Predicting Future Pasts

or

Reenchantment for the Disenchanted

A Thesis in Architecture

by

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A great epoch has begun.
There exists a new spirit.
Industry, overwhelming us like a flood which rolls on towards its destined end, has furnished us with new tools adapted to this new epoch, animated by the new spirit.
Economic law unavoidably governs our acts and our thoughts. The problem of the house is a problem of the epoch. The equilibrium of society today depends upon it. Architecture has for its first duty, in this period of renewal, that of bringing about a revision of values, a revision of the constituent elements of the house.

Le Corbusier, Towards A New Architecture, 1927.
This book is dedicated to Judy, who brought me into this world,

and to Debbi, who makes it worth saving.

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Ball State University's College of Architecture and Planning,
and the world in general.
Abstract

When humans first walked the face of our planet their thoughts were of an "intuitive" nature. As they wandered the landscape, following the migrations of the animals upon which they depended for survival, they perceived the earth to be inhabited by a living spirit. "Civilization", as defined by modern archeologists, commenced when humanity began setting stone against stone for the purpose of erecting permanent structures. We call this practice Architecture. Written language was developed at about the same time and in these early "intuitive" writings, we find descriptions of the creation, meaning and purpose of life. This intuitive philosophy was based on people's relationship "with", not to, their environment, and they celebrated the landscape as a giver of life, mothering all. These concepts can be found in early architectural pieces as well. Places like Giza, Stonehenge and Black Mesa all embody a special power or spirit which evoke feelings of awe and enchantment within anyone who ventures there. I believe this is due to the fact that the designs of these places are based on certain universal truths.

With the rise of Greek civilization, people stopped believing and started proving. Rational thought replaced intuitive thought with the result being that humanity eventually lost its intimate relationship with the environment. Fearing, and at times even hating the landscape, humanity no longer considered itself dependent upon mother Earth but rather began to see itself as master over her. The proliferation of the sciences brought with it an enormous evolution of technology, yet technological advancement is dependent upon resource potential (which is now swiftly dwindling).

I believe history as well as existence is made up of cycles. The scientific world is now arriving at conclusions developed through rationalization which intuitive minds knew long ago.

The purpose of this thesis is to develop design strategies which coexist in harmony with the environment and its resources while at the same time embodying those universal, intuitive truths which give certain environments their eternal, timeless and enchanting qualities.
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This is how it all began. I was seventeen, standing in the middle of a field near the famous Fudge Mounds just outside my home town of Winchester, gazing back into antiquity. This was the first of my experiences linking past to present and present back to past. I felt wonderment as I gazed down and realized I was the fist living being to behold this and comprehend its meaning since it had been lost by its owner, thousands of years prior to my venturing upon it. The object was sacred in my eyes and even to this day, when I make "a find", an unexplainable sense of awe pervades my spirit, lo, my very essence.

My heart and breathing quicken as I draw close to the relic, almost afraid to touch it. At farm auctions around the area where I grew up you can purchase bushel baskets full of such objects for a mere pittance, but to me, they are, and always will remain, priceless (especially the ones lucky enough to have been found by me). This is the way I like to remember them best, untouched, in their natural state and environment, the way they were meant to be. They are symbols of a bygone people, a people who lived as one with their surroundings. I didn’t know it at the time, but this tiny piece of flint would have a big influence on me in the following years.
Adapt or Perish
A Brief Statement of Genuine Concern

In recent months I've been reviewing information or evidence if you will in regard to the question: Where are we going? We live in an environment which is chaotic and disjointed at best. We are constantly bombarded by information and various stimuli all our waking lives. Most of the information is meaningless sensory pollution with the remaining portions being comprised of either negative input, or something designed to help us forget or escape the effects of the first two. This sensory pollution is perceived through both audio and visual mediums. It frightens me to think that the major environmental stimulus for a child developing basic language skills might be something like a billboard, truck or television commercial.

Modern life has become almost unbearably complex and due to the vast amount of knowledge now afforded the human race it currently takes over two decades of training before an individual is prepared for even basic survival skills.

Through this storm of sensory overload I've been trying to isolate just a few of the myriad pieces of data constantly being hurled at us every second. I've come to two conclusions. The first is that our planet is falling apart, and the second is that we, as a people, are becoming psychologically and ethically bankrupt.

