"The idea of a sacred place where the walls and laws of the temporal world dissolve to reveal wonder is apparently as old as the human race." ^a

Joseph Campbell



Geomancy is *Earth Geometry*. The words *geometry* and *geomancy* are derived from the ancient Greek words: *geo* meaning *Gaia* or *earth*, *metry* meaning *to measure*, and *mancy* translates into *mantos*, which means *to divine*, *of spirit*. Geomancy is the law of balance and proportion combined with the spirit or energy that connects all form.

Geomancy is the practice of using inherent energy to live in harmony with the earth. Earth Design is a synthesis of geomancy, conventional aesthetic design, and personal divination. Geomancy is one form of divination.¹

In addition to practices that specifically relate to geomancy, there are many others that are complex studies in themselves. Briefly, ancient practices include: the Shamans, Seers or Medicine Men of Siberia, Mexico, North, Central and South America (including the United States), Japan, Tibet, Indonesia, Aboriginal Australia, and Nepal.

There is the divination of the Celtics of Wales, Scotland, Ireland, and Brittany that threw the Ogam sticks. There are the ancients of the Germanic world that threw the

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Through educated interpretation and intuition, divination enables choice of action rather than dogmatic prediction. Like Earth Design, geomancy is used to maintain the natural flow of the earth while incorporating that vital life energy into our environments and bodies.

Geomancy is the energy or *Soul of Mother Earth*. By living at one with the earth, ancient geomancers understood that by preserving the *Earth Spirit*, abundance, well-being, and a full life were attainable. By definition, geomancy has been a major factor in all historical design and architecture. "Geomancy may be described as an ancient, holistic, integrated system of natural science and philosophy, used to keep human activity in harmony with natural patterns: from seasonal cycles, to processes that maintain the balance of nature, to the geometrical proportions found in the way all organisms grow." ^b

Geomantic practices are as ancient and culturally diverse as are the roots of language. The integration of natural science and spirit and their connection to the environment have been interpreted in many ways and have universal similarities.

The basic tenet of geomancy comes from the realm of spirit. When our lives are postured in connection with our inner spirit, the flow of purpose is engaged. Instinctively, this connection forms the basis of philosophies, for which the ancients generated stories of symbolism and creation.

Runes, the reading of the bones in Southern Africa, Chinese casting of the Hexagrams in the *I Ching*, and through Kabballastic tradition, Tarot cards are read.

There is gazing into crystal balls or dark pools of water, tea-leaf reading, palmistry, reading dreams, and numerology (from the Kabballah, *I Ching*, and the Verdic Square).

There are new divination practices on the market, as a different medicine card can be pulled for various readings. I have even seen Pleiadian symbols drawn on sea shells that were used for divining.

The natural laws have had a major influence on all the above divination practices, and because shelter is one of our basic needs, they most likely are linked to geomancy.

The stories were explanations about the workings of nature. Myths, created by the ancient soul, were symbols of natural laws and the relationship of heaven and earth. Many myths provided instructions, which developed into ritualistic action and created cultural order. Some myths regarded the ability to consult with individuals that had divine powers. Through ritual, the seers provided guidance, advice, and faith because of their special connection to spirit.

Seers would often reside in selected sites that had special energy and mystical powers. Cross-culturally, *geo-mythology* tells stories of the earth and sacred space. These stories either provide information that defines the sacredness of a site or instructions for ceremonies and rituals performed there.

When myths described the sacredness of a site, they often suggested that these locations were only to be used as the gods' earthly home. Many of these locations are still used today as places of worship. Native Americans would never consider using a sacred mountain to make camp, just as we would not have a party inside a church.

Myth defined such sacred space as Delphi, Greece, where the Oracle of Apollo, home of the Greek Sun God, is located.

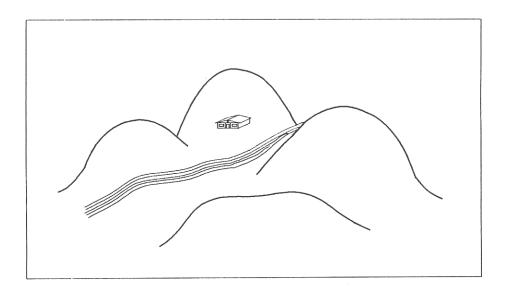
> This site is one of the most magical Temples of God that I have experienced. From the power, energy, and natural beauty, it was obvious to me why the ancient Greeks selected this location. I was able to feel my own spiritual connection with the site and to the ancient stories.

Delphi, according to mythology and anthropological documentation, developed into a great religious center. Prophetic consultations were used for such personal undertakings as getting married or taking journeys. This guidance was important throughout ancient Greek life and is mentioned in many myths. Even the great Socrates was said to have consulted the Oracle.

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There are several common factors beyond energetic beauty that many sacred locations share:

Delphi, for example, is nestled in the *classic geomantic site* configuration. The mountain behind it protects the site from the north wind, the one to the right protects against the hot western sun, and the one to the left balances the height of the mountain on the right. The front of the site provides an open view to give the inhabitants warning in the event of any intrusion, and the river Pleistos provides nurturing Chi, water, and food for the site.



