnetic loads, or which is unconscious of the role of the genius loci in the process of healing will deplete a site much more rapidly than one that is gentler on the land, respectful of its spirit, and mindful of its vulnerabilities.
- Once depleted, a period of rest is necessary for the power of the site to regenerate. The nature of this rest period is directly proportional to the degree of abuse inflicted. Unfortunately, modern technology has dramatically increased the levels of damage inflicted on the land and made recuperation more difficult.
- Structures that are respectful to the land in terms of their siting, form, materials and processes, help to conserve the site's potential for future generations. Architecture must be mindful of this potential to foster cultural integrity over large periods of time.
- Surrounding features (natural or man-made) have an impact on the performance of the site, not only for health and healing, but for prosperity as well. Healing structures cannot be located in isolation from their surrounding communities, landscapes, or other architecture. A harmonious external environment has a direct and immediate impact on the potential of the site. Auspicious features include moving water, verdant landscapes and gardens, open space, topographical and urban landmarks, and mythological and symbolic representations of the power of life such as monuments, artworks, and parks.
- A healing site must avoid harsh and damaging environments such as nuclear power plants, heavy industry, cemeteries and crematoriums, military installations, and even government offices such as police stations and jails. These functions are incompatible with healing.



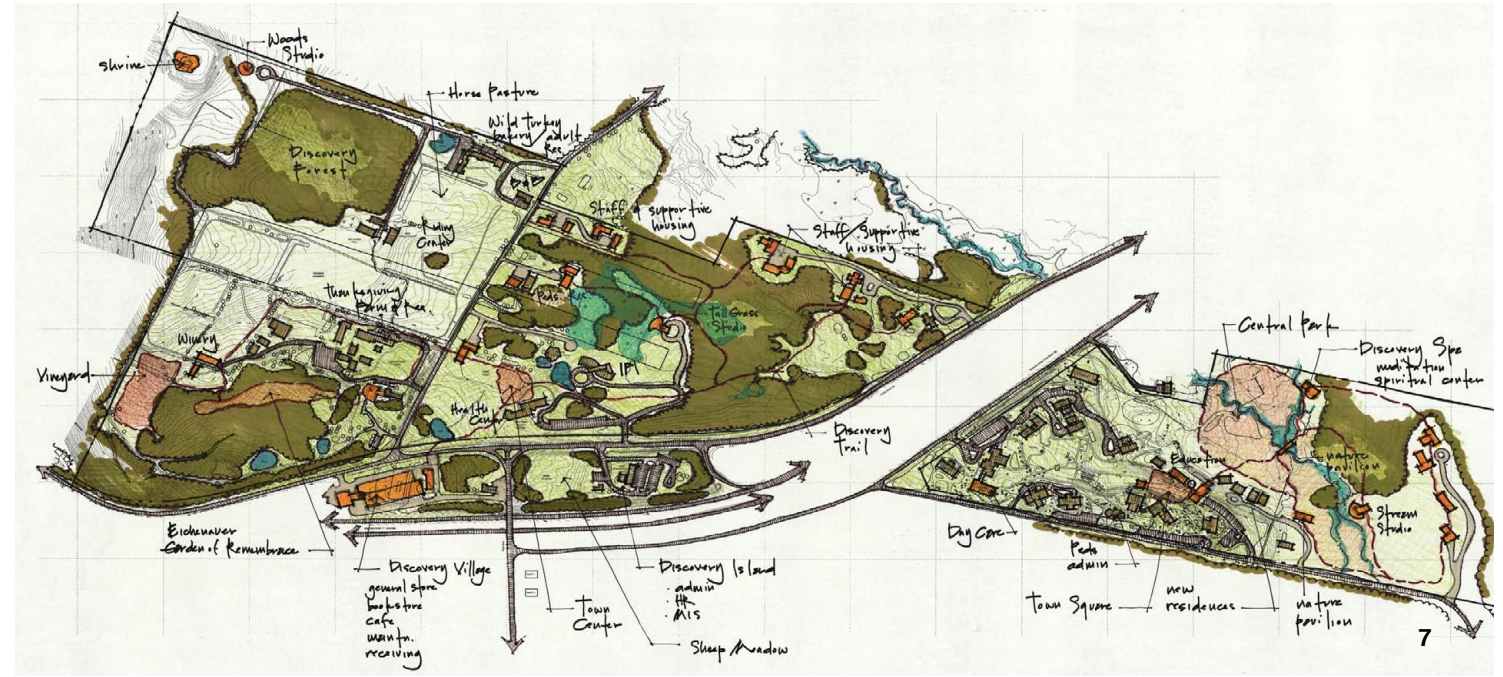
AN URBAN SITE

Urban situations require analytical tools that have been borrowed from the study of natural environments. Many of the rules that apply to water dragons, for example, also apply to streets and parking (opposite). However, the very harshness of the city can create problems not foreseen by the sages of antiquity. Bridges and overpasses, for example, carry damaging forces that are incompatible with healing. Above, the Brooklyn Bridge; at right, Maimonides Medical Center in Brooklyn

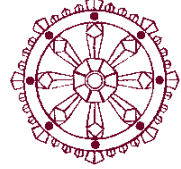


A RURAL SITE

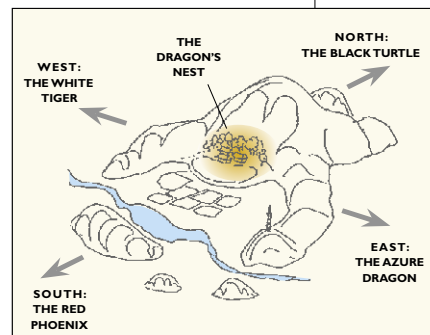
This site is an example of enlightened planning in which a large parcel of land (900 acres) was carefully studied in order to maximize building potential while preserving natural watersheds and forested areas. Master planning made extensive use of geomancy and feng shui techniques. Despite being a pristine environment, the land required much healing, as it was nevertheless compromised by a major highway that bisects the property, and by its previous use for animal slaughter.



topography & orientation



ORIENTATION & LUCK
Traditional peoples often believe that orientation determines fortune. The Pakua of feng shui is one such case (top), but similar concepts have existed in ancient Greece, India, Africa, & Native North America.



THE ARMCHAIR
The armchair formation of feng shui emphasizes the need to protect the site (the "dragon's nest") from behind and from the sides, and for a focal point in the distance. Flowing water nourishes this ideal site.

