

The HEART of PLACE



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PREFACE: THE HEART OF PLACE

I would never have believed five years ago that I would today be talking as a designer about the necessity of a sacred society for our survival.

Many years ago, I began trying to find how to put heart back into our architecture and building. That led first through renewable energy, appropriate technology, and sustainable economics - knowing that such things weren't answers in themselves, but necessary housekeeping that needed to occur before we could address root problems. It led way off into an academic discovery about feng-shui, and many years later to a somewhat deeper understanding of the centrality of that tradition. It led to sacred places, and a realization that we can't shape our surroundings separately from ourselves and the people who use them.

As others began also to focus on the vital changes needed to make our society sustainable, it became clear that most were concerned only with technological dimensions of our problems. I will not focus on that dimension of sustainability here - it can be found in my writing and built projects over the last twenty years. Those changes are important, but the mindset that focuses only on them is part of the source of our problems. We need to ask where those problems came from. We need to ask ourselves where we really want to go with our lives and society. No one seemed willing to suggest answers or even to raise these questions.

A few lonely voices have long held that the root of our ecological crisis is a spiritual one. Fewer still have been able to suggest in any concrete terms what that means in terms of the "real" everyday world. Over time, I began to find things in my own life and work which seemed to have a sense of rightness and seemed able to show what could be done. I began to see also that they showed how we might approach other parts of our society and of our lives. As the threads drew together, I began to see the shape, at least from the outside, of what we are not part of.

We can't separate places from people, or people from institutions, or any of that from the rest of life outside our skins. Yet that living community - *Place* - is vital. It is one of the major meeting points where we live, interact, show honor, grow and learn to give.

PLACE is a song, not an address in space.

It arises from the harmonic interaction of the many voices and many lives that inhabit a locale of space and time. It emerges from the rocks, the wind, the dragonfly and the ox. It comes from the life that composes sunlight into form and from the life that elegantly disassembles form back into new potential.

Like any song, its joy lies not in how fast we get to the end of it, but in sustaining, enriching, and partaking in the unfolding of the harmonies and interweavings of many voices and many rhythms of time, complexity, and duration. The joy of being part of this song, and the dream of bringing it to new depths of power and beauty, meaning and value, are the enduring treasures of our lives.

Not knowing or being part of the song of place is to live with an empty heart - the emptiness of a heart evolved over millennia in resonance with that great and powerful song and aching in the absence of its touch. The illusory separateness and self-centeredness to which we dedicate our lives and society is an immense poverty and meagreness if we know even a glimpse of its alternative.

Our every thought, dream, and action generates, strengthens, or destroys these ties that constitute the Heart of Place. Our every action in shaping and using our surroundings and relating to others and other life in them embodies our attitudes and beliefs and nature into those surroundings. Our surroundings are not inert containers for our activities. They are an active force in our well-being or ill-health, and in our success both as individuals and as a society. Our attitudes towards how we design and use our homes, work places and community facilities are integral to their success.

The more we turn our eyes to the stars, the more crucial are our roots in the primal forces of life which have shaped our nature. Only these inner dimensions of our actions can keep our roots alive and our actions within the bounds of sustainable and desirable futures that open before us.



DISEASES OF THE SPIRIT

DISEASES OF THE SPIRIT

The greatest failing of our architecture and cities today is the same as that of the society in which they are embedded - a failure to address the spiritual dimension of our lives. This is not the once-a-week, sit-in-church spiritual dimension of our lives, but the part that deals with the diseases of the spirit which constitute our greatest social problems.

Look at all our intractable social problems - alcoholism, tobacco and drug abuse, crime, child and spouse abuse, homelessness, obesity, apathy, divorce and broken homes, poverty, failing schools. All are reaching epidemic proportions. All seem resistant to resolving.

These problems, however, have a common root. They are not diseases of the body, but of our psychic "immune system". They all arise out of lack of self-worth, lack of respect by and for others, or lack of opportunity to be of use and value to family and society. All are tied to temptations that have existed in every culture, but temptations to which in our society resistance has weakened or vanished. These problems are all *diseases of the spirit*. They cannot be resolved without dealing with this root cause.

* *It is a disease of the spirit* when successes and failures of the past lie so heavily on a person or culture that they don't want to even try to measure up to either that past or to their own potentials.

* *It is a disease of the spirit* when wealth and comfort make us too self-satisfied to reach out for the vital nourishment of work, challenge, community, and giving to others.

* *It is a disease of the spirit* that we see in the eyes of people who have been defeated - individually or as a society - and have seen what they love and value destroyed or taken away.

We have prided ourselves on "conquering disease", yet have not recognized that each culture has different forms of illness and health. These problems that plague our current society lie in a different dimension, and have a different vector, than the plagues of the past which we have been able to resolve.

Our minds are the greatest force in our immune systems and our health. Our health depends most centrally on our spirit. Spirit is the heart of our lives, our dwellings, and our cities. The nature of our lives and our communities grow from the same inner fire.

A spiritual core to society is essential for personal and social health and survival. Simply put, that spiritual core deals with "honoring". It deals with respect, with what the Christian's 'Golden Rule' distilled into, "Do unto others as you would have them do unto you."