This topographical layout has also been described by Chinese geomancers as the perfect site configuration. It has been mythologicalized by the animal representations of the cardinal directions: The Chinese describe the Black Tortoise of the north, the Green Dragon to the east, the Red Phoenix to the south, and the White Tiger to the west.²

Neither the Greeks nor the Chinese have an exclusive on this layout. This geomantic configuration is universal in scope. The ancients selected sites

It is interesting to note that the Chinese often used Warrior instead of Tortoise to define the energy of the north. Native American Warriors by definition are seekers of truth that mythologically describe the North American continent as Turtle Island.

through logic and intuition. Likened to being wrapped in your mother's arms, when a site is wrapped in the paws of these *sacred animals*, there is natural protection from the elements.

Native Americans regularly sought out these protective sites. In New Mexico, at the Taos Pueblo, there is a tribe nestled in this configuration and living there the same way they did over one thousand years ago. Anasazi Indian sites throughout the southwestern United States, such as the cliff dwellers at Bandelier by Los Almos, New Mexico, are located with the same orientation.

There is a purposeful selection of the site relative to where it is positioned on earth. Many sacred sites were used as geographic markers. Delphi is located directly on a latitude line. The Oracles of Dodona and Delos are each one latitude away on either side of Delphi and appear to define a mapping system.

Recent studies have theorized, "The original purpose of the oracle sites was connected with a reverence for the earth spirit, and the meticulous measurements were not merely for navigational purposes, but for explaining the deep mysteries of the measurement of the Earth as a sphere and cosmic motions, which to the ancients were the profoundest mysteries of all. As the centuries wore on, however, the oracles achieved increasing prominence and the geodetic function was forgotten."

In Judeo-Christian ideology, geo-mythology and geomancy are found in The Bible. *Exodus 36-40* describes specific detailed instructions for the construction of the Tabernacle.³ The text describes *millwork drawings* that include complete dimensions, construction materials, and ornamentation. The *specifications* describe in detail the length, number of fabric panels, and the colors of the curtains.

Geo-mythology and geomancy are not limited to the ancient cultures mentioned above. Universal earth symbols were used in all forms of geomancy. Symbols of the Earth Goddess are used in Shamanic traditions. Even earth itself is used in Navaho and Tibetan healing

³ The Tabernacle is the building where Hebrews worshiped and still do.

ceremonies through sand paintings. Earth is symbolically used in Earth Design through Chinese and Western Astrological geomantic interpretations.

Earth Design is the blending of ancient geomancy and geo-mythological practices with our contemporary lives. Our own mythology is the combination of personal history, relationships, dreams, and the ceremonies we create for such life events as the anticipation of birth, childhood play, holidays, and the memory of loved ones.

Stories that remind us of universal concepts such as, "There really is no place like home," define us as spiritual beings. "We have an inner geometry in our bodies and an inner biology, which becomes an extension of our planet/world, making our bodies and the planet interchangeable. We reflect what is 'out there' because it is within us, and because it is in us, we see it out there."

Historical Geomancers and Scientists

Being able to recognize relationships between the earth and the heavens made historical geomancers natural scientists as well. It is hard to differentiate between the professions. Both have made their discoveries by observing the harmonics of natural relationships.

Unlike modern scientists, however, early scientists did not limit their perceptions to what could be proven. Their theories were based on the integral workings of the universe. Discoveries were made through the relationships between growth cycles and mathematics.

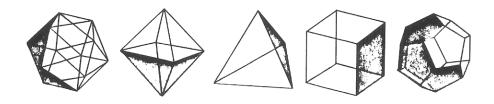
These natural science geomancers have been around since recorded history. **Pythagoras**, who lived between 582-507 BC, "created a humanistic philosophy which used mathematical harmony and proportion as primary tools in daily life, including art, architecture, music,⁴ and history. He believed that the order inherent in numbers, a number

According to Pythagoras, the *music of the spheres* is the harmonious movement of the planets, mathematically expressed, corresponding to numbers representing harmonic musical sounds.

symbolism, creates specific effects on the observer, both psychologically and spiritually." As humans are an integral part of the natural cycle, Pythagoras added humanitarian factors to his scientific discovery. He understood that this humanitarian philosophy incorporates human spirit because it energizes the deepest core of our subconscious.

From your high school geometry class, do you remember the Pythagorean Theorem? This formula of triangles, more than 2,500 years old, is one of the basic laws of geomancy. Triangles are repeated through archetypal symbolism, sacred shapes, architecture, natural science, and Earth Design.

Plato, who lived between 427-347 BC, "believed the world to be ordered by divine intelligence according to the laws of symmetry." He discovered five geometrical solid shapes⁵ that would fit, with all their apexes touching, inside a sphere. He identified the Platonic Solids through the sequence of natural numbers and the five elements, 6 which defined the structure of the universe.



Interestingly, there are carved stones about 2 ½ inches in diameter, dating from 1200 BC, found in Scotland and Britain. These stones, carved 800 years before Plato, have the same precise measurements and shapes as the Solids. Anthropologists believe that these stones were used by the ancients to define geometries of the earth and the cosmos.

We will refer to these five elements in Chapter 5, Feng Shui.

About two thousand years later, **Leonardo da Vinci** (1452-1519) and **Johannes Kepler** (1571-1630) discovered that everything in nature, including the human body, the earth, and the universe itself, may be broken down by the exact characteristic proportions of the Platonic Solids.

To further show geomancy in the cosmic order, Kepler recognized how the Platonic Solids defined the mathematics of the planetary orbits. He found "that when the solids are inscribed within the spheres, and within each other in sequence, the mathematics described the orbits of the planets in the solar system."