- The placement of a structure on the site must consider its orientation in relation to land masses, river systems and building form. The configuration of land or building masses is most important: a site should be protected from behind by higher ground or higher buildings. Lower protection should also be present from left and right. The site should also enjoy a focal point in the distance. This configuration, known as the *armchair*, applies to both land masses and groups of buildings, and is illustrated below.
- Sites located in the middle of a slope enjoy positive *sheng chi* and have an advantage over sites on the top or bottom: lower wet lands have stagnant *ssu chi*; wind-swept hilltops have damaging *sha chi* (see *useful terms* on page 22).
- The site should exhibit balanced land and water formations: too much or too little water can be detrimental to health. Avoid building on or near flood plains, in damp or windy locations, or near dumps or spillways, especially if they contain polluted materials.
- Rivers and streams that encircle the site have nourishing *sheng chi*. Water that glances or aims at a site has destructive *sha chi*. A location above a confluence of streams is good, as is the head of a bay. However, locating on an exposed point can be detrimental.
- Locate your building in an area that shows evidence of "dragon veins" (green areas with abundant chi on the earth's surface). These have abundant life-affirming energy. Land forms that encourage healing are smooth, rolling, and with vibrant vegetation.
- The site should be protected from damaging *sha chi*: ridges, gorges, large outcroppings, jagged rock, turbulent rivers, waterfalls, wind tunnels, fast roads, and intersections. Avoid locations in line with streams or roads. These all impact negatively on healing.
- Similarly, bridges, viaducts, highway ramps, canals, power plants, high-tension wires, and high-rises can be harmful, especially if they aim at the site or loom over it.
- Look out for forms in the landscape that resemble beneficial forms or symbols. Avoid land that resembles threatening forms. Do not place your building under a ridge, rock outcrop or tall mountains, near buttes, hill tops, hills shaped like broad couches or upside-down boats.

■ Compass directions have inherent meaning and can influence the outcomes of functions and procedures exposed to them (e.g. north is better for recuperation, esp. for kidneys & bladder; south better for activation of weakened functions, esp. heart, mind, or large intestine). Hence, different orientations on the site can have different healing potential for the same architectural design. The study of the interactions of these forces in time is known as *flying stars* feng shui.

■ Specific functions within a structure have inherently favorable locations, both in terms of their orientation as well as their location within the footprint. (e.g. the areas located at the rear center of the structure enhance recuperation of heart, mind, or large intestine conditions, regardless of direction).

- There is interaction between orientation and building form. Good design must consider both. These influences are not fixed in time: change occurs in cycles of hours, days, months, seasons, years. It is important to study the *flying stars* of the structure in order to make periodic adjustments.

UNFAVORABLE SITES

Bellevue Hospital in New York City (at right) is adjacent to a major highway and has no protection from behind or from the sides. In also has to contend with aggressive *sha chi* of the bridges and viaducts in the background. There is no vegetation and the site shows signs of urban depletion, lowered earth energy, and geopathic stress. Despite beautiful views of Lake Superior, St. Mary's Duluth Cancer Center's main entrance (below) faces an aggressive escarpment and a parking facility that looms over it.



FAVORABLE SITES

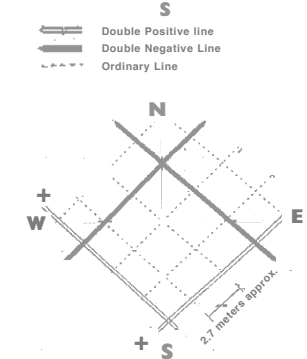
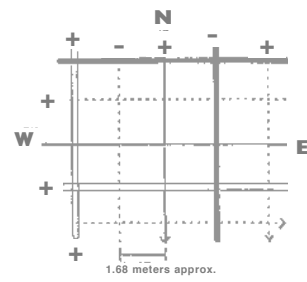
The Andrus Retirement home in Westchester, NY (below) faces south and is well protected from behind. To either side higher ground is also present. A garden provides a reservoir of earth energy. Water encircles the site and helps to enhance its power to heal as well as its financial potential. (A south-facing site such as this one is also favorable for financial reasons). Because south is the area of the compass which rules maturity & enlightenment, this site is well suited for the age group which it serves. The XVIIIc Kartause Hospital in Turgau, Switzerland, (right) also faces south and is located on a favorable slope. Underground water surges below the site but does not reach the earth surface (a "blind" spring), augmenting its healing potential. In addition, the site was developed with a great deal of respect for nature and local history and is a symbol of community pride.



land energy & earth healing



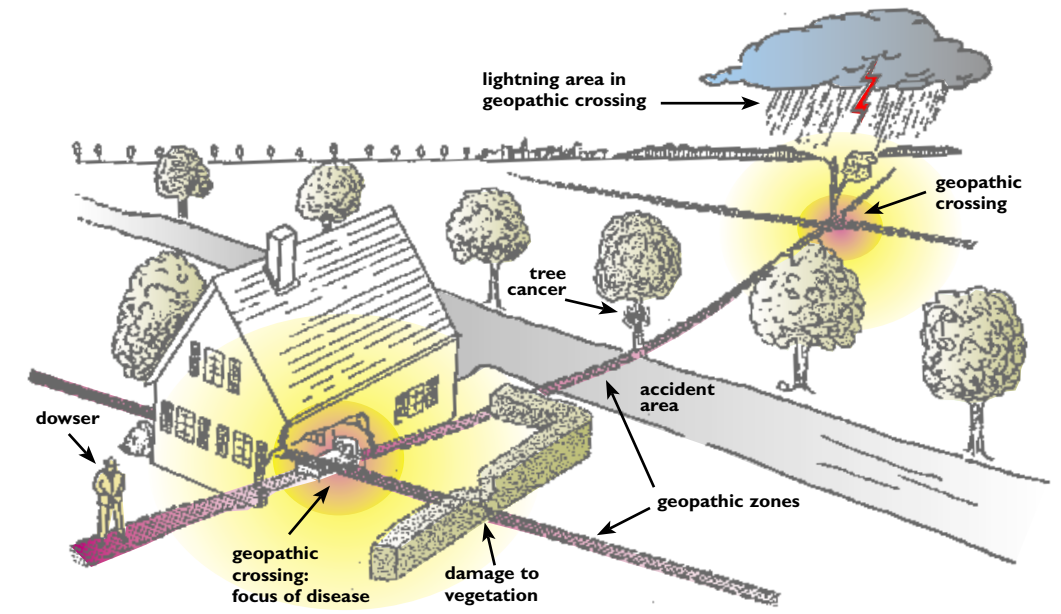
GLOBAL LEY LINES
Ley lines are lines of earth energy that can traverse huge distances. One of the longest lines discovered to date is the Apollo/St. Michael line that connects Skellig Michael in Ireland with Mt. St. Michelle in France (top), and the Temple of Apollo in Delphi, Greece.