The purpose of this thesis is also twofold in nature: Humanity must first reconcile itself to the planet on which it lives, it must then go about the task of reinstilling meaning into its every day environment as well as life in general.

I propose to do this by Predicting Future Pasts, that is to say by making informed predictions of the future which will inevitably be someone else's past. But to predict the future, one must comprehend the present in addition to understanding the past.

I believe the way to achieve this total comprehension is by realizing how intricately everything in the universe is interconnected with everything else. I now invite you to take a quantum leap with me into the realm of holistic thinking.

A long time ago, you, me, and everything we know of existed as hydrogen atoms in a nebulous cloud. These hydrogen atoms began attaching to one another eventually forming dust particles. As the nebula grew, it began to condense due to the effects of gravitation and its ever increasing mass.

The condensing of the nebula gave it a funnel like rotation. As the dust particles grew in the outer regions, rocks began to appear which collided with other rocks travelling at more or less the same rate of speed, in more or less the same general direction, so the when they collided they did not shatter but coalesced into even bigger rocks. Proto-planets began to appear, growing in mass as they swept out what would eventually become orbits.1

When the pressure in the protosun core reached a critical level, fusion began to take place and an enormous explosion and solar gale swept through the solar system removing the existing atmospheres from the inner planets.

At this point in time, the Earth was like a giant, lifeless asteroid, but the planets had grown so large that their centers too began to heat up under the pressure of their own weight. The elements in the center of the planet started to break apart and the lighter elements began to leak out only to be caught by the Earth's gravitational field and held here to form a second atmosphere. The vapors would rise and condense in the colder regions of the upper atmosphere and rain began to fall.2
Adapt or Perish
A Brief Statement of Genuine Concern

The rain continued falling until three-quarters of the Earth's surface had been covered. Water, the elixir of life. Here, in the ocean's depths, atoms were again hard at work. This time arranging and rearranging themselves in such a way as to form extremely complex molecules as DNA and RNA. Soon the seas were teeming with one celled organisms. Eventually insect life emerged followed quickly by higher forms.

Up to this point man was just another animal struggling to survive in a hostile environment. But this is a big day for mankind, because today, for the first time, he's about to use an item from his surroundings in a way in which it was not intended to be used. Today, for the first time, man will alter his environment to suit his own purposes.

Until now, man's existence was confined to fulfilling his basic needs such as food, water, sleep and shelter. Yet with the inception of the tool, man's tasks became easier and a new need was born. The quest for leisure had begun.

Crude tools were used to make better tools and better tools were used to make machines. Technology arrived hand in hand with obsolescence.

Society began to need power to operate its machinery, with the unlocking of the secrets of the atom, the power of electricity was unleashed and the electrification of the planet Earth was underway.

Electrification made man's existence much more comfortable as well as permanently raising the potential of his achievements. It turned night into day with the unfortunate consequence that the stars, perhaps, were never again to shine as brightly.

Power requires energy and energy requires a source. For the source of man's energy he chose to dig elements out of the Earth and convert them into usable fuels. While the ultimate intention of technology has always been to liberate society from the mundane in order to pursue more intellectual and artistic endeavors, it has also brought about some very serious problems.

The natural resources we're utilizing for our power supply will eventually run out. What will we do then? Some have suggested that we mine space for our needed raw materials. This is not a good idea because through industrial processes, raw materials indigenous to this planet are being converted into elements which have an adverse effect on the environment, it therefore would not make sense to bring more raw materials here to further damage the ecosystem.

Well then, why don't we just move when we run out of raw materials or when pollution reaches critical levels? Although space travel is feasible, it is not considered a viable alternative because of the immense times and distances involved.