What did the ancients in Britain and Scotland, Pythagoras, Plato, and Kepler have in common? From different periods, perspectives, and interests, there was a commonality ascribed to the order of things. Even the atom is defined by these universal shapes.

There are no *coincidences* in nature; The universe is designed with a masterful purpose.

Sacred Shapes and Archetypal Symbolism

Symbolic shapes are archetypal graphic representations of the natural laws. They are used numerously through cross-cultural myth and philosophy, ancient art, religion, and such personal mythology as dreams. The shapes are included throughout ancient architecture, thereby adding humanistic, spiritual, and geomantic qualities to buildings.

For our purpose, when building an Earth Design foundation, it is necessary to understand the spiritual symbolism of some geomancy shapes. These shapes have archetypal characteristics that activate spiritual qualities within us.

Whether or not these symbols have conscious meaning for you, they are part of the collective unconscious, and therefore, a part of you. This framework justifies Earth Design, serves as historical reference, and helps you to integrate sacred symbolism into your design. When you con-

sciously incorporate the symbols in your design, as did the ancients, your environment can become a personally supportive, sacred space.

The Universal Shapes

Circles/Spheres:

Representative of one of the Platonic Solids, the circle signifies wholeness. It is the spinning wheel of natural law, without top or bottom, beginning or end. The circle is the Yin-Yang balance of polarity. Circles are representations of living entities. Living circles are the cycles of nature: the seasons, the heavenly bodies and their orbits and planetary phases, atoms, the cycles of life and death, and the energy center chakras7 in our bodies. The Earth Sphere is a living circle.

This recurring shape can be appreciated by observing such objects in nature as: ripples in a pond, a snowflake, the cross section of a tree, a sunflower, or by gazing into the eyes of a loved one.

Life Circles are tools of divination and geomancy used in the search for higher meaning and personal growth through connection to the spiritual whole. Often there are circles within circles that are symbolic of deep interconnection. Life circles are the tangible manifestation of the natural cycles represented by this sacred symbolism. Universal models are in geometric proportion and progression. Their nucleus is the unification of the universal soul or the collective consciousness. The soul has also been described as the collective consciousness by one of the pioneers of psychotherapy, Carl Gustav Jung.

A mandala is a life circle, literally translated from Sanskrit, it means circle or center. The center is symbolic of the eternal potential. The mandala is a "structural matrix through and from which flow a succession of changes, elemental forms, and primal surges, each surpassing the other

Chakra is the Sanskrit word for wheel. There are seven major chakras or energy centers in our body by which we process life energies.

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in an infinite variety of organic structures and impulses, crowned by the supreme attribute of reflective consciousness. Its flow, working through a relatively well-defined structure, is subject to the infinite process of growth and transformation by virtue of the ever-changing relationships, both internal and external to its basic structure."

Mandalas have been used cross-culturally throughout time as meditation tools. Jung used mandalas with his patients because he saw that they were powerful tools for self discovery.

Sometimes prayer mandalas are used as meditative tools for spiritual growth. Take a minute to enjoy the following excerpt from *Ezekiel's Vision* that comes from Judeo-Christian mythology:

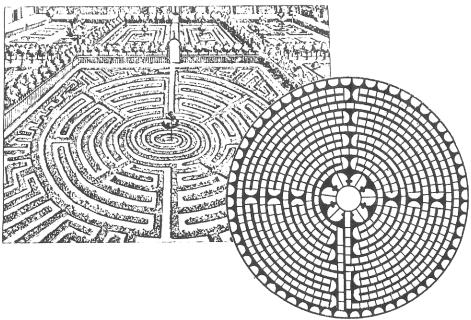
Exercise:

Go to a quiet place; by reading the passage out loud, you will experience it through your mind's eye as it is reinforced by your ears. What do you see?

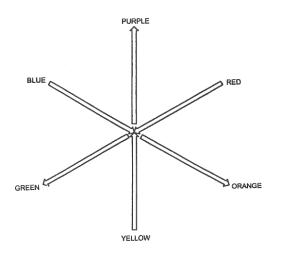
"As I looked at the living creatures, I saw wheels on the ground, one beside the four. The wheels sparkled like topaz, and they were all alike: in form and working, they were like a wheel within a wheel, and when they moved in any of the four directions, they never swerved in their course. All had hubs, and each hub had a projection which had the power of sight, and the rims of the wheels were full of eyes all around. When the living creatures moved, the wheels moved beside them; when the creatures rose from the ground, the wheels rose; they moved in whatever direction the spirit would go; and the wheels rose together with them, for the spirit of the living creature was in the wheels. When the one moved, the other moved; when one halted, the other halted; when the creatures rose from the ground, the wheels rose together with them, for the spirit of the creatures was in the wheels."

Did you see and experience the mandalas? Did you see your spirit in the mandala vision? Did you **experience** universal symbolism and its significance?

Physical mandalas come in many different forms and sizes. Large mandalas are stone circles or medicine wheels used by native peoples. The ancients also used stone circles such as Stonehenge to measure terrestrial and astrological cycles. Mandalas are located in fine European gardens with their concentric circles of manicured hedges. Notice the maze on the floor at Chartres Cathedral is shaped with the same mandala design.