GLOBAL MAGNETIC GRIDS
The German medical dowzers Ernst Hartmann and Manfred Curry have postulated the existence of magnetic grids that encircle the globe and which can have a significant impact on human health. The Hartmann grid (top) runs north-south and east-west. Curry's grid runs at a 45° angle to Hartmann's.

- The life force on this planet is the result of *cosmic energy* streaming into our planet from the sky and its interaction with the *biosphere*. This vast complex of energies that cross over the surface of the globe is fundamental to life, healing, and recuperation. This array of vibrations is so fundamental to life that without it life is impossible. Space travel, for example, requires special on-board resonators that mimic the frequencies of the earth, otherwise bone density is quickly lost.
- The energy of the globe is contained in the land, it is distributed by the topography, and held in reserve in mountains and lakes. Earth energies change with the seasons and are influenced by the phases of the moon, solar flares, and ambient temperature.
- Traditional peoples have chosen to conceptualize this energy complex as a *web of energy lines* interspersed with areas of rising or sinking energy. Earth energy is distributed by these energy lines, which are similar to the meridians of Chinese acupuncture. These include *ley lines* and *dragon veins*, which are concentrations of energy that follow discreet paths. Sites too removed from these lines have less potential for healing.
- Earth energy lines sometimes cross, forming *energy crossings* which are locations of vast potential for healing. Many temples and healing structures in the ancient world were intentionally located on such powerful places. The power of these sites was often associated with the *genius loci* (see page 4) and exalted in folk tales and myths.
- *Power spots* are localized concentrations of energy which may or may not be related to energy lines. Although residential use is discouraged on such powerful sites, they are the most desirable location for a healing structure. Traditional healers prefer to work on such spots as the healing potential of these places is unsurpassed.
- There are certain normally-occurring conditions in which earth energies can become injurious to human health. These include areas of magnetic deposits or underground streams. Earth energies can also be rendered harmful by human activities such as blasting for foundations, mining, and war. Known as *geopathic stress*, these forms of trauma to the earth are becoming ubiquitous. Research has linked geopathic stress to many illnesses, including cancers, immune disorders, sudden infant death syndrome, myalgic encephalomyelitis, arthritis, and rheumatic disorders. Because these forms of energy can be seriously injurious to human health, curing and controlling geopathic stresses is of fundamental importance in site planning.
- Geopathic stress can be cured with *earth healing* if the trauma is not too great (see opposite). Stone or metal monuments, crystals, and special rituals are sometimes used to perform *earth acupuncture* (see page 11). However, it is always best to locate healing structures in areas free of such negative influences.
- Earth energies interact with the *global magnetic grids* to create areas of greater or lesser potential for healing. Unlike earth energies, which are manifestation of geological processes, *magnetic grids* are created by the magnetic polarity of the earth. These are conceptualized as a regular grid of polarized lines that circumscribe the planet (diagrams at left). Under certain circumstances the lines in these grids form *negative crossings* which can be harmful to humans and should be avoided.

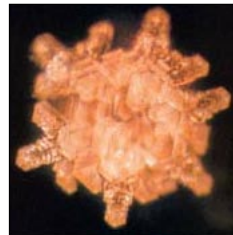
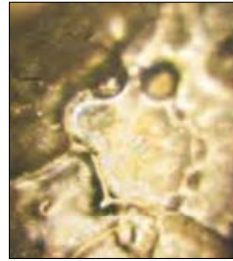
GEOPATHIC STRESS
This diagram illustrates the main criteria for geopathic stress diagnosis. Lines of compromised earth energy (in red) criss-cross the landscape, causing damage to hedges and cancer growth in trees. Geopathic zones are also notorious for the accidents they seem to attract. Wherever two lines of geopathic stress cross, lightning strikes are more likely and sickness is often found. Besides these and other diagnostic signals, geopathic stress is readily detected through dowsing, a technique that makes use of devices to amplify the dowser's own natural sensitivities.



EARTH ACUPUNCTURE
Cures for geopathic stress include earth healing techniques such as Earth Acupuncture. In the photo at right, a group of volunteers at The Center for Discovery pause after construction of a cairn (stone pile) used to anchor one end of a ley line. The boulders below anchor the other end. In both cases the cairns and boulders were used to connect two areas of the property that had been separated by the construction of a highway, which had caused massive geostress across the entire site.



the healing power of water



WATER MIRACLES
The Japanese researcher Masaru Emoto has taken laboratory photographs of water crystals. He discovered that polluted water from Fujiwara Dam (top) crystallized differently after a prayer was offered (second from top). Additional photos show the effects on the water crystals of such phrases as "Thank you", "I will kill you", and a Tibetan Sutra.

- Water is symbolic of the vitality in life and is key to the sacredness of a healing site. Water can be metaphorical of peace, tranquility and calm. Conversely, it is also associated with vitality, fertility, abundance, fluidity and movement. Water opens up the contemplative nature of the soul and helps to elicit memories and a sense of belonging. Because water is a feminine energy, it is also associated with the land and with the *genius loci*.
- Water helps to distribute vital *sheng chi* throughout the landscape, both as surface rivers, creeks, and lakes, as well as in underground streams. This force can be tapped by enhancing naturally occurring water in site planning or by introducing it into the site or the structure in gardens, water features, and vistas.
- **Surface water** has the ability to enhance both healing and prosperity, provided it is located on the proper direction in relation to the building and the site. Geomantic practices the world over (such as feng shui) refer to ideal locations for water in the landscape
- Surface water can be incorporated into a site in many ways: as a gushing stream in a fountain it is symbolic of the life force, of surmounting obstacles, and initiating new life. As a slow moving, meandering stream or creek, water is symbolic of the river of life and our personal life path, and is also allegorical of progress and attainment. As a waterfall, it is symbolic of a leap into the unknown, of courage, and triumph over fear. As a still pond, water is symbolic of contemplation, of the soul's yearning for truth, renewal and healing.
- Water that disappears into the earth, a cave, or crevice is allegoric of the cycles of life and death and can be a reassuring symbol of our ability to overcome even the most dire circumstances. Adding a bridge over moving water is a powerful symbol of our ability to overcome obstacles. It also helps to define our journey within the landscape and to create a sense of natural transition into more pristine environments.
- **Underground water** (rivers, aquifers) have the potential to greatly augment the healing power of a site. These can be reliably located by *dowsing*. Dowsing is a time-honored skill which allows its user to perceive energies such as underground water despite the fact that they cannot be seen. Experienced dowsers can locate underground water on site or remotely using maps.
- Water that rises towards the surface from below the site is particularly beneficial. If the water does not break the surface it is called a *blind spring* (see photo opposite).
- Underground water, like the energy lines, can also be traumatized; *geopathic stress* often involves compromised underground water known as *dark streams*. In such cases it is necessary to perform earth acupuncture in order to heal the problem. As with other forms of geopathic stress, it is important to cure or avoid such areas as they have been implicated with many serious medical conditions.
- The quality of water is of great concern in geomancy. This not only includes the potability and cleanliness of this valuable resource, but also its energetic integrity. There is growing evidence that water is capable of carrying spiritual information and that unless managed consciously, it can lose its power to nourish, regenerate, and heal. The illustrations at left demonstrate how ordinary water can change its crystalline structure in response to verbal stimuli.