Our century has inhabited a secular world. We have placed religion, spiritual concerns, the sacred, in a peripheral category of the unimportant. Our important thoughts and actions in education, business, pleasure, government, even health, take no measure of the sacred. To us it is a thing of the past - an emotional crutch of earlier, less careful and critical thinkers. We see it as belonging only to times lacking our powerful tools of science to separate fact from fiction, to tear apart and prove how our world really operates.

Our science has branched out from physics and chemistry into biology, psychology, neurology and immunology. More and more, we find that our emotions, our feelings, our will power, our faith, the power of laughter or grief or depression, are the initiating force in illness, in healing, in creativity, in success in accomplishing whatever we do.

And what marshals those forces? When we ask that, we find ourselves suddenly back on the edge of the sacred and the spiritual and seeing them from a new and more respectful viewpoint. We are now discovering that the spiritual core to society which we have discarded is essential for personal and social health and survival. The lack of that spiritual core pervades all parts of our society.

How do we honor each other, and ourselves? How do we honor old people, children, the sick or dying? How do we honor workers and those outside the workplace? How do we honor those going through life's changes? How do we honor our neighbors, our past, our communities, or our adversaries? How do we honor plants and animals; the earth, air and waters; our planet and the stars from which we are descended?

Life in a sacred society is difficult to comprehend from outside, for we have no comparisons to the kind of support, strength, freedom, meaning, and confidence - and therefore health - that arise from being part of a community of respect. We can get but a glimpse of how that kind of life, meaning, and power tie to a place in the eloquent and famous words of Chief Seattle:

"....Every part of this country is sacred to my people. Every hillside, every valley, every plain and grove has been hallowed by some fond memory or some sad experience of my tribe. Even the rocks, which seem to lie dumb as they swelter in the sun along the silent seashore in solemn grandeur, thrill with memories of past events connected with the lives of my people.

"The very dust under your feet responds more lovingly to our footsteps than to yours, because it is the ashes of our ancestors, and our bare feet are conscious of the sympathetic touch, for the soil is rich with the life of our kindred."

On a simpler level, sacredness involves honoring the needs, dreams, and contributions of others. I remember one night in a Japanese Youth Hostel watching a group of American and Japanese students try to decide how to get to a festival. Some of the Americans thought there wasn't time to sit around and argue about how to get there, and decided to just charge off and try to stumble onto the festival. Others felt that was too chancy, and decided to stay at the hostel.

In contrast, the Japanese sat down as a group and listened carefully to everyone's thoughts as to where the festival might be and how to get there or whether to try. The differences in group process, the weight of risk and how to share it, and the support for everyone from a community process were very visible.

How do our actions in shaping and using our surroundings fit into the question of our health and society? Expressing a sense of honoring in our surroundings is but a small piece of a sacred world, but one, like all, which permeates and connects to everything. And it is one which constantly surrounds us with concrete images of what we value.

Our surroundings themselves are worthy of honoring. They also act like mirrors, expressing our values and conveying to others our inner strengths and fears, pride and hungers. They speak of our relation with nature. They reflect our patterns of

work and what we gain from that work. They show our relations with others, and what paths we take to self-respect, balance, and growth. They reflect our goals as a society. They tell how we build, live and love. They show whether we know ourselves as part of the great and all-encompassing drama and adventure of our universe, or if we see ourselves as a small and insignificant thing apart from it all. What they reflect back to us today is not inspiring.

How we shape our surroundings demonstrates our values, and can be a tool for healing ourselves and our relations to others. In a sacred society our surroundings are a source of meaning, power and strength which we lack today. To make our surroundings better, our hearts need to be in a better place - which we are learning step by step. If our surroundings are better, they make us better. Strength leads to vitality, just as weakness leads to impotence.

Sacred places and sacred building are vital to a healthy society. When we study the phenomenon of sacred places, we find amazing variety. We also find that what is special and held sacred in one place is commonplace and of no note in another. Ironically, what seems decisive is not the qualities of the places themselves, however powerful they may be. The core, and the power of sacred places is *the act of holding something sacred!*

What sacred places boil down to is honoring. And that, we suddenly remember, is the key to a whole complex of social diseases!

Once we accept that some places should be held sacred, it is impossible to deny the sacredness of all places, all things, all life. Affirming the sacredness of all our surroundings, we have to acknowledge that we inhabit a sacred world. As part of a sacred world, we are all to be held sacred also. And that calls forth a totally different way of relating and acting. If the person/place/world we love is not happy, we cannot be happy. We reject the taking for greed rather than for need. We rediscover the multiple benefits of giving and sharing. Our ways of working, playing, celebrating, sharing, and shaping our surroundings all undergo fundamental change. We find a new strength and vitality arising in all parts of our lives.

*Change ourselves, change our institutions and our impacts.
Create new dreams that embrace all of creation.*

*Honor everything.
Create gardens for our spirits.*

*Build in a sacred manner.
Transform tourism.
Create cities of passion.
Discover that the spirit of sustainability is the spirit of
sacredness.*



THERE ARE NO SECRETS

OUR ENERGY CONNECTION TO OUR SURROUNDINGS

"We cannot lie", Marlo Morgan quotes the Australian Aborigines in *Mutant Message*, her account of a several month walkabout with them, "because our minds are open and joined to each other". The Aborigines' "telepathic" communication and their inability to lie both relies on and results in their having nothing to hide or need to close off their minds.