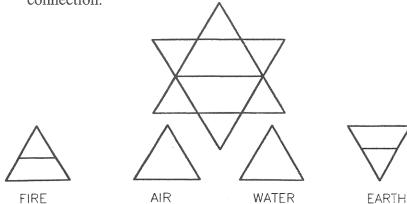
On a smaller scale, there are many graphic representations of the spiritual cycles, such as the Aztec Sunstone, Mayan Calendar, and our personal astrological chart. Mandalas at this scale are often artistic spiritual expressions of humanistic geomancy, like the previously mentioned Native American sand paintings and the Tibetan Wheels of Life.



Perfect for our purposes is a color wheel.

Triangles and Pyramids:

The triangle has universal significance, represented by man's quest to ascend to the spiritual realms as the apex reaches toward the heavens. Representations include: the triad of physical and spiritual wholeness represented by the *Christ energy triad*: Father, Son, and Holy Spirit, or the mind, body, and spirit connection.



In the *Seal of Solomon*, or *Star of David*, the two interconnected equilateral triangles represent the four elements: fire, air, water, and earth. "The upward pointing triangle signifies the ascent of spirit, and the downward pointing triangle is the decent of matter." i Notice how the points of the star create six equilateral triangles; the shape within the shape repeating its own sacred form.

Additional shapes created by connecting triangles include the Platonic Solids, a circle (in two-dimension) and a sphere (in three-dimension).

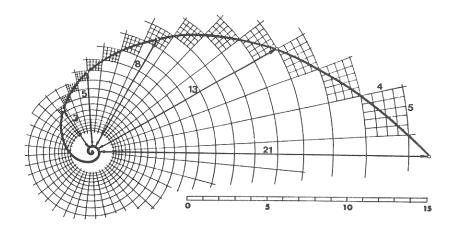
Squares/Cubes:

The square is not a natural phenomenon; however, it is created by connecting two triangles by the hypotenuse. Squares were also created because of the humanitarian factor, or man's unconscious spiritual need for order and balance. "The square and circle are the harmonious balance of human and divine, of physical and spiritual worlds, and of imperfect and perfect qualities. The square and circle are metaphors for the equilibrium between heaven and earth."

Spiral:

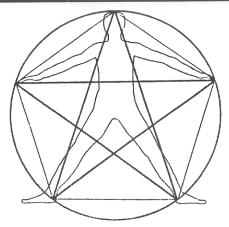
The spiral shape suggests a deeper or higher knowing. It is symbolic of infinity as either an ascent or descent, depending on the inward or outward movement of the spiral.

The spiral is geometrically and geomantically proportioned like the Platonic solids. The spiral is the pattern of expansion based upon the Golden Section, Golden Mean, or Pi, which are mathematically found in many natural forms.

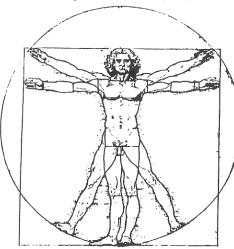


"Where these ratios occur, resonance with the natural patterns of growth and regeneration insures harmony and accord with the universal will. Therefore, geomancers, architects, and artists employ this cannon of proportion in the construction of temples and works of art."k This recurring modulation is present in the cross section of a nautilus shell, in the array of seeds of a sunflower, and in human body proportion. Spirals have been universally depicted throughout time, as seen in ancient Egyptian artifacts.8

How could the Egyptians even begin to fathom the double helix of the DNA molecule spiral as a basic building block of life?

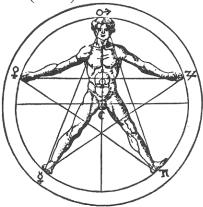


The famous illustration by Leonardo da Vinci graphically represents the mathematical symmetry of the Golden Section between the circle, square, and human proportion. The points are the two feet, the two arms, and the head. When they are connected by drawn lines, a *pentagram*⁹ is created.



Man's sacred relationship to the heavens is further shown by the graphic, "Symbolic representation of man and the microcosms, through the astrological symbols of Mars, Jupiter, Saturn, Mercury, and Venus at the apexes of the pentagram."

The circumference of the circle is mathematically the same as the perimeter of the square, thereby "squaring the circle." The humanistic factor of this sacred geometry defines the human body as the scared vessel that connects earth (square) and heavens (circle).



Coincidentally, Pythagoras used the pentagram with Leo's Man as his emblem. Did you notice that Leonardo lived one-thousand years after Pythagoras?

Cross:

This symbol represents the energy of the four cardinal directions: north, south, east, and west. The cross is also a representation of the four elements: water, fire, earth, and air.

The cross is represented by the earthly manifestation of human incarnation, or Christ energy, as known by some traditions.

The Bagua:

The Bagua is a universal symbol that comes directly from the ancient Chinese text, I Ching: The Book of Changes and the *Unchanging Truth.* The historical symbolic representation defines harmonic inner workings of the natural energetics. The Bagua is represented by a series of eight tri-grams that are symbolically constructed out of graphic representations of Yin-Yang.

In Earth Design, the Bagua is stylized on the front cover and in the Contents Wheel Mandala. From an Earth Design perspective, the Bagua is a universal symbol because it combines the triangles, or Guas of all the life situations to create a harmonious and wellbalanced circle of life experience. In Chapters 5 and 6, you will see how the Bagua refers to life situations and to the planetary cycles.

Geomancy in Application

Ancient structures, strategically located on sacred sites, were built according to archetypal geometry. By building according to the spiritual energy of geometric structure, the ancient architects deepened their personal connection to the universal collective.

The momentum of Catch 69!

"Nature is deepened in the biology and geometry of our bodies. As we begin to connect with the places of spirit in our environment, through awareness we can begin to connect with places of spirit in our bodies."^m

Earth Design unconsciously touches upon mythic dimensions of self and activates our higher spiritual qualities.