By products from refrigeration and automobile exhaust are being drawn to our southern polar ice cap where they are eating the ozone layer of our atmosphere. The ozone layer of our atmosphere is that which protects all life on Earth from the sun's harmful ultra-violet light rays.3

Carbon monoxide levels from automobile exhaust are rising, creating a greenhouse effect. Under this condition, heat energy from the sun which would normally reflect from the surface of our planet and pass back out into space is reflected by the carbon monoxide in the upper atmosphere only to return to the surface again. The result being that the average surface temperature of our planet is slowly increasing and the polar ice caps are melting.4
Adapt or Perish
A Brief Statement of Genuine Concern

Remembering that three-quarters of the Earth is water, we see that we have one-hundred percent of the Earth's population confined to twenty-five percent of the Earth's surface area. Then, when we take into account the fact that only half of the total amount of land is presently considered life sustaining, we see that in fact we have one-hundred percent of the Earth's population living on roughly twelve percent of the Earth's total surface area.7

The problems are obvious.

Living resources essential for human survival and sustainable development are increasingly being destroyed or depleted. At the same time human demand for these resources is increasing rapidly.

These two combined conditions have caused humanity's numbers to grow by leaps and bounds.

If current rates of land degradation continue, close to one third of the world's arable land will be destroyed in the next twenty years. Similarly, by the end of this century, (at present rates of clearance), the remaining area of unlogged productive tropical forest will be halved.

Modern man physically has a much easier time of it than did his ancestors, with the resultant being that we have a much better survival rate at birth, and we live almost twice as long as we did before.

These two combined conditions have caused humanity's numbers to grow by leaps and bounds.
Adapt or Perish
A Brief Statement of Genuine Concern

During this period the world population is expected to increase by almost half.10

Each year we are paving areas equivalent to the size of Texas (this comes out of the twelve percent of arable land we presently inhabit).11

We are simplifying the plant life of our planet down to basically five species: Corn, potatoes, rice, wheat and grass.12

We are currently witnessing the extinction of life on our planet at the astounding rate of one species every hour.13 It is projected that by the year two-thousand we will be eliminating one species every fifteen minutes. At the height of the great dying of the ice age, we were losing one species every one-thousand years or so.

The deserts of our planet are growing at the alarming rate of about eight-thousand square miles per year.15
Adapt or Perish
A Brief Statement of Genuine Concern

Overall, life on our planet is not being destroyed by poisoned arrows, harpoons, sporting rifles, traps or even pesticides, rather it is being extinguished through the use of bulldozers, chainsaws and digging hoes.

In addition to all of these environmental concerns, terrorism, divorce, alcoholism, drug abuse, child abuse, suicide and violent crime have all increased dramatically in the past few decades. The individual has been completely alienated from society and the very social fabric of our planet is being hopelessly rent.

If we are to survive, we must all realize that we are literally one with the planet on which we live. We as architects, engineers, planners, legislators, developers and agriculturalists must take responsibility for the stewardship of our planet. I believe we will be confronted with an onslaught of change during the course of our lives and careers. As professionals we must prepare ourselves for the demands and levels of expertise which will inevitably be made of us.

I agree with Buckminster Fuller when he said, (and I'm paraphrasing), 'Man is meant to survive or else the universe would not have made her secrets known to him, enabling him to see the errors of his ways and thus correct them.'
The Nature of Cycles
and the Cycles of Nature

It was toward the end of the summer in 1987 when word of the Harmonic Convergence first reached my ears. At this point in time I was planning to propose doing a mega-structure for my thesis in architecture. In view of my ongoing concern for the environment, I thought an Arcosanti approach would be most appropriate, this was soon to change however. The cynical bits and pieces I picked up over the television and radio, somehow carried with them the unerring ring of truth and genuine concern for the environment. The stories themselves had a "Real People" connotation in the way the networks attempted to make the participants look like Woodstock remnants, nevertheless, something stirred deep inside me. I heard about the harmonic convergence almost at the eleventh hour, and even though I didn't know of a close by gathering, I was not easily turned away. I went into my back yard, sat on the ground, crossed my legs and began to commune with nature. Not a single U.F.O. appeared over head, no earthquakes rocked my surrounding landscape and after awhile I forgot about such things and without thinking, began to find myself concentrating on something much larger. I became aware of a consciousness, a "planetary" or "galactic" consciousness if you will. I had often thought about the possibility of such a thing but this was the first time I had actually felt something like this. Oh, I had had spine tingling religious experiences in my earlier youth, but these experiences were more of a frenzied sort of affair. In the end it began to get dark, I picked up my towel and went back into the house.