UNDERGROUND WATER

Underground water was part of the site selection criteria for many of the world's ancient healing sites such as Santiago de Compostela and the temple of Apollo in Delphi. At the Kartause Hospital in Turgau, it is allowed to surface naturally (above). In the nearby town of Bischofszell, a labyrinth marks the spot where underground water rises to the surface but does not break (a "blind spring")



SURFACE WATER

Moving water in view of a structure can augment its capacity for healing and prosperity. Although this analysis requires a knowledge of compass feng shui, water can be activated in fountains, waterfalls, and internal pools and water features. Above, a retaining pond at the Center for Discovery; below, the Jardin d'Horta in Barcelona; at right a chapel fountain at Woodwinds Hospital in Minneapolis.



the healing power of gardens



SEASONAL COLOR
The beauty of a garden is made manifest as a transition of life forces in time. Using the metaphorical power of seasonal changes, this single flower bed shown during a one year cycle, can be a powerful symbol for regeneration and rebirth.

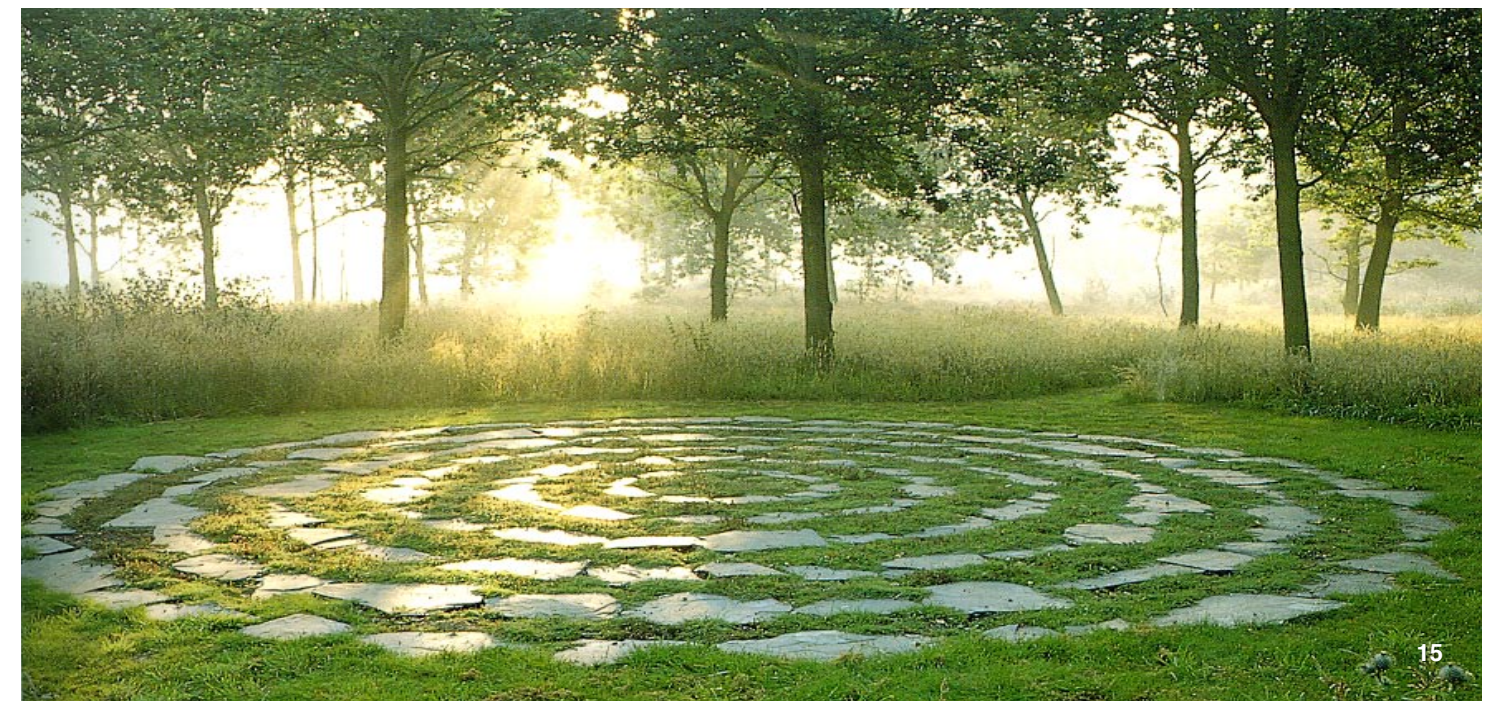
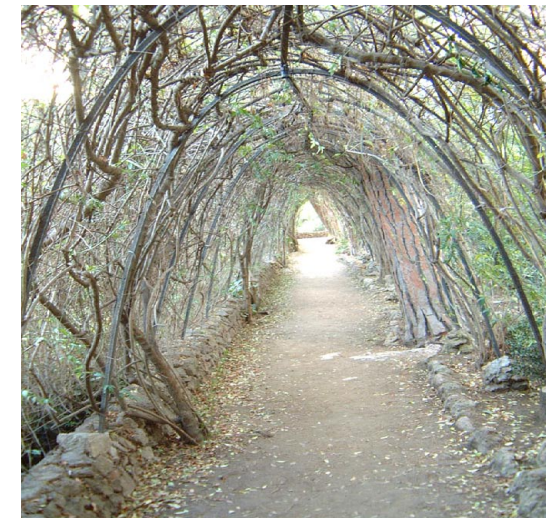
- A healing garden is a link to the divine, to the creative force of the Cosmos. A healing garden needs to work with Nature and its forms: it should discourage rigidity, conceptual thinking, and preconceived notions of design. It must recognize the polarities and organic forms present in nature. Consequently, it needs to avoid straight lines, sheer volumes and planes, and excessive use of symmetry.
- A healing garden is a microcosmos of the larger world: each feature in the garden has the power to represent a larger feature in the landscape: mountains, rivers, lakes. It is through this holistic modeling that a healing garden can stimulate the senses, improve vitality, and promote recuperation from physical, emotional, mental and spiritual illness.
- A successful healing garden is a co-creative process in which humans and Nature are intimately connected through the bonds of reciprocity and stewardship. A healing garden is a symbol of the possibilities, obstacles, and hardships that need to be overcome in order to reach higher levels of consciousness and a sense of our own divinity and interconnectedness with all that is. This potential allows a successful garden to have a healing role even in those situations where physical healing is not possible. Consequently, its users should be a driving force in its design and should be involved in its maintenance.
- Healing is achieved through careful alignment with the forces of earth, water, air and fire. It implies a recognition of orientation in space in a cosmological sense, and of the anthropocosmic relationship between man and the larger body of the planet (see page 4), its creatures, and the invisible forces behind material reality. It can also include formal religious allusions as well as iconographic additions. Its end product is a space where many activities are possible: stillness/movement, contemplation/interaction, wonder/discovery, mystery/creation, relaxation/work.
- Gardens should encourage healing through the interaction of patients with healers, family and friends, the old with the young, staff and colleagues, and even the act of being in solitude. The garden also needs to provide subspaces and seating arrangements that allow gathering in larger groups. It needs natural, spatially enclosed settings for talk and conversation. In all cases, however, there is also the interaction of humans and nature: plants, wildlife, and the forces of wind, water, light, and color.
- A healing garden should afford opportunities to make choices: private areas and public spaces, contemplation and people watching, various walking routes, different kinds of seating, interaction with humans and nature, participation in the garden's maintenance.
- A healing garden should allow its users to experience a sense of control: users must know it exists, how to gain access to it, they should be able to use it in ways they prefer. They should enjoy a sense of physical and psychological security. Design should encourage clarity of layout and movement. The garden should provide a sense of enclosure and a special entrance to convey a feeling of structure, permanence and groundedness. It should avoid dead end paths and complex formations.
- Design needs to create opportunities for movement and exercise; this brings physical and emotional benefits and helps to combat depression. Create paths for walking, make the garden visible from corridors that can also be used for exercise, place rehabilitation units in view of the garden or nature, add a walking or jogging route for staff.