What would our own world be like if we became aware that our innermost thoughts were transparent to others? Would we feel naked and exposed, and paranoid about what people might see there? Or would it be a sigh of relief that there is no benefit or reason to lie and become caught up in the subsequent inner and outer complications? Would seeing the inner secrets of everything around us fill our minds with a strident cacophony of dissonance? Or would we find revealed an overarching harmony with which our own inner song could blend and enrich?

These questions are turning out not to be academic. We are affected more than we are aware by many unexpected dimensions of our surroundings. Our bodies and our minds pick up on even the dreams of those who have used our places before us. Our innermost values and emotions are openly imbued into our surroundings on many levels.

We know that much about our inner states can be read through body language, through the subtle variations in our speech or actions, and even in how we design and use our surroundings. We've slowly learned of complex communications among elephants, whales, bees, trees, and many other forms of life of which we were totally unaware only a few years ago. In states of deep attunement - through meditation, dance or musical entrainment, deeply harmonious living patterns, or even under influence of certain drugs - our sensitivity towards other people and things and our ability to communicate with them over distance is known to take order of magnitude leaps.

As our culture has developed a more and more discordant relation with the rest of nature, we have slowly steeled ourselves, raised the barriers, and closed ourselves off from the pain and disharmony resulting from our actions. There are indications that this may be so, and strong indications that we are bodily, if

subconsciously, aware of very complex and detailed conditions of our surroundings and how they are affecting us. It also appears that we can learn to reopen and more fully reconnect ourselves to the world outside our skins as we lessen the pain we are causing there.

Health practitioners using a variety of techniques including dowsing, acupuncture, computerized electrophysiology and kinesiometry are now measuring specific physiological responses in our bodies to ELF radiation (extremely low frequency oscillating magnetic fields) and a wide variety of other environmental stressors.¹ They are documenting consistent and persisting physiological impacts from events as small as an overflight by an airplane, the presence of plastic bags, auto exhaust, or low-level chemical outgassing from plastic windows, furnishings, floor and wall coverings. They are showing bodily responses to residuals of anger or fear from recent occupants of a space. They are showing demonstrable loss of muscle strength caused by magnetic fields from computer monitors, electric blankets, cellular phones, microwaves and other electrical appliances.

These studies are showing we are far less tolerant to the wide range of harmful chemicals, products, and other influences we have released into our surroundings than we had any idea. The emerging understanding of massive organic damage to our bodies from organochlorine compounds is only one of many that will necessitate major changes in our attitudes and practices.² Most importantly, they are showing that our bodies are far more sensitive, and far more affected by apparently subtle aspects of our surroundings, and that the vehicle for our "immunity" to many stressors is intimately related to energy fields in our bodies.

Feng-shui masters such as Professor Thomas Yun Lin in Berkeley have long asserted that there are important and reciprocal energy interactions between us and our surroundings which affect our lives. "Our vital energy, or *chi*", he says, "impacts and alters the energy of the places we inhabit, and consequently affect others that use those places." We know on a less specific level that places retain the reverberations and mark of events occurring in them long after the event. Yun Lin outlines specific practices to impart positive energy into a place and counterbalance the residue of past occupants.

Such energy connections may appear esoteric at first contact. Yet the spiritual traditions of many cultures have long

spoken of a particular kind of human life energy. The Chinese call it *chi*, the Japanese, *ki*. Hippocrates called it the *Vis Medicatrix Naturae*. The Egyptians called it *Ka*; the Hindus, *Prana*, the Hawaiians, *Mana*. Its measurement and how it operates in our bodies is only now slowly being worked out.

Many traditions have similarly spoken about the energy in a place - *feng-shui*, *ley lines*, *earth energy*. We know now that there is a demonstrable geophysical basis for part of this power of place. And it is being clearly shown that these geophysical phenomena affect all life and bodily processes, including the thought processes in our minds via the magnetite incorporated into almost every part of our brain.

It is only recently that we've realized that this interaction works *both* ways. Our *internal* "chi" energy impacts and alters the energy of the places we inhabit, in much the same way that the energy of place affects us. Dowsters in England a number of years ago documented amazingly precise correspondence between the physical configuration of various cathedrals and the patterns of energy they could measure underlying the cathedrals.³ What it appears today is that the energy fields in the building have resulted from the visits and energy brought *to* the place by centuries of pilgrims as well as from the original energy patterns of the sites.

We are clearly not distinct and separated from the world within which we move. Influence and awareness move both ways across our skins and entwine us into a single organism. There *are* no secrets, and no place or reason to hide. The harm we cause to our surroundings returns to cripple and diminish our own lives. There is no excuse for taking, only reason upon reason for *giving* and enriching life on both sides of our skin. The implications for how we shape and use our surroundings are significant.

GEOPHYSICAL PHENOMENA

Serpent Mound, in southern Ohio, was built upon a hill seemingly not unlike other hills in the surrounding area. But there is something quite different about this particular hill that quickly becomes visible to everyone. The grass there is different, the trees that grow there are different from those on surrounding hills. Even the rock and the air feel different.