You see, for some years I had been fascinated or perplexed by the meaning of life and felt I was still searching. Like Einstein, I too felt there was a secret to the universe, one that mere science nor blind faith in some higher entity could account for. I felt that the true secret to the meaning and purpose of life lay somewhere in between. Not too far in the distant past I had finally come to the conclusion, (through an understanding of physics), that whatever it was that made me me, was more than just atomic structure, that is to say, the atoms that make up one's body, in addition to everything else for that matter, have been here since the beginning of time. I am constantly exchanging matter, yet I go merrily on through existence as a cohesive consciousness, apparently unhindered by the fact that I am a constantly changing state. If the matter that made me came from other places, then whatever made me conscious must have come from some place too. If the atoms in my body would be returned to the giant caldron of the life cycle on this planet, then so also would my spirit progress to some other form or place. I had finally thrown of the age old shackles of mortality, and rid myself of my fear of death forever. I had now turned my attention to an even bigger problem...."WHY?".

When I arrived in Art Schaller's thesis studio, I had dumped the idea of a mega structure altogether, at this point I had only a feeling for what I wanted to accomplish. As I came to know Art, I discovered that both he and his wife Anne were something of regional experts on the subject of New Age philosophy. I began to pick his brain. He told me of books which might be of interest to me in my pursuit, the first one, The Mayan Factor: Path Beyond Technology, by Jose Arguelles, blew me away. Somehow Arguelles answered all the questions, filled all the voids and eloquently described the big picture in terms not only spiritual, not only scientific, not only comprehensible, but somehow hauntingly familiar. As I read, it was as if I was relearning things I had known all along. Like a week long dejavu, I travelled the universe remembering things long forgotten.

The Mayans: The existence of the Mayans has only been made known to us in the last one hundred and forty years. In that time, archeologists were stumped when it came to three major problems: Where did they come from, where did they go to, and what is the meaning of their hieroglyphs?
The Nature of Cycles
and the Cycles of Nature

It would seem the reason the archeologists had so much trouble deciphering the mayan hieroglyphs is because they are not representative of an alphabet, but rather a philosophy of numbers.

The Mayan calendar begins with the beginning of time and ends with the end, which is not really an ending at all, but rather a new beginning. I have always been fascinated by how all of the major religions follow a basic path. I believe now this is due to the fact that there is this one universal truth I've been searching for.

Their ruins in Central America seem as if they simply appeared, wrote everything down, then left. The hieroglyphs almost read as a message to present day man, having been put in such a remote place that they would not be found until mankind's population and technology had grown to such a point that in his efforts to expand, he would inadvertently stumble across them at the precise moment he would be in danger of not only extinguishing himself, but all other life as well.

Each one of the two hundred and sixty permutations is a combination of one of thirteen numbers, one of twenty signs, and one of four directional positions. The pure progression of these numbers being the sequence of 2, 4, 8, 16, 32 and 64 (the number of codons in a molecule of D.N.A. This progression of numbers may also be found in the I Ching as seen on the following page.

Above is a picture of the Mayan Tzolk'in and its Roman numeral equivalent. There are thirteen columns and twenty rows giving a total of two hundred and sixty permutations. To the Mayans, numbers have more than just quantitative meaning. Like notes on a musical scale, they are fractal in nature.
The Nature of Cycles
and the Cycles of Nature
The Nature of Cycles and the Cycles of Nature

Above can be seen the way in which the numbers in "the loom" can be combined to add up to 28 by using thirteen sets of four numbers.

This is very frustrating for me because nothing can be described without describing everything. Even though the whole is contained in the part.

What I'm trying to get at is that the tzolkin is both a yearly and historical calendar, as well as a theory of wave harmonics.

The tzolkin actually mirrors itself, with the seventh column being the change in phase or neutral column. This means that "everything that goes around, comes around". This mirrored effect may be seen on the next page.

As for page 21, it consists of a region that doesn't develop its own content.

Also, historically, the cycles are based on the "cycles of the cycles".
The illustration on the opposite side of the page represents the development of one's consciousness, the three developmental regions of the brain, as well as the development of the planetary consciousness.

Also, for every baktun or large cycle of history, there are twenty katuns or smaller cycles. Thirteen baktuns in the grand scheme and two hundred and sixty katuns.