PLACES TO BE TOGETHER AND TO BE APART
Gardens derive their healing potential from the interaction of humans with nature, the community, and the self. Gardens should therefore accommodate a variety of groups and activities. Above, the beer garden at the Turgauer Retirement home in Frauenfeld, Switzerland. At right, a labyrinth and meditation garden at the Kartause Hospital

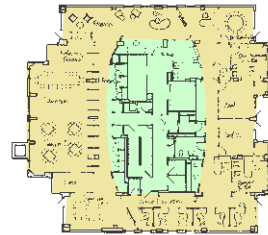


PATHS, WALKS, AND EXTERIOR ROOMS
Gardens act as a microcosmos of the larger world in which a rock can represent a mountain, a fountain a river, and the garden an entire region. Conversely, because gardens are holograms of more intimate realities, paths, walks, and enclosures can also symbolize the journey of life and the discovery of the self, rebirth and regeneration. These photos show the gardens in an Ayurvedic farm in Valley de Bravo, Mexico;



architecture & building form

- Excellence in architecture is of primary importance in helping to foster health and healing. Harmonious, well-balanced environments help to reduce stress, capture the imagination, and liberate vitality and creativity, all of which enhance healing. Harmony in design can be achieved through a combination of harmonious proportions, clear layout, smooth energy flow, and nourishing *sheng chi* (vital force).
- Clarity of layout and form have an impact on the healing potential of the structure. Design tools such as the *pakua*, (Chinese feng shui), the *vastu shasta* (Indian vedic geomancy), and western *sacred geometry*, are among the many tools that offer conceptual and methodological approaches. The goal is to create an *anthropocosmos*, a structure that is a living participant in the role of healing (see page 4).
- The healing structure needs to be in harmony with its surroundings: the community, the street, the *genius loci*, and the other buildings in the area. Architectural form needs to recognize this imperative. Although innovation is welcome, form for the sake of aesthetics or dialectics should be discouraged.
- Distribution of functions within the structure must be practical, but should also consider orientation and position within the building envelope. Using the *pakua*, *flying stars*, and *vastu shasta* to determine location can greatly improve healing performance.
- Arrangement of rooms and functions should not be too irregular. Avoid awkward geometries, angled entries and walls, and fractured profiles. Avoid sharp angles and pointed elevations. These generate *sha chi* and can be damaging to community relations and health.
- It is important that the geometry and footprint of the building recognize the relative hierarchies and interrelationships that operate within the institution. Institutional safety and vulnerability can be addressed through design. In general, it is best if higher ranking personnel are located farthest from the entry. Conversely, functional and programmatic allocations can be determined by applying the *pakua*, *flying stars* and other tools.
- Building form should be clear and readily understandable. Levels within a building should be well defined. Ceilings with uneven heights are undesirable unless they help to define space more clearly. Avoid split levels, rooms or atriums with excess height, and rooms that are too cramped or crowded.
- The main entry into the structure is of fundamental importance in determining overall prospects for success. The experience of arrival should therefore include a sense of determination, clarity and welcome. Avoid entrances that are behind the front face of the building. Reception and waiting facilities should be readily observable and easily accessible.
- All rooms should receive adequate light: artificial light should not be needed on a sunny day. However, overly large windows leak nourishing energy and afford poor protection from destructive energy. Avoid buildings with floor-to-ceiling glass windows.
- The building's structure should be clear and rational: buildings that feel precarious or that use structural imbalances for aesthetic effect risk compromising the healing response.
- Avoid plots with irregular shapes. Odd shapes can be corrected with lights, fountains, landscaping, flag poles, or buildings.
- Avoid buildings that have critical functions above or near garages, viaducts, or bridges.