There is an old and well beaten path to the Indian Hot Springs, north of Big Bend National Park in Texas. For hundreds of years, people have ignored other more accessible and more beautiful nearby springs in favor of the supposed healing and vision-inducing powers of this spring.

Over the generations, the popularity and fortunes of the Kiyomizu Shrine, perched precariously on the eastern hillsides of Kyoto, have remained strong, while those of other temples and shrines throughout the region have fluctuated with the times. There is something special we feel when we visit this place.

Since the beginning of human time, people have retreated to mountaintops, to sacred groves of redwood, cedar or other trees deep in the forest, or gone to sit by a stream, waterfall, or the ocean shore to find greater strength to deal with the issues of their day. There is something more than solitude that draws us to such places.

For millennia, people have repeatedly reported visions and significant revelations at Stonehenge, Delphi, and other "sacred places". And for millennia, the Chinese have held to an elaborate practice of "feng-shui" to align their homes, cities, temples and tombs with the energy currents in the earth.

Today, the more sophisticated instrumentation of our sciences is finally demonstrating that there *are* specific underlying physical as well as psychological reasons for these phenomena. Serpent Mound is the site of an ancient geological "implosion" which broke loose the plug of rock beneath today's Mound, changing the flow of underground water in the vicinity, and shifting the heights of the rock strata in the mound area relative to the surrounding rock. Over time, erosion has differentially worn away the overburden, so that the rock exposed there is limestone rather than sandstone and shales. There is consequently a different acidity and fertility to the soils. Different plant communities are successful there, and different conductivity exists in the rock.

Chemical analysis of the waters and muds of Indian Hot Springs reveals dissolved solids in greater abundance than other springs. The muds of this spring alone are high in lithium - commonly used medically today to stabilize mood shifts. Natural uranium is also present, which has the effect of stimulating the production of negatively-charged ions in the air. Magnetometer readings show unusually strong electromagnetic fields at the springs, which are located on top of the Cabrillo fault line.

Researchers at the University of London studying the electromagnetic fields around the ancient stone circles of Europe found that places like Stonehenge frequently have unusually strong fields which people can sense.⁴ Here again proximity to earthquake fault lines which regularly discharge electromagnetic energy, the unique crystalline structure of the stones and their particular geochemical makeup appear to result in fields which can often affect and be sensed by people.

Geophysicists and medical researchers are casting important light on some of the mechanisms by which these special places affect us. The rotation of our iron-cored planet in the stream of electromagnetic radiation from the sun generates electromagnetic fields in the earth's crust, the ionosphere, and the magnetosphere. The magnetic compass has for several thousand years revealed some aspects of this magnetic alignment and documented variations and anomalies in its strength from place to place due to concentrations of iron, water, and discontinuities in the earth's crust. But far more has been learned in the last thirty years.

Sunspots, solar flares, and seasonal shifts in radiation received by the northern and southern hemispheres due to the tilt of the earth's axis, all cause significant changes in these fields.⁵ The electrical field gradient changes cyclically - most notably a 24 hour cycle highest in early morning and lowest in the afternoon, but also on a lunar cycle, and one tied with cycles of sunspot activity. Weather conditions, such as hot dry winds (*fohns*, *chinooks*, *Santa Anas*, *mistrals*, or *siroccos*), cold wet fronts, or other storms cause rapid and significant electrical changes more extensive than the visible lightning bolts. Their high levels of positively charged ions cause breathlessness, headaches, dizziness, painfully swollen feet, itchy eyes and noses, mental disturbances and other symptoms.

In contrast, *negatively* charged air ions are created naturally by lightning, waterfalls, ocean waves and pine forests. They penetrate our body via our respiratory system, providing extra energy for electrochemical interactions in our blood. They improve the functioning of cilia in our respiratory system, and increase the oxidation of serotonin from our blood, as well as inhibiting the growth of micro-organisms.

The positively charged air ions produced by winds, fires and from concrete and asphalt surfaces, impair the working of the

trachea surface, increasing the potential for illness and infection. They can cause diarrhea, muscle spasms and difficulty in breathing, as well as the other symptoms common to the *fohn* winds.

The rate of spontaneous electrical impulse generation by the nerves is affected by electrical fields, affecting visual brightness discrimination, alertness, and reaction times. Such fields affect the viscosity of blood and lymph fluids. Medical research is investigating the potential for more rapid healing of wounds and injuries, and even regeneration of limbs and organs with biological electrical stimulation. A range of health problems associated with the e-m fields associated with radar, computer monitors and other cathode ray tubes is also revealing the negative impacts that can also occur from the generation of low frequency e-m fields.

The earth's steady state magnetic field, the Schumann resonance, is about .5 Gauss in strength, and pulses measurably with seismic, volcanic, lightening activity and changes in the solar wind. Its dominant frequency is between 7-10 cycles per second, which is the same frequency as the alpha brain waves of the human brain which are connected with relaxation and creativity. This is not surprising, as any fluctuating energy field is likely to have greatest impact in tipping the balance of chemical and biological processes on its dominant frequency or harmonics of that frequency.