DEVELOPMENT OF PRIMARY BEING:
1. BAH, Source of Life, Placenta, Blood, Nourishment, LIFE.
   Mother Energy, Power of Birthing. EAST
3. AKBAL: Heaven, Allowing Darkness, Night, Moon, Planetary System, Vital and Internal Organs. WEST
5. CHAN: Serpent, Nervous System, Sensory System, Integration and Symmetry of Astronomical Functions. EAST
6. CHON: Death, Revelation, Realization of Identity, Mortal Body. NORTH
7. KANIK: Hand, Grasping, Closure, Knowledge of Power of Completeness, Realization of Innermost of Physical Being. WEST

DEVELOPMENT OF HIGHER BEING—Generative Stage
9. MULUL: Rain, Cosmic Seed in General of Achieved Cosmic Integration, Principle of Communication and Expansion of Higher Life. EAST
11. CHUM: Moon, Mind, Blackness, Pure principle of Development of Creation of the Higher Life. WEST
12. O: Human as Vessel for Realization of Higher Mind. SOUTH

DEVELOPMENT OF HIGHER BEING—Catalyst Stage
15. MIN: Eagle, Higher Collective Mind, Planetary Mind and Consciousness. WEST
16. CIB: Cosmic Force, Ability to Contain and Communicate with Galactic Consciousness. SOUTH
17. CABAN: Earth, Earth Force, Spectacular, Power of Intuitive Systems of Communication. EAST
18. ETZANIB: Half of Atonement, Ritual Pattern of "No-Time," Ritual Smoke, Ritual Knife, Sword of Wisdom and Purification. NORTH
19. CALUAC: Storm, Thunder Cloud, and Thunder Storm, Transformation that Precedes Full Realization. WEST
20. AHAU: Solar Mind, Solar Seed, Man or Woman, Realization of Solar Body, Wisdom, Knowledge, Ability to Focus Galactic Whole, Ability to Encourage and Create the Entire Cycle. SOUTH
The Nature of Cycles
and the Cycles of Nature

Opposite are shown the thirteen baktun or larger cycles with brief summaries of what happened in history during these cycles.

The two come together nicely on the following page with the major person or historical event of each period being indicated.

With his being not the not only positive difficult think to if it has of the and another come to

Across the best example they look

But what is their thesis? people's believe
The Nature of Cycles
and the Cycles of Nature

With history being made up of cycles, nature being made up of cycles, or negative positive relationships, it shouldn't be too difficult to see where I'm going with this. I think technology is on the verge of peaking, if it hasn't already. Too much technology has brought about a great many problems and will eventually destroy us unless we come to terms with it.

Across the page are some scientific examples of waves in case you forgot what they looked like.

But what does any of this have to do with my thesis? Architecture used to reinforce people's ideologies and philosophies, I don't believe it does anymore due largely to its dehumanization through technology.
The Nature of Cycles and the Cycles of Nature

The Astronomer and the Physicist:

It was at about this time, I got the idea that if indeed there were an exponential quality in history, there must be one in structure as well. I got out my physics and astronomy books to see if there was a correlation between the structure of atoms and the orbits of the planets. To my dismay there appeared to be no correlation, but I was plagued by this notion and some months later I got them out once again. This time I realized that I was looking at two entirely different systems of measurement. The orbits of electrons in an atom were expressed in terms of angstroms, while the planetary orbits were expressed in terms of astronomical units. I then proceeded to cross multiply them out to put them in the same frame of reference. When I did this, I was astonished to find that not only were differences in the numerical progressions almost negligible, but they were in fact, the same progression of numbers found in the Mayan Tzolk'in.

This discovery will become important later when talking about my design.

Cycles in Architecture:

I have long been interested in ancient architecture. The way in which it exists in harmony with its surroundings and embodies what can be described as a timeless quality. The relationship between the earth and the sun appears again and again in architecture, transcending time, distance and culture to appear on every habitable continent in the world.

The Cycles:

I became so enthralled with Stonehenge that I built a model of it so I could study it in three dimensional form.
The Nature of Cycles
and the Cycles of Nature

The Egyptians:

The Great Temple of Amun-Re, Karnak, Luxor, Egypt.