WEALTH & POWER	FAME & RENOWN	RELATIONS & HARMONY
AMBITION & CREATIVITY	HARMONY & BALANCE	JOYS & PLEASURE
IDENTITY & INVENTION	MISSION STATEMENT & CAREER	LEADERS & HELPERS

MULTIPLE ALLUSIONS
The layout of Beth Israel Hospital's Renfield Center for Nursing Excellence reflects the conceptual tools used to define its public and private areas (yellow and green on top); the semi-circular corridors refer to the vesica pisces, medieval symbol of the feminine. The distribution of functions follows the *Pakua* of feng shui (bottom).



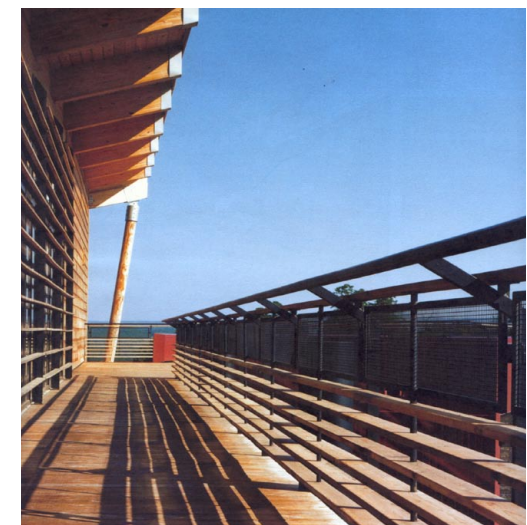
A METROPOLITAN HOSPITAL

Maimonides Medical Center in Brooklyn is currently expanding its facilities. As part of its master plan, a feng shui analysis was requested to determine the suitability of the site, main building orientations and entrances. In addition, materials, colors and decor were also checked against feng shui criteria.

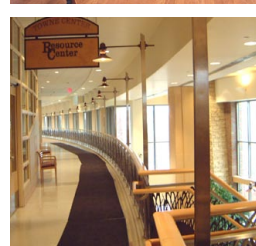
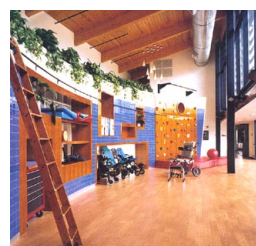
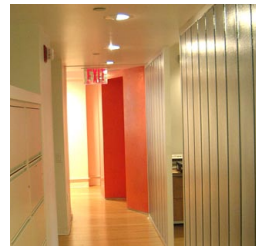
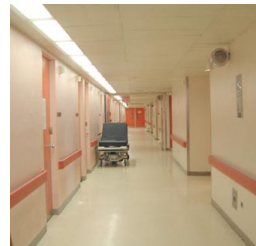
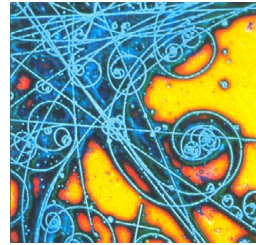


A RURAL RETREAT

The Patrick H. Dollard Health Center at The Center for Discovery was designed to conform to stringent green building and sustainable criteria. In addition, both the master plan and the site plan for this pediatric complex were undertaken with feng shui and other geomantic considerations. The use of water and open fields, to mention only one of many features, exemplify a more organic approach to architecture. Building mass, elevations, and movement of energy also fulfill energetic criteria.



interior design & energy flow



NATURE LOVES A CURVE
As the photo of a bubble chamber demonstrates (top), energy in nature moves in curves and spirals. Long, double-loaded corridors (second) should therefore be avoided. Strategies used in design of corridors include (from third): a visual destination, hallways that harbor functions, and corridors as city streets.

- Good interior design helps to reduce stress levels and increases satisfaction and recuperation. To achieve this, interior layout must encourage smooth flow of *sheng chi* (vital energy). This is achieved by containing the *chi* within the space while allowing it to move where needed. Smooth flow of *sheng chi* within a structure determines the quality of its experience and is necessary for good health.
- *Sheng chi* needs to be captured and brought into the building in order to nourish the functions, individuals and goals contained within it. This energy is captured primarily by doors. The main entry into a structure is therefore known as the *mouth of chi*.
- In order to capture *sheng chi* efficiently, the area located outside the *mouth of chi* needs to be open and should be exposed to as much verdant greenery as possible. It should not be encumbered by obstacles, higher ground, or other objects, forms or structures which carry stagnant *ssu chi* or damaging *sha chi* (power plants, cemeteries, churches, heavy industry, military installations, police buildings, electrical and transmission towers, and even trees). Drives, roads, or sharp objects should not aim at the front entry.
- Once within the building, *sheng chi* must gather in lobbies and vestibules. Entrances and lobbies determine the overall potential of a structure and should be bright, open and cheerful. They should be experienced as areas of calm amidst the flow of energy. Front doors that line up with rear doors or with large windows are undesirable as they allow energy to rush through the space before it has a chance to gather in the lobby.
- Lobbies and foyers need to be cheerful and welcoming and should be generously proportioned. Calming artwork and greenery are essential. Lobbies should always include symbolic or metaphorical recognitions of the healing process: waterfalls, fountains, sculpture, fireplaces, or gardens. Waiting areas should feel welcoming and familiar: include sleepers, private toilets and phones, internet connections, massage, aromatherapy, etc.
- Energy moves along corridors and elevators. Congestion, turns and twists in corridors and hallways slow down energy and create stagnant *ssu chi*. It is important to avoid such situations. Clutter, excess noise, and lack of natural daylight have similar effects.
- *Sheng chi* moves in curved and sinuous paths. Conversely, straight lines carry *sha chi*. Design must therefore avoid long unbroken corridors and uninterrupted planes (see strategies at left). In situation where this is not possible, corridors can be opened up by placing art or mirrors along the sides to make them feel more expansive. Staggered art or plants can also help. Corridors should be lighted as brightly as possible.
- As with main lobbies, elevator foyers and stair landings need to be generously proportioned, and should feel open and cheerful. Open stairs and escalators should be expansive and inviting. Wide, curved, graceful stairways opening onto wide landings are best. Avoid spiral stairs, and stairs that point directly towards the entrance door.
- The position of doors along traffic routes is also important. Avoid doors that open onto walls directly in front of them. Avoid more than two consecutive doors in line along a corridor. Avoid facing doors that are not in alignment. Large doors should open onto large rooms, small ones onto smaller rooms. The opposite is detrimental.
- Avoid layouts with sharp corners, angled walls or entries, and irregular geometries.