Measurements at "sacred" places often show anomalies in the electromagnetic fields of sufficient strength to cause biological entrainment - causing the electromagnetic patterns in human brains to become tuned to and resonate with those environmental fields. Other research has shown that it is only at particular frequencies, or "windows", that biological effects occur; that it is usually the magnetic rather than the electrical, and the varying or pulsating magnetic fields at these frequencies that have the most significant effect on living matter.

These influences are far larger than originally predicted by medical researchers because the energy acts to tip the balance in many delicate electrochemical processes in our brains and bodies, resulting in highly leveraged changes in the processes themselves. This is similar to the kind of leverage that occurs in "fractal" mathematics, where tiny variations in a pattern, over thousands of

iterations can generate wholly new and dramatically different relationships and patterns.

While very small fluctuating fields materially affect our biological processes, there are also on occasion very large accumulations of such energy. During dry spells, the locally strong accumulations of electromagnetic energy cause a glowing halo around peaks in the Andes. Prior to a thunderstorm, the accumulation of electrical differential, particularly around mountain peaks, can cause a person's hair to stand on end.

The increasing documentation of the nature and pervasiveness of environmental energy fields and their biological effects gives credence to claims of the powers of certain sacred places. Documentation of the existence and effects of electromagnetic fields does not imply that other important conditions do not exist at places which have such powerful effects on our spirits.

FENG-SHUI

The ancient Chinese art of feng-shui, and its parallel in modern geomancy, show an amazing prescience when examined in light of these geophysical processes. For several thousand years the Chinese have practiced an art of placing and designing their cities, residences, and tombs to harmonize with the local currents of the cosmic breath flowing through their surroundings. '*Feng-shui*' literally means 'wind and water', but is concerned with quite different things than the surface topographical and ecological considerations that we consider important.

Rather than the normal atmospheric winds, feng-shui is concerned with the flow of '*chi*' or '*prahna*' energy of the earth and atmosphere circulating through the veins and vessels of the earth. Feng-shui has appeared to foreigners to be a puzzling blend of superstition and mythology, and they have continued to be perplexed and frustrated by the high regard which the Chinese hold for it and the central place it finds in their sciences. Like any traditional practice, feng-shui, as first approached by modern investigators, did reflect an intricate interweaving of sound principles and practices along with an accumulation of more than a thousand years of mythology and folklore.

The application of feng-shui to building location and design is based on a belief that at every place there are special topographical features, either natural or artificial, which indicate or modify the cosmic energies present there. The forms and arrangements of hills, the nature and directions of watercourses, the heights and forms of buildings, the location of forests, roads, and bridges are all important factors. The influence of the sun, the moon, the planets, and the stars, are also considered important.

These considerations have led to a particularly refined appreciation of the topographical features of any locality, and the efforts to achieve favorable balance of forces has brought about a unique and sensitive environment, with high cliffs setting off thickets of bamboo; towering pagodas counterbalancing the contours of hills; and dwelling places quietly nestled in the contours of the landscape.

The practice of feng-shui differed considerably in northern and southern China, influenced by the quite different nature of their topography. North China, with a much more uniform and regular landscape, developed a practice emphasizing the influence of astrological and astronomical considerations. This involved the use of a complex geomantic compass to consider the relative direction and influence of various environmental and astrological forces. In the south, with a complex and irregular topography, the relative importance of the influence of surrounding land and water forms was much greater. This brought about the development and refinement of practices involving dowsing techniques to locate and map the location of various kinds of energy and consideration of the shapes and position of various kinds of landforms which correspond with certain energy flows and concentrations.

The sensitivity to the landscape which developed through feng-shui held important ecological and cultural meaning as well as more esoteric significance. The principles it employed for location of cities were also means of scientifically selecting a location that was functionally and ecologically sound, of ordering the arrangement and placement of the city to the forces and energies of its situation and its cosmos, and of reinforcing and affirming in the minds of the people the nature of their cosmos and their place within it.

The view of the cosmos upon which city location was based spoke symbolically in terms of four Gods—one dwelling in a stream to the east, one in a plain to the south, one in a highway to

the west and the fourth in a mountain to the north. A site with these surroundings was felt suitable. A rectangular plan was made in the symbol of the cosmos, reflecting the rhythms of the sun and the seasons which most strongly affected the land. The Emperor was placed in the north, as he always faced the holy south—in alignment with the growth-granting forces of the earth and sun. Temples were built in the northeast to a guardian deity, as that direction was felt to be unlucky—devils dwell in the mountains (as well as enemy troops). Buddhist temples often were placed in the west, as it was felt that Buddhism had a tendency to proceed eastward. The entire geometry and detailed layout of the city symbolically reflected and reinforced their understanding of the cosmos.

Thus sites were selected with mountains to protect the city from winter winds, and monasteries were founded in the mountains so the city could be warned of attack. Southern orientation brought sunlight, warmth, cheer, and sanitation. Fresh water and air were provided for, and the commerce and food supply of the city assured. At the same time, every activity in the making of the city, of living within it, and participating in its life reminded a person of the forces they felt in the world. They became aligned with those forces, and gained nourishment from them.