High Room of the Sun, Dedicated to Re-Hor-Akhet.
The Nature of Cycles
and the Cycles of Nature

The Mayans:

[Diagram of Mayan temple]

Three temples marking the seasonal rise of Chacmool, Guatemala.
The Nature of Cycles
and the Cycles of Nature

The Native Americans:

In addition to embodying such characteristics as usage of indigenous materials, the Native Americans of this country have a very beautiful life philosophy which lends itself nicely to the rituals of the new age enthusiast. One of the physical manifestations of this would be the medicine wheel. As a tool for aligning one's self with the creator it is excellent and for these two reasons found its way into the heart of my thesis. The actual stone circle layout is displayed to the left, while the reference chart appears below.
The Nature of Cycles
and the Cycles of Nature

I combined both charts into one for my own better understanding.
Palisades of Harmony
The Project
Palisades of Harmony
The Project

Social Institutions

- Family
- Economic
- Religious
- Political
- Education
- Military

At the spring of the river which feeds into the lake and the well fed spring feeds into the lake, as this is the case, we lose the project. Once...
Palisades of Harmony
The Project

**Early Concepts:** My initial concept was to embody my own personal philosophy of life into an architectural piece. To do this, I began by splitting a pyramid into fourths with the inner two quarters being white to represent the physical plane that we know and the outer two quarters being black to represent the before and after life experiences that we're not sure of. These pieces were then further pulled apart to represent a beginning of a journey, birth, and an end of a journey, death. The pyramids would be made of white and black marble with the "cut planes" of the segmented pyramids being made of mirrored glass. You begin in the west travelling toward the sunrise.

![Diagram of Palisades of Harmony](image)

At the beginning of the journey there is a spring. The union between you and the water is symbolic of the union between spirit and flesh at the time of birth. The spring feeds into a straight and narrow aqueduct and the traveller is separated from the water as the land falls away from the aqueduct, this is in reference to the child like innocence we loose as we get caught up in figuring out the physical plane we've been placed in. Once you figure out that there's more to life than physical pleasure, the water is as high above you as it can get. You must now spend the remainder of your journey climbing up hill, trying to be reunited with the water or truth. In the middle of the journey you come upon the culture dome, the place where everyone goes, the one thing we all have in common, the experience of living. The water passes through the dome via a super structure bridge. The amphitheatre is canopied with a partial dome with holes in it. At certain times on certain days sunlight is admitted into the space through these holes and signifies the start of special events.

Once you've completed your journey by climbing the hill, you are reunited with the water. As you look back across the trek you've made, you're looking west into the setting sun, pondering the course of your life. As the water passes between the final two pyramid quarters, it cascades in a waterfall over a cliff into a vast gulf, symbolic of leaving your body behind in this world while your spirit continues on. Far in the distance is something, people can see it, others cannot, some never do, but that is where you're eventually going.
Palisades of Harmony
The Project

Pictured above is a sketch of the culture dome. The totems (pictured on the previous page) would be sectioned into twenty segments each containing one of the twenty motifs of the katan cycles of the Maya (pictured on page 13). There are twelve of these totems; they are placed at the upper perimeter of the amphitheatre and correspond to the twelve outer stations of the stone circle. These totems are equipped on top with high-powered spotlights. When used in unison, these lights create a curtain of light which envelopes the space and makes a connection between the earth and sky.

Site: By this time, it was the beginning of winter quarter. I felt pressured to pick a site, so I sat down with the atlas and started looking for a landscape which would be conducive to what I was trying to accomplish. It came down to two choices: one being Kansas, because of its topography. An object placed there would become a surrealistic element on the landscape. I then decided against using Kansas because of its food production capabilities. I then turned to the American southwest. I initially picked a place called Black Mesa in Arizona. Black Mesa is relatively close to Grand Canyon, Arizona and has much of the same terrain characteristics. The Hopi built their pueblos here and this land is sacred to them. I made this decision based on the fact that this land is not good for food production, and also because of the natural splendor of the region. The next day when I went to studio and told Art about the site, he said that there was a place not too far from there where new-age spiritualists were moving because of energy vortices occurring there. He said the name of this place was Sedona.