The parameters of location, architectural stability, integrity of form, and construction materials have been tested through the centuries by the spiritual humanistic factor. The Colosseum, the Pantheon, the Great Wall of China, the Parthenon, the Temple at Machu Pichu, Chichen Itza, the Egyptian Pyramids, and many others are still standing in all their power, grace, and beauty.

Why are they still available to us? What are their stories? How are they connected to spirit? Is this *coincidental*?

Earth Connections

Ancient architecture is a combination of many sacred shapes and structural form. The tent, one of the earliest structures designed by man, represents home design excellence. The tent solved the housing problems of migratory native peoples who followed their source of food.

The native peoples designed their tents by noticing that the triangular shape of a mountain was the most stable of structural forms. The narrowest part at the top had the least amount of wind resistance, and it grew in stability toward the base. In its simplicity, the tent was light enough to transport and easy to reassemble.

If you look at a tent in three-dimensions, isn't there a circular form at the base where it connects to the earth? Since you are in training to "see" like an Earth Designer, notice the mandala of concentric circles created by all the cross sections when cutting through the central axis.

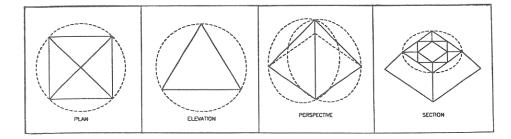
The Egyptians also recognized the triangular form. They believed the land was an integral part of the triad connection of earth, the cosmos, and human spirit. Even Egyptian topography reflected the concept of the pyramids through the sacred shape of the Nile delta. Theories suggest the Egyptians selected the pyramid shape because they subconsciously needed mountains in their landscape, perhaps to create a man-made classical site configuration.

Through the triad, the Egyptians understood that reality was incomplete without a connection to the spiritual realm. Through mythology and hieroglyphic language, the Egyptians delved into the conscious and subconscious mind for spiritual meaning. Spiritual life directly relates to mythology and pyramid construction. The pyramids contained mummified Pharaohs, which were said to preserve the Spirit of Osiris, necessary to sustain Egyptian life for all eternity.

The Egyptians understood that "the earth acts just like the human body in having subtle and gross energies crossing its surface and interior, and that blockages produce illness while a free flow of energy leads to health." With this sensitivity, Egyptian structures were built with purpose through energetic flow, spirit, sacred dimension, harmonic proportion, and mythology. Because of all the factors that went into Egyptian design, Imhotep, the most renowned Egyptian architect, was also recognized as a priest, scholar, astrologer, magician, and medical healer.

While the Egyptians predated Plato and Pythagoras, Imhotep used the same mathematical proportions-and-ratios relationships. The proportion of 3:4:5, the Pythagorean ratio of a right angle triangle, is repeated throughout Egyptian sculpture and architecture.

Squaring the circle was used repeatedly. The Great Pyramid at Giza, coincidentally located in the apex of the Nile delta, is an example. When a circle is drawn to connect the points, on either the square of the plan view or the triangles of the elevation or section, the circumference of the circle is equal to the perimeter of the square.



When the structures or design details are constructed according to universal geometry, a human will feel at home, whatever the size of a building. Not only is the proportion relative to natural law, but Leonardo's man reminds us that this proportion is symbolic of such humanitarian factors as the universal psyche and spirit of man.

Exercise:

Open your wallet, and pull out a one dollar bill. Look at the back. What comes to your mind's eye? As you look at the pyramid with the eye at the capital, what spirit is reaching toward the heavens?

With these *mathematical coincidences*, the pyramids were not only constructed as burial chambers, they also served many other functions. The Great Pyramid at Giza, constructed for Pharaoh Cheops, marks the perfect longitude and latitude at the center of the world as the Egyptians knew it. It is also said that the Great Pyramid was used as a surveying instrument, initiation temple, astronomical observatory, telescope, and standard for systems, weights, and measures. The Great Pyramid, beautiful in its simplicity, is probably the oldest, most complex example of sacred geometry.

It is fascinating to think about the enduring symbolism of these Egyptian structures that are over 4,000 years old. From an architectural and structural perspective, no wonder the simple triangular shape, as in any building truss, is used in today's construction and materials.

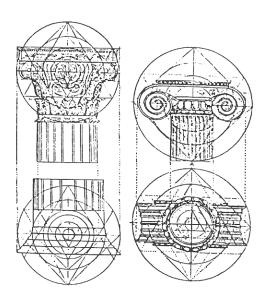
Spirals:

The spiral shape is the geometric progression of Pi. The patterns of growth are represented as far back as Mayan civilization. The spiral is experienced in Mayan Temples with smaller and smaller levels as the pyramid shape reaches toward the heavens.

The sacred shape of infinity was clearly used in the award-winning Guggenheim Museum in New York City, designed by Frank Lloyd Wright. There is the constant flow of Chi in the stratified layers of the building. You can experience the symbolism of infinity as you move down the spiral pathway. Your eyes have no abrupt change, and your focus is on the works of art for which the building was designed.

Spiral staircases, while not very practical as primary steps because they tend to be a hazard, do make the best use of the geometry of space because they require the minimum square footage.

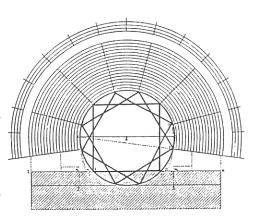
Spirals have also been used universally for such decoration and detailing of sacred construction as on the capitals of Ionic/Greek columns.