The laws of nature on which feng-shui is based comprise three principles. The first is that heaven rules the earth; the second that both heaven and earth influence all living beings and that it is in our hands to turn this influence to the best account for our advantage; the third that the fortunes of the living depend also upon the goodwill and general influence of the dead. Upon these considerations is based the elaborate and now time-encrusted practices of calculating the specific astrological influences on a place through the aid of a geomantic compass on which is diagrammed the action of those forces.

The numerical proportions of nature are expressed in diagrams—the trigrams of the I-Ching—where the various possible combinations of the two kinds of vital energy are minutely worked out in relation to different directions and the alignment of the forces of the heavens. The forms of nature, the shapes of hills and watercourses which act to divert, accumulate, or disperse the cosmic energies are classified according to their effect. The study of these, along with the diagrams, the expression of the laws of nature in astrological charts, and a study of the topography as it affects the flow of vital breath of nature through and around

different places are all combined in the elaborate considerations necessary in the traditional practice of feng-shui. Interestingly enough, Chinese geomantic compasses after a certain date have additional notational rings added, duplicating the existing ones but rotated a certain number of degrees, reflecting an apparent shift in magnetic field orientation.

The intensive study, and valuing of the nature and influence of their surroundings with which the Chinese approach any alteration in them results also in a very different meaning of their surroundings to them. While we may see splendid vistas, and have an objective aesthetic pleasure in seeing them, the Chinese appreciation is cosmological. To them the viewer and the viewed are interacting, both being part of some greater system. While we may find a place beautiful, the Chinese more likely might remark that they feel content or comfortable. *Feng-shui asserts a human interaction with the forces working in the cosmos. Landscapes affect us, and we may affect them.*

MODERN IMPLICATIONS

Our growing understanding of some of the forces which appear to underlie feng-shui is giving us a clearer sense of the nature and importance of the complex interconnectedness we have with our surroundings. It alerts us to the hazards of the uncontrolled electromagnetic emissions enveloping our lives today. It is also helping clear away the encrustation of centuries in the practices of geomancy and develop new techniques applicable to our current conditions.

What is probably of greatest importance is our new understanding of feng-shui that the energy interaction works both ways. Our internal "chi" energy impacts and alters the energy of the places we inhabit, and consequently affects others that use those places. Knowing this is important both to our personal health and to understanding how we affect others. In the Pueblo tradition, our breath goes out and fills the spaces we inhabit, leaving forever traces of our thoughts and actions. In the Chinese tradition, our chi alters the chi of our surroundings. Lasting impact on the energy of a place from the "state of mind" of its users means a whole new consideration in the design of places. When our anger, indolence,

reverence and passions are physically imparted to our surroundings, we have to become aware that our feelings can set up a chain reaction for good or ill. The design of our surroundings to balance such energy also becomes important.

Other aspects of feng-shui deal with how our minds respond to subtle psychological as well as physical configurations of our buildings. Entrances to homes opening directly into living spaces contain the potential for unwanted interruptions. Beds or desks located so the entrance to a room can't be seen by occupants prevent their psychological preparedness to deal with visitors. Heavy beams directly over a person where they work or sleep can become an oppressive presence in our minds. People in some cultures are uncomfortable sleeping with their feet towards a door, because it reminds them of corpses being carried out the door feet first.

Some of these factors are cultural, some physical, some psychological. *Feng-shui acknowledges that our minds and spirits, dreams, fears and history all inhabit our buildings along with our bodies, and that their needs and gifts must be accommodated and nurtured in our design.* It recognizes the full complexity and strength of our interaction with our surroundings, and establishes a framework for addressing them in our lives and our building.



ARCHITECTURE, NATURE, AND POWER

ARCHITECTURE AND NATURE

A mist-filled forest of thousand-year old California redwoods is a spiritual experience for many people. To an earlier generation, the felling of those ancient trees was merely a livelihood, with all the tangled emotions of love and death, need and greed. To the generation before, the trees were mostly a colossal and useless hindrance - endless miles of gloomy sunless caverns to traverse, Herculean obstacles to clear for the farmland and roads which meant survival, and masses too big to convert to lumber with available tools. At a yet earlier time, the redwoods were both life and spirit to those who lived among them.

Our perceptions of our surroundings and our relation to them is an ever-shifting web that is stretched and twisted one way then another by the unfolding of our dreams, perceptions, memories, needs, technology, and ways of knowing. Our lifetimes have witnessed profound and continuing changes in our relation with nature. Our built surroundings, no less than our other actions, have echoed both these changes and our frequent bewilderment as to their meaning.

Central to these changes has been our growing power to affect our surroundings - the capability to do greater and greater good or harm; the lessening of both our fear and our respect for powerful natural forces; and the headiness, arrogance and blindness that often accompany such newfound power. And now, perhaps, we're even gaining some glimmers of maturity and wisdom, accompanied by admiration, wonder, and growing respect for the beneficial gifts borne by even the faintest and most tenuous relations within the web of nature. Sacred relationships, we are rediscovering in a new and clearer way, are powerful and vital dimensions of health, survival and growth - both for ourselves and our surroundings.