Context: Upon hearing this I went to the map-collection room in Bracken and obtained the following map of the area as...
Palisades of Harmony
The Project

well as the phone number for the Sadona Chamber of Commerce.
**Analysis:** At this time, I also obtained a two and one-half minute USGS topological survey of the area which I copied in line-drawing form.
Palisades of Harmony
The Project

Because solar angles were to play such a key role in my design solution, I generated a sun-angle diagram for Sadona’s latitude.

Sadona is located 20 miles south of Flagstaff. This is high-desert country where, although temperate during the day, the sun’s rays are very intense. The native red rock lays close to the surface and makes a natural thermal sink absorbing the sun’s heat during the day and slowly releasing it at night.

Systems: Because of the thermal storage capabilities of the indigenous stone, I decided to use materials such as adobe, caliche and stone in an effort to maximize passive environmental system potential.
Palisades of Harmony
The Project

Likewise, I decided to maximize existing wind patterns in conjunction with building form and fenestration in an attempt to gain optimum utility from passive cooling systems.
Palisades of Harmony
The Project

By combining natural ventilation with the presence of standing water, one may passively humidify a space.

Site Information: I soon began receiving hotel brochures from merchants in the Sedona area due to my contact with the Chamber of Commerce.
Palisades of Harmony
The Project

These brochures supplied me with valuable photographs of the site. Sedona is located at the entrance to Oak Creek Canyon.

OAK CREEK

Revised Concepts:

In this version the entire town plan is submerged below grade with the rooftops occurring flush with grade as shown in the section below. In the central gathering space itself, I decided to combine an underground cultural arts facility beneath the amphitheatre floor, as shown in the drawing above.
Palisades of Harmony
The Project

At this point in the design, the totems came back to serve their original function with the added function that they would now be exhaust ports for natural ventilation occurring below in the cultural arts facility.

philosophy of life.
Rituals and ceremonies of these social groups.

Materials and Scale: As stated previously, as many construction materials as possible will be derived from elements indigenous to the site. These include adobe, caliche and stone. These methods and materials are low-technology, labor-intensive operations, reducing the amount of heavy equipment needed in the construction process.

As for scale, no building, (with the exception of the pyramid discussed later), shall exceed four stories in height. All housing areas are to use juxtaposed massing in addition to amorphic planning. As with Vitruvius, the scale of such elements as columns, arches, doorways and windows will all be based upon the proportions of the human figure. It is hoped that by using juxtaposed massing and amorphic planning that a suitable amount of private yard and garden space will be afforded all inhabitants.

Program:
Rapid increase in Sedona population.
Passive environmental building and infrastructure systems.
Indigenous building materials.
Sympathetic construction methods.
Structure of society.
Site context.
Hopi Indian and New Age Spiritualists'
Ornament: All ornate elements shall have a complexity and richness indicative of Mayan, southwest native American, Louis Sullivan and Frank Lloyd Wright motifs as exhibited on the following pages.
Palisades of Harmony
The Project
Palisades of Harmony
The Project
Palisades of Harmony
The Project
Palisades of Harmony  
The Project

Final Concepts:

Exponential Time/Space Sequences:
As stated earlier, I discovered a correlation between the orbits of electrons in atoms, planetary orbits in our solar system, and the Mayan harmonic number sequence, leading me to a theory on exponential existence.

At the heart of the community is a stone circle. The stone circle rests on the floor of a small amphitheatre high atop a truncated pyramid. Surrounding the pyramid is a mote of water. Surrounding the mote is the inner-city plaza wall. The relationships of these elements to each other follow this exponential numerical proportion.

The root element (one) is equivalent to the diameter of the amphitheatre. The next number in the progression, four, is equivalent to the base diameter of the pyramid. Seven is the proportional distance to the inner-city plaza wall; nine is the proportional relationship to the first solar plaza, and 13 to the next solar plaza. The remaining two solar plazas are fractal increments of this progression.

Where these increments occur, a change in level takes place with the solar plazas being located in the heart of their corresponding level. Each time a level is changed, one is exponentially one step closer to, or further away from, the center, giving the observer
Palisades of Harmony
The Project

an unconscious point of reference as to the structure of the universe.

As one ventures east, Lee Mountain terminates one's vista.