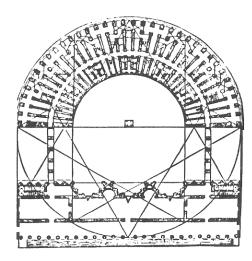


Circles:

One of the best examples of functional sacred design is in the Greek Theater. The design was a physical representation of the goals served by the Greek dramas. *Life plays* dealt with values dramatized by the collective experience of man, nature, and the gods. The theater design followed principles that governed Greek life and its connection to all natural and cosmic experience.

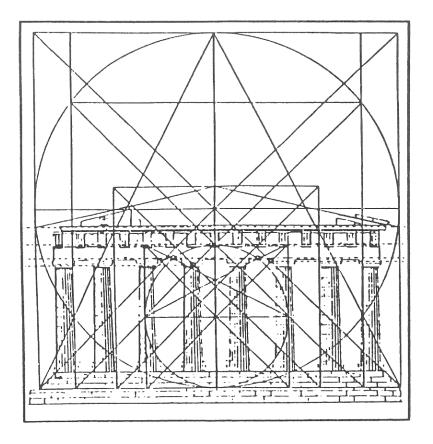
The Greeks, in geometric architectural terms, appreciated the symbolic perfection of the timeless circle in keeping with the unification of the natural laws. Vitruvius' original theater in the round was a masterful study of symmetry and mathematics that integrated many sacred shapes. As already seen, most sacred shapes used in design cannot be limited to one shape.



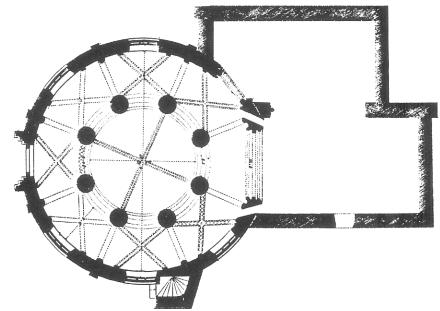


That mastery is also seen in Palladio's reconstruction of the ancient Roman Theater.

Notice the mastery again in the Greek and Roman elevations.

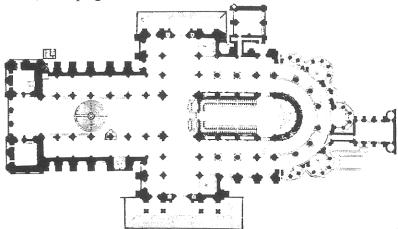


St. Sepulchre's Church, built in the 1100s in Cambridge, England, not only has circles within circles, triangles, and crosses, but includes the cardinal directions and the Bagua. Do you see sacred mandalas in the floor plan?



The Cross:

Crosses have been used as universal archetypes by most cultures that include the ankh or the Egyptian symbol of life, Delphic Cross, the upright cross of Jerusalem, and the Byzantine Cross.



Any church of Romanesque or Gothic design has been constructed in the Latin or elongated cross. It is typical of these churches to have a dome placed at the crossroads apex, confirming the cross with the unity of the sacred circle.

Connections to the Heavens

The ancients knew that the earth was an integral part of the cosmos. Mythologically, the heavens were where the gods lived. When the people respected the heavens and the earth, the gods would take care of their children.

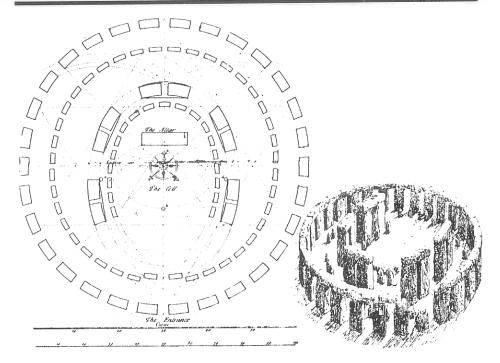
The ancient Greeks built temples for the most honored gods, represented by their earthly locations. Typically, the best sites were at the highest elevation with natural protection, such as the Temple of Athena atop the Acropolis in Athens. This site was chosen so the gods could be as close as possible to the heavens.

The geographical location of sacred sites was also selected by their alignment with the stars, the planets, and with the precision of the equinoxes. Stonehenge, one of the great stone mandalas, 10 was constructed approximately 2000 BC, in Wiltshire, England.

Sonehenge is in celestial alignment with the sun, moon, the Pole Star (which was Polaris at the time of construction), and Sirus. On certain days, such as the Summer Solstice, as seen in the sketch, from the reconstruction of the angle of the sun in 1680 BC,11 the direct line of light passes through the stone marker and illuminates the altar in the middle of the circle.

In the floor plan, there are many mathematical relationships, including squaring the circle, between the sacred shapes and earth geometry. Do you see the interconnecting triangles of the Seal of Solomon?

The earth's polar axis is on an angle that is not parallel to the equator. As the earth rotates, creating day and night as it revolves around the sun, the inclination of the axis does not allow the earth to spin like a top. The wobble changes the position of the celestial bodies from the earth's perspective. This effect is called the shift in the polar axis, which alters the alignment of sacred structures with the heavens. Because of the shift, the earthly perspective of the alignment has changed from the original construction date.