Until the last century, the physical function of most building was simple: security and affordable shelter from excesses of nature - heat and cold, rain, snow and wind. The costs of working with or against local conditions were immediate and obvious. Big windows in cold climates meant cutting big woodpiles, as did building in damp and chill hollows instead of on warm and sunny slopes. High ceilings, wide roofs, and raised houses in the southeastern states could give comfort by shading, catching breezes and letting unwanted heat escape. The effort to

haul water, firewood, food, and supplies made hilltop houses with grand vistas, such as Thomas Jefferson's *Monticello*, a rarity affordable only by those able to squander the necessary human and animal energy. Availability of local materials and the necessities of defense from climate and predators quickly transformed imported building traditions into climate-sensitive and regionally unique patterns from New England to Virginia to the Deep South and the Spanish Southwest.

The application of fossil fuels to heating, cooling, ventilation, lighting, transportation and food production abruptly altered the relation of our architecture to nature. It became possible to sit warmly in a glass box watching it snow outside, or drive far from the crowded city to have enough land for a garden and some trees. There is yet much for us to learn of the implications of these choices opened to us.

With the unfolding of this new power, the history of architecture in our lifetimes has been one of grappling with what our dreams *ought* to be in this new world - exploring diverse new possibilities and trying to learn from the shortcomings of each. There has not been a single thread of change, but a tangled web. The isolated insightful developments have often been at great odds with the subsequent direction of popular choices.

Ours has been an age of power, and the real architecture of our lifetimes - that which has caught the imagination and creative energy of society - is the architecture of bridges, freeways, space vehicles, electronic media and nuclear weapons. In its sideline domain - wrestling with the issues of large scale construction, mechanical equipment, cost and value analysis, vehicular access and circulation - the mainstream of modern architecture has let itself become divorced more and more from nature and from our own spirit. Architecture and nature has not been an issue the profession has felt relevant or felt itself capable of dealing with. The focus has been on dramatic visual impact to compete with the attraction of other manifestations of power. This failure has roots as much in the institutional and technological nature of this period in our history as with the architectural profession itself.

The urban setting of much of our building has not in itself been a cause of this separation from nature. Mies van der Rohe's *Barcelona Pavilion*, Frank Lloyd Wright's *Mile High City*, or Luis Barragan's *Pedregal Cloud Garden* have shown clearly that the density of building or absence of plants does not mean the absence

of a powerful presence of nature. Concrete, glass, metal, sunlight and clouds are all a part of nature, and the stone-bound Piazza San Marco in Venice or the Place de la Concorde in Paris do not show the lifelessness of most modern urban designs.

On the other hand, the place of nature in our cities has expanded considerably. Efforts to improve upon the 19th century industrial cities were early demonstrated in places such as Clarence Stein's greenbelt city of Radburn, N.J. and the Scandinavian New Towns. These efforts to bring plant life into our cities have been absorbed into conventional practice in both housing development and urban planning. A growing realization of the effectiveness of natural processes is now leading to wider and more sophisticated use of natural systems in climatic control, air purification, storm drainage, aquifer recharge and waste recycling.

Land use planning regulations in many cities now require extensive landscaping as part of new developments. These measures have turned out to be some of the most successful land use provisions, visibly demonstrating a sense of values which include room for nature.

In terms of individual building design, architects as a profession have failed to absorb the benefits of integrating buildings with landscaping, use of outdoor spaces, and outward orientation of buildings which Frank Lloyd Wright and others demonstrated so dramatically in the early years of this century. Wright's *Falling Water* or *Taliesin East* show a richness and variety of enclosure and use of plants, climate and natural materials still unequaled 80 years later. Wright discovered the Japanese house - an outward-oriented shelter designed to join people with nature instead of an inward-focused fortress from nature. He adapted and applied its lessons in a rich and diverse way, but the interests of our society have been too focused elsewhere for wide understanding and application of his insights.

The All-American Ranch House - that popular caricature combining Wright's "Japanese House" with the fossil-fueled suburb - shows how slowly popular concepts of relating with nature have changed. Even today a large part of typical suburban lots is given over to creating a pastoral visual setting for the houses from the street, and views in through "picture windows" are as ill-considered as views out. Symbolic meanings, status, and cultural history have in the short run proven stronger than desire for closer relation with nature. Yet slowly we are beginning to fence yards,

open rooms outward, and to create usable outdoor spaces in those same suburban lots.

Though nature's place in our cities and architecture may be expanding, it is generally a tamed and domesticated nature. It is groomed, hybridized, and used without context or meaning - without the power and vitality of a nature untrampled. It is people using plants for decoration, not people being a part of nature.

Nature is not an esthetic amenity, but a vast and vitally intricate organism. Being part of it means learning to accommodate to other life rather than seeking its extermination. It means learning the reciprocity of giving to other life as well as taking. The thistle gives food to the bird, while the bird gives wing to the propagation of the thistle.

Becoming part of nature means imbuing our lives and our actions and our feelings with the passion and love which nature exhibits in the perfection and beauty of its diverse parts. It means knowing that our health depends upon the health of our whole planet. It means the humility to learn from and respect the differing goals of other life. It is knowing and honoring birth, death, fear, and joy; destruction and peace, as integral parts of a vital whole.

Nature is not reason.

It is harmony and it is meaning, and sustenance that can give vitality to our lives. It is an essential touchstone to contact the primal forces of life which have shaped our natures and which give potential to our future. To understand this nature, to create surroundings that connect us with it, and to set our present enthusiasms and achievements in their proper context takes a maturity, humility and wisdom which is slow to develop.