Cardinal Axes/Termini: I situated the town in such a way as to take advantage of certain natural elements. As one progresses toward the center of the city, along the east/west, north/south axes, the truncated pyramid services as a terminus. As one ventures outward from the center on the northern axes, the Chapel of the Holy Cross serves as the terminus.

As one ventures west, Bell Rock, one of the electromagnetic power points, terminates the axes.
Palisades of Harmony
The Project

As one ventures south, one is headed toward Cathedral Rock, another of the local electromagnetic power points.

Pyramid: Inside the pyramid, I've taken the sphere of space created in the Pantheon one step further. As one sits in the indoor ampitheatre, the average person's eye level is on the bottom circumference of the sphere of space. Ascending to the gallery and proceeding to the railing, visitors are now at eye level with the horizontal diameter of the sphere of space. Design development of the pyramid, the inner sphere of space (ampitheatre, aisle and gallery), pyramid and bridge ornament sketches are displayed on the following pages.
Palisades of Harmony
The Project
Palisades of Harmony

The Project
Palisades of Harmony
The Project
Palisades of Harmony
The Project
Palisades of Harmony
The Project

**Solar Axes/Plazas:** The plazas are broken into four categories: summer sunrise plazas (located in the northeast quadrant of the town), winter sunrise plazas (located in the southeast quadrant), summer sunset plazas (located in the northwest quadrant) and winter sunset plazas (located in the southwest quadrant.) As the sun moves from equinox to summer solstice, its change in azimuth causes the plazas to be illuminated in an inward-moving manner occurring every 23 days. At sunrise summer solstice all the plazas align and the sun is admitted to the innermost part of the town. In an attempt to provide the plazas with separate and distinct identities from one another, I developed the following catalog of parts. These studies were intended to explore the different potentials in the sun's illuminating and heating characteristics as well as finding different ways of manipulating the direction of the sun's rays.
Palisades of Harmony
The Project
Palisades of Harmony
The Project
Palisades of Harmony
The Project

...Whirl The Maps About How Different Events Made Together Into One Whole Dependent Events. Lessons Learned In Oil Every Other Lesson Learned, Writing Of All. Be Created And Mapped. In A Whole Never Made As Many Maps, Also Told... The Greatest Confidence Of All. The Learning Room As Address To The Semi-Metal Column Oil Man Hole Location.
Palisades of Harmony
The Project
The last section of this book is a reproduction of my final thesis design presentation at Ball State University. No text accompanies these drawings because all pertinent issues and concerns have previously been addressed. It is hoped that the portfolio of charcoal renderings will speak for themselves.
Red Rock Crater
Red Rock Crater
Red Rock Crater
Red Rock Crater
Red Rock Crater
Red Rock Crater
Red Rock Crater
Red Rock Crater
Summary

I've come to the conclusion that no one architect or designer can successfully plan, design, orchestrate and construct a total environment the way I had hoped to do.

The way an environment such as this comes into existence, (aside from slavery), is for a group of people to share enough in the same vision that they plan it, they build it and their lives give it life.

By aiding in the construction process, it is likely the inhabitants will obtain a much richer experience from their environment than if that same environment were constructed in a prefabricated of fast track manner.

I have received considerable criticism regarding the low technology, labor intensity of this project. Those people say it is "not feasible". What I think they really mean to say is that it is not comfortable, in other words, it would take a lot of intense physical labor as well as a considerable amount of time investment. My response to this is that every truly great piece of architecture took both time and loving care to accomplish such greatness.

This intellectual pursuit we call thesis is not yet over for me. It was never intended to have an ending or conclusion. It has been a summary of influences and a statement of intended continuing pursuits, once outside the college.
Text and Illustration
Notes


2 Ibid., p. 25.


5 Ibid., p. 67.

6 Ibid., p. 45.


9 Ibid., p. 81.

10 Ibid., p.78.

11 Ibid., p. 150.

12 Anderson Omega, p. 98.


14 Ibid., p.63.


16 Ibid., p. 22.

17 Fuller, Operating Manual, p. 81.


19 Ibid., p. 85.

20 Ibid., p. 91.

21 Ibid., p. 90.

22 Ibid., p. 94.
Text and Illustration
Notes

23 Ibid., pp. 99, 100, 101.

24 Ibid., pp. 114, 115.

25 Ibid., pp. 116, 117.
Selected Bibliography