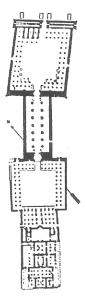


At the great Mayan ruin, Chichen Itza, on the Yucatan Peninsula in Mexico, there are many examples of sacred design. Included in the connection to the heavens is the Mayan worship of the Sun God.¹² Another example of how the ancients married the science of the cosmos with design is again witnessed during the Summer Solstice.

On the bottom stair at the base of the main pyramid, there is a carved serpent's head, which represents time and solar energy. When the sun peaks at the equinox, a serpentine-shaped tail is created by the light and shadow as it falls on the steps. The tail of light extends from the base of the pyramid to the top and into the sacrificial chamber.

As clearly seen in the examples at the Great Pyramid at Giza and the Temple at Luxor, the Egyptians considered cosmic relationships. Due to the mathematical relationship of the latitude of the Great Pyramid, the descending passage was illuminated by Alpha Draconis, which was the pole star of the time.

Not unlike the other ancients that believed in the Sun God, isn't it amazing how they understood the sacred or scientific connection that the sun is the sustainer of all life?



The magnificence of Luxor is a complete expression of Egyptian knowledge, combining science, mathematics, proportions of Pi, geometry, astronomy, and sacred symbolism. Notice, on the floor plan, how the ancient architects aligned the structure with the heavens as they considered the polar axis shift over several hundred years of construction.

Sacred structures were used as ceremonial centers and as symbols that integrated spirit and science; they were also planetary observatories, accurate calendars, and calculators. Additionally, these sacred buildings were said to be vessels to store and transmit powerful earth energies because they are *coincidentally* located at earth magnetic centers.¹³

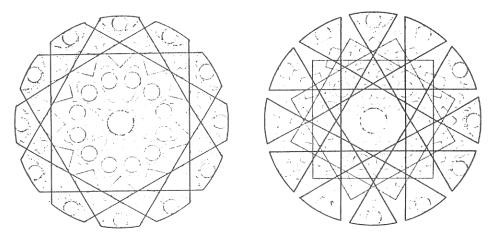
Beyond location, there is a spiritual connection between the mythology of heavens and earth that appears in sacred design.¹⁴

Rose window mandalas usually have twelve panes of glass that circle a central one. Often, the center pane depicts Christ surrounded by the *twelve zodiac signs*. Look at the many repetitions of spiral progression in the rose windows of such Gothic churches as Chartres Cathedral and Notre-Dame.

Earth magnetics will be explored further in *Natural Science*, Chapter 3.

The astrological representations of the gods ruled certain places on earth. Poseidon (known by the Greeks) or Neptune (the Roman equivalent) was the god of the Sea. Neptune is also the name of one of the outer planets, and in Western Astrology, Neptune rules Pisces, the sign of the fish.

The north and south windows, drawn by A.T. Mann,^o illustrate two different Golden Mean geometrical relationships.



Start to experience structures like an Earth Designer. Notice their relationships to natural laws and archetypal symbolism. The greater your awareness, the more your intuition will augment your own design process.

Exercise:

In your mind's eye, review the architectural design of any gift of antiquity. What does it look like in plan, in elevation, and in three-dimension? Is it in architectural and natural balance? See the structures the way the architects designed them. What are the sacred shapes?

What are the people doing? What is the mythology? What is the spiritual connection? How do you feel as you experience it?

Do you see any missing dimensions in the original structure that are not in balance? If there are missing dimensions, what was the intention of the architect? What was the feature element that was purposely designed to fill the imbalance?

When you travel, look for the sacredness of form that exists. Look for archetypes in overall site layouts, such as in Saint Peter's square (which happens to be round), or in the cross shape in most historic cathedrals. Look up at the

domes in churches in the Vatican or in the United States Capital building.

Do you see the life circle mandalas? Look for inlays in the floor. Look at the woodwork, detailing, and art. Do they include geometry or sacred symbolism? What do you see in the designs of today?

Contemporary Geomancers

For a foundation of Earth Design, it is important to understand that geomancy is not an ancient phenomenon. There are contemporary geomancers that are well respected architects. They listen to the humanitarian call of the natural forces, which gives them insight into the spiritual and scientific realms, which they then apply to design.

Rudolf Steiner (1861-1925)

Steiner was an Austrian architect that applied *spiritual science*, philosophy, and artistry to his buildings. He felt the role of a designer was to design a unique form that defines each building's function while sustaining the activity that takes place within it.

"He believed that the form-creating principles of the earth are derived from the *Spirits of Form*, beings of a spiritual hierarchy who are involved in the evolution of the universe and of humanity." The Spirit of Form in question is the energetic of the natural laws.

Steiner's design suggested that activities were not limited to tasks alone but to the means by which the inner spirit connected to carry them out. He felt that designers have a humanitarian responsibility to participate in and to spiritually enhance the live environment rather than to restrict it.

Steiner used theories on organic growth and materials based upon plants and animals. He used ideas of movement and harmonic balance and blended the architecture into the landscape. He based the entirety of his life's work on the philosophy that human development and science reflected natural patterns.

Frank Lloyd Wright (1867-1959)

"Wright's innovations provided a new direction for freedom and logic in architectural design, and all emphasized the importance of an overall sense of unity and harmony. He stressed the joy of understanding nature, which produces the forms of plants, each responsive to the needs of its environment, each with its basic 'engineering' structure, its material and color, its form and function evolving in its life pattern."