INTENSIVE CARE, INTENSIVE HOSPITALITY

The Woodwinds Hospital in Minneapolis attempts to provide state of the art technology with open hospitality. Operating rooms, shown at right, include relaxing graphics and slide projection screens for patient's distraction. ICU units include sleeping facilities for families, and headboard panels that can conceal equipment from view. The facility also boasts a branch of the town library, and a public restaurant, all within the building.

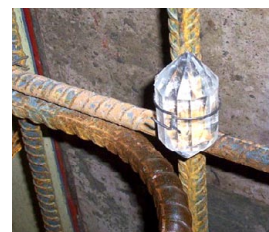


CURVES, CURVES, CURVES

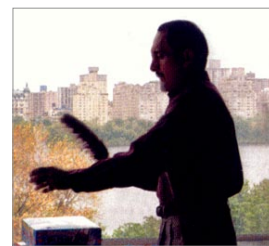
Given the extensive use of corridors and hallways in hospital design, it is important to encourage good energy flow. Beth Israel Hospital's Renfield Center for Nursing Excellence (above), the new ICU at Bellevue Hospital (right), and the Continuum Center for Health & Healing (below) show curved profiles in walls, furniture, and decor.



building practices & rituals



EARTH HEALING
Site preparation often requires rituals such as Earth Acupuncture to cure a damaged site. Typical approaches may include the installation of rough stone cairns (top), or precision-cut crystals within poured concrete.



SPACE CLEARING
Space Clearings are used to prepare a space for occupation, to revitalize it, or when an unfortunate event requires a cleansing. Clearings can be very elaborate and its rituals often include multiple offerings.

- The role of geomancy does not end with the design of the structure. In fact, many of its more useful techniques deal with corrections to the problems uncovered in the site analysis, such as geopathic stress, burial grounds, or historical trauma. In addition, emphasis is placed on protecting healthy sites from the construction process itself, which can cause disruptive effects upon the very energies we depend on for health and recuperation.
- To further this aim, *building rituals* are used to enhance the potential of the site and structure, protect from misfortune, and increase its healing capacity. They are also used to counteract a poor history of performance in previous uses of the land or the structure (see below). They can also help to galvanize the community around the planning process.
- *Ground-breaking Ceremonies* are building rituals that honor the *genius loci*, the ancestral forces that reside in the land, the ancestral forces associated with the client institution, and those that are particular to the healing modalities represented in the facility. Ground-breaking ceremonies are typically festive affairs and have a certain public relations appeal.
- *Earth Healing* is a building ritual used to cure the site of trauma inflicted by historical misuse (wars, crime, neglect, burial grounds, etc.), and by geopathic stresses, either from underground mineral deposits, black streams, or compromised ley lines. There are many variations in these rituals. Techniques include the use of cairns (rough stone piles) and *earth acupuncture* with metal rods and stone monuments (the pagodas of China and the Obelisks of Egypt are examples of this craft). In more recent times additional techniques have been perfected using mirrors or precision laser-cut crystals (see photos at left)
- *Space Clearings* are rituals used in preparation for occupancy, as a way to renew the vitality of existing spaces, or as a way to cleanse the spaces from unwanted energies after events such as death or accidents. These are often very elaborate and can involve the use of complex altars and multiple offerings (photos at left). It is important to be conscious of the need to periodically perform Space Clearings as a regular part of maintenance.
- Another important concern is the health of the environment itself. Whenever possible *green materials* and *sustainable building* processes should be used within the site. Modern technologies such as geothermal energy and wind-powered electricity can be used to reduce dependency on damaging fossil fuels. It is also of great concern that medical facilities are among the most toxic of environments with particularly high concentrations of mercury and chlorinated compounds. Medical incineration is one of the top generators of dioxin. All efforts need to be done to combat these trends.
- Medical equipment is responsible for heavy exposures to *radiation* and *electro-magnetic fields*, which have been implicated in some studies with serious conditions such as childhood leukemia. Proper shielding and avoidance of excessive electrical equipment are of paramount importance.
- Wherever possible, technology (building & equipment) needs to be balanced with natural materials, daylight, and organic forms, even in high-tech areas such as ORs or ERs.
- In addition, it is important to consider damage caused to the site by the construction process itself. It is not uncommon, for example, to cause geopathic stress where none existed by blasting for foundations. Treading lightly on the land will pay off in increased healing potential within the site.



BUILDING DEDICATIONS

Rituals are important components of building practice because they address the need to create relationships with the site, its ancestry, and the community. Whether public or private, these are important occasions that can result in an enlarged sense of belonging in the world. They are also important because they can prevent unwanted problems stemming from poor site history, accidents, or cost overruns.



A SUSTAINABLE HEALTH CARE FACILITY

The Center for Discovery (above) is one of the first LEEDS certified health care facilities in the USA. Its concern for the environment includes all green materials and sustainable practices. Energy is derived from geothermal bores and wind generators. Ponds (right) are used on the site for their aesthetic, healing, and farming value. It is interesting to note that the site for this hospital was once a slaughterhouse. The photo below illustrates the site's degraded condition as a consequence of this type of use. Earth healing, earth acupuncture (see page 11), and space clearing rituals were used to condition the site for its new role.



glossary of useful terms

geomancy

The generic attribution of all earth-based disciplines which deal with human settlement on the land. It derives its roots from **geo** meaning "earth" and **manteia**, meaning "understanding" or "divination". Geomancy has been used widely around the world since at least the Paleolithic era. The Roman *augur*, who was responsible for the demarcation of city limits and orientation in the landscape, was a geomancer and city planner. He was also in charge of the oracles. Geomancy has left brilliant examples of its craft at Stonehenge, Chartres, the great pyramids, Teotihuacan, Macchu Picchu, and in Medieval city planning. In various forms it is still used today in modern practice, particularly in Britain, Switzerland, France, China, India, and Africa. Chinese feng shui and India's Vaastu are but two of many local variations. Geomancy includes both time and space dimensions, which it considers to be part of a single continuum. Heavily based on cosmological and metaphysical principles, geomancy was a fundamental part of the building trades until historically recent times. Modern geomancy has found new relevance because it is an earth-based discipline which has a wide variety of tools to understand, manage and correct issues in the environment as well as in ordinary life.

feng shui

A chinese geomancy discipline which is concerned with the placement, orientation, and distribution of architectural spaces in the landscape. It is used, in various forms, by millions of peoples in China, Taiwan, Indonesia, and Japan. Feng shui means literally **wind** and **water** and refers to the subtle energies (wind) and the more obvious physical energies (water) present in reality. Feng shui is used not only to design spaces but also to help in the generation of prosperity, good health, longevity, and success. Often referred to as "acupuncture of space" feng shui has grown to include Western geomancy, geobiology, green architecture, and sustainable economies.

vastu shasta

Vastu is the traditional Indian science of building design and spatial configuration. It is based on principles of measurement, rhythm and proportion as the basis for all material manifestation. It espouses principles which are both metaphysical and ecological, mythical and practical. Often referred to as the feng shui of India, vastu not only is concerned with placement and design but also with the sacred and hidden aspects of reality. It postulates that mind and spirit are capable of infusing life into space.

holographic universe

The notion that every manifestation of reality is a reflection of the larger totality of existence and that the whole is contained in the part and vice versa. Based on metaphysical principles, holographic thinking is also connected to modern principles in physics and cosmology, most notably field theory, chaos theory, and Rupert Sheldrake's morphic resonance.

anthropocosmos

The notion that the larger reality is holographically related to the human body and to the body of the planet. Anthroposophy was used extensively by the Greeks. In the Orient it is related to the chakras of the body's energy field. This concept is also related to Da Vinci's, Serlio's and Palladio's notions in architecture, as well as to Pythagoras and therefore to all of sacred geometry. More recently it was the basis for Rudolf Steiner's Temple of Healing in Germany and Keith Kritchlow's Sai Baba Hospital in India. Notions of anthroposophy have ruled city planning and site planning for millennia, most notable in Medieval Europe, China, and Japan. This concept refers to both the form as well as the purpose of the structure and is related to the concept of the **holographic universe**.

genius loci

The spirit and power of the land. It refers to the energies which are specific to the site and which need to be honored in the process of planning and building. The **genius loci** is also associated to the communities, history, traditions, and other structures that occupy that land.

chi

The term for vital energy in feng shui. It describes the animating principle which imbues physical space with vitality. Chi nourishes and supports and is considered necessary for health, prosperity, longevity and success. Chi is categorized into three types. **Sheng chi** is positive or auspicious. **Sha chi** is negative, inauspicious or destructive. **Ssu chi** is stagnant or unmoving.

the pakua & the loshu

Feng shui design tools which correlate sectors in a floor plan to the movement of energies in space and of change in time. They are primary tools for understanding the correlation of space and time in the physical dimension. They have correlations with magical mathematical squares in Western mathematics.

flying star

An elaboration of the **loslu** which enables the plotting of change in time within architectural space. It is used to predict the likelihood of material success, good health, and good relationships within a given structure for any given period of time. Highly accurate, this technique is based on the orientation of the structure in space and on the time of its construction.

power spot

A concentration of vital energy. Usually it is experienced as an upsurge of **chi** and is often associated with open springs, **blind springs** or **energy lines** (see below). Such spots were actively sought throughout human history as locations for healing structures and holy sites.

blind spring

An upsurge of underground water which does not break through to the surface of the earth. Considered highly desirable for healing purposes, blind springs can be located through **dowsing**. They have been found under such notable sites as Avebury, Chartres Cathedral, Santiago de Campostela, and at all the major Asklepan healing temples in Greece.

energy lines

Pathways for energy which traverse the landscape and which serve to distribute the vital force of the land. Earth energies are considered to be alive in the landscape. Their movements are regulated by topography as well as time and follow patterns which are variously referred to as ley lines, energy lines, dragon veins, earth meridians, etc. **Ley lines** are polarized lines which traverse the land in roughly straight courses. **Dragon veins** are more connected to topography, tending to follow the high contours of ridges and mountain ranges.

geopathic stress

Trauma induced upon the earth by a variety of motives, and which is considered potentially damaging to human health, husbandry, and agriculture. Geopathic stress can be caused by compromised underground water, mineral deposits, or deviations or overlapping of the **global magnetic girds** (see below). Recent research points to correlations between geopathic stress and illnesses such as cancers, immune disorders and psycho-spiritual illnesses. Modern construction methods that damage the earth and the absence of **building rituals** have compounded this problem.

dark stream

A form of geopathic stress which involves compromised underground water streams. This is not related to water tables, although some interaction is possible.

global magnetic grid

A grid of regularly-recurring lines of magnetic energy which distribute the earth's polarity around the globe. They have been found to encircle the earth both longitudinally as well as latitudinally, and repeat at regular intervals. Their amplitude seems to be affected by telluric phenomena, moon cycles, and sun flares. Despite their unflinching regularity, they are often absent within sacred enclosures, such as at Karnak and Chartres. Some interactions have been identified with illnesses of various types.

earth healing

The generic appellation for a series of techniques used to cure problems that affect the energy of the land. These are an important component of site planning and building practice. They are often called for in situations where there is **geopathic stress** or desecration to the land. It is also used when construction is contemplated on ancient burial grounds or areas that have seen war or crime. Techniques have been incorporated into this practice from Native American ceremonies, European mysticism, Balinese and Japanese house rituals, and Chinese **feng shui**.

earth acupuncture

One of many **earth healing** techniques that consists of inserting crystals, stone, or metal artifacts into affected energy lines in order to cure them. The multi-tiered pagodas of China are conscious examples of this craft. It is also believed that many of the megaliths of Europe, the Egyptian obelisks, Mayan stellae, and Buddhist stupas served similar purposes. Contemporary earth acupuncture uses crystals cut with lasers into precise and complex geometries (see page 20).

electromagnetic fields (emfs)

This term refers to the fields created by the electrical grids and equipment which deliver services to homes, offices, factories, hospitals, etc. Recent and controversial studies point to correlations between emfs and certain types of cancers (i.e. childhood leukemia, brain tumors) as well as infertility.

building rituals

The body of rituals and processes which are meant to connect the practice of architecture and planning to the power of the land, the cosmos, and to the ancestral influences of location and history. They invariably honor the **genius loci** as well as the **anthropocosmos** (see above). Performed by specialists, they include **ground breaking ceremonies, space clearing, blessings** and **earth healing**, among others.

dowsing

A traditional geomancer's technique for locating minerals, underground water, or **energy lines**. Dowsing is a respected profession in many cultures and is used by surveyors and builders worldwide. Dowsing is performed with special tools that allow the practitioner to amplify vibrations emanating from the materials or energies being sought, even though these may be buried deep in the earth. Skilled dowers can find materials by dowsing on site or remotely, by dowsing maps.