Because of his philosophy, he created environments¹⁵ that were harmonious for modern lifestyles. With his curiosity regarding nature and its structural form, he designed spaces that provided an innate sense of comfort. He created spiritual architecture because his interior/exterior design relationships fully integrated structure with nature.

Discourses on Architecture, written by his associate Viollet-le Duc, suggests that Wright was a student of Pythagoras and Plato and that he understood sacred shapes and symbolism.

"There is a tight correlation between architectural proportion and the geometry of the granite rhomboids that structured the crust of the earth."

"One issued out of the order, and both were extensions of the framework underlying the universal order. Since each rhomboid was formed by interlocking pyramids, each defined in turn by four equilateral triangles, nature's wisdom was made apparent in her choice of this most stable of shapes to prevent the internal energy of planets from bursting out. It was through this kind of natural reasoning that architects were to construct sound and stable buildings."

The library in his studio/home was designed in the shape of the sacred Bagua Octagon.

Not unlike Pythagoras' mathematical relationship to tonal sound or the music of the spheres, Wright saw the similarity between music and architecture. "Only the nature of the materials differs. Music and architecture blossom on the same stem; sublimated mathematics. Mathematics as presented by geometry. Geometry is to Architecture only what mathematics is to music." He added the breath of spirit or humanistic qualities to his design.

When Wright was in need of spiritual refreshment and strength, he would spend time in his church of nature. He studied *The Trees of Life*¹⁶ and applied the lessons they taught him to his design. He recognized that trees with deep tap roots would survive violent wind storms, so he designed buildings with deep vertical foundations. He learned that when tree branches cantilevered from the trunk, they would be stable, so he built floors of buildings that would transfer the forces to the vertical core.

In his own words: 5

"No part of anything is of great value in itself except as it be an integrate part of the harmonious whole."

"Form and Function thus become one in design and execution if the nature of the materials and method and purpose are all in unison."

"Human scale was true building scale."

"By organic architecture, I mean an architect that develops from within outward harmony with the conditions of its being."

The tree is a universal symbol in ancient mythology that represents the connection between heaven and earth: The Tree of Good and Evil in the Garden of Eden, The *Tree of Life* in the Hebrew Kabbalah, the Sacred Oak Groves of the Druids, the Yggdrail world ash tree in the Norse myths, and the Chaldean myths that suggest trees are the center of the world.

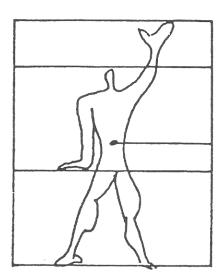
"Man takes a positive hand in creation whenever he puts a building on the earth beneath the sun. If he has birthright after all, it must consist in this: that he too, is no less a feature of the landscape than the rocks, trees, bears, or bees of that nature to which he owes his being."

While Wright's designs reflected his organic philosophy, he used reinforced concrete, which was the modern construction material of the time. Today, as you will learn in Chapter 3, science is discovering that these building materials create toxicities in the environment. If these dangers had been present at the time, I am confident that Wright would have either demanded manufacturers to provide him with suitable building materials or he would have developed them himself.

"Architecture is that great living creative spirit which from generation to generation, from age to age, proceeds, persists, creates, according to the nature of man, *and his circumstance as they changed*."

Le Corbusier (1887-1965)

As a painter, sculptor, theorist, planner, and architect, Charles Edouard Jeanneret changed the rules and established the tone for contemporary architecture. Le Corbusier, as he had become known, incorporated many levels of meaning in his design, including symbolism and proportion.



Corbu, as he was affectionately known to students of architecture, used divine proportion and designed a system he called the *Modulor*. This system was a harmonic measurement to the human scale and universally adaptable to architecture. The Modulor was based upon "a six-foot man with his arm upraised, inserted into a square, which was in turn subdivided according to the golden section."

The Modulor became his philosophical emblem and his commitment to discovering an architectural order equivalent to that of natural creation. The Modulor helped to regulate the relationships between elements of different scales that resulted in unique grid patterns in his design. However, if a design did not look right to Corbu's eye, he would make visual modifications, thereby adding the humanitarian factor.

From the poems he wrote about the natural forces: sun, moon, water, and shadow, Corbu incorporated the natural laws in his design. He said, "the landscape which is to be seen must be preserved, not built on in haphazard fashion. A wise plan should provide the resources of nature: architectural forms of great sculptural value must be created. The primitivism of his late works should be received with the ethical perspective of a search for the roots of architecture, an attempt at touching upon the basis of psychic experience, and the old obsession of harmony with nature."4

In probably his most famous building, The Chapel of Notre Dame du Hut at Ronchamp, Corbu reflected upon sacred imagery and forms of past and present architecture. The building is a beautiful sculpture that is perfectly integrated into the landscape.

While Corbu was a masterful geometric and organic architect, it is difficult for me to qualify him as a current geomancer because one source validated his involvement with the Third Reich. Geomancers base design on universal laws that include true humanitarian principles; however, his work is too important for me to exclude.

We have seen "geomancy as the art of finding the right place and time for any human activity. It is an ancient form of sacred, ecological land-use planning. Originally integrating the study of ecology, geology, dowsing, earth acupuncture, architecture, sacred geometry, harmonics or music, dance, seasonal myths and rituals, astronomy, astrology, and cosmology, it can also be viewed as the Mother of the natural sciences."

When geomancy or sacred earth geometry is used, we add its dimension to our environments. We are able to come full circle by including the sacred triangle of Science (mind), Design (body), and Creativity (spirit).