Parallel to the mainstream of architecture has always existed a minority strongly concerned with the relation of architecture to nature. Beginning in the 1960s, this minority began to explore ways of building with minimal on- and off-site environmental impacts for material and energy production, water, sewage and transportation, as a way of restoring harmony with nature. Malcolm Well's meadow-roofed underground office next to a freeway interchange in New Jersey demonstrated an architectural vision of ecological restoration.

Development of energy and water conservation, sewage recycling, passive solar design, natural daylighting and cooling, edible and native landscaping, and their incorporation into ecologically sensitive architecture has refocused our attention on the benefits of wise use of natural systems. In retrospect, the most significant architectural innovation of the 20th century may turn out to be the humble batt of building insulation. It has shown us how to live snugly and warmly without the massive energy consumption of prior decades.

The process of learning to build with lighter impact leads us to alter our perceptions and attitudes. After a decade of landscaping with only native plants and relatively natural ecological communities, I personally found that I had developed unexpected reactions to more conventional landscaping of grass lawns and hybridized ornamental plantings. Landscaping chosen from among thousands of kinds of nursery stock came to seem arbitrary in its purpose. Its only base seemed to be an imposed abstract esthetic. The results, to my new eye, conveyed confusion more than coherent meaning or sense of where the power of place arises.

Native plants have a fit, a feeling of rightness. They reflect and make visible the special and unique creative powers of a place. In doing so, they give our surroundings a dimension of meaning, of history, and of context otherwise absent. There is power and magnificence in the relationships of a natural community. It is the culmination of eons of trial and fitted without equal to the specific climate, geology, topography and history of a place.

Ecologically-sound architecture is an important step towards a viable contemporary relation with nature, but only one piece of the puzzle, for the visible and the physical make up only a small part of either architecture or our relation with nature.

INVISIBLE ARCHITECTURE AND VISIBLE DREAMS

Architecture began this era as a visual art. It continues to be taught and practiced as a visual art, as the science of building, or as the servant of exploitive real estate development. All miss the heart of the matter. The most important aspects of architecture have always been in the realm of the invisible, as have the great formative forces of the 20th century. As we become more aware of the "invisible" dimensions of architecture and life, it is certain that we will exit this century with a dramatically different sense of the nature and practice of architecture.

The formerly invisible parts of the electromagnetic spectrum have fundamentally changed our society. Electricity, the power of the atom, electronic communications, radio astronomy, computers, TV, and electron microscopes today influence our lives far more than the directly visual dimension of our world. They have transformed our patterns of living, our relation to nature and the leveraging power of our actions. The chimeral world of TV has become more real to many than the world outside our windows. The surroundings we dream into existence come far less from our own dreams than from the pages of *House Beautiful*, *Time Magazine*, or *Architectural Digest*. The symbolic images of *MacDonalds*, *Safeway*, *Exxon*, and their clones have taken a more central place in our surroundings than nature. Striking to the heart of image and symbolism, they are truer architecture than our fanciest buildings. Any shaping of our surroundings that considers only the visual manifestations of our world invariably misses these vital levels of our hearts, our spirits, and our technology where major changes and impacts occur.

Our expansion into the invisible worlds of time, space, energy, and meaning have also extended our familiarity with nature and the awesome dimensions of time and space which it fills with incredibly beautiful creations. We carry images within us now of the faces of planets and the stars; the depths of the sea; the life within crystals and the universes within atoms. The faces of insects and microbes are no longer alien to us, and the inner beauty of our bodies has become as familiar as its outer. We can see with the infra-red eyes of a flea, and hear the solar wind passing through the gossamer radiation fields of the Earth. We walk in the reconstructed cities of the past and touch the actual footprints of our ancient forbearers.

The nature we are coming to know and relate to today is more immense, more immediate, and more incomprehensibly beautiful than the flowers and shrubs in our gardens that we once called nature. Objects no longer need familiar geometry or function to be found good. We seek coherence, meaning, relationship and patterns of transformation rather than the static dance of the past. And with it, we begin to see ourselves and the familiar around us with new eyes and new comprehension. We now see the visible nature around us as ambassadors and manifestations within our particular conditions of creative power and forces that generate, permeate, and transform universes beyond our wildest imagination.

DREAMING

These invisible worlds to which our technology is connecting us lie in our minds as well as the material world, and there may be important and unexpected dimensions to the current turbulence of our lives, society, and surroundings. The writer Michael Ventura has pointed out that we are increasingly surrounded by projections of dreams - advertising imagery, MTV, strip highway developments, instant 24-hr services of all kinds. Our fantasies, of all kinds, are finding instantaneous concrete or electronic manifestation in all their intensity and complexity. They are becoming the daily facts of our waking life. We once accessed the power of our psyches only in sleep, in specialized arts, or controlled religious rituals. Today the instantaneous changes, unpredictable metamorphoses, random violence, and archetypal sex of dreams has escaped the world of our sleep. Their constant cascade of supercharged imagery and their threatening sense of multiple meaning are now becoming part of our waking life⁶.

"Our long-suppressed psyche, as outrageous in the most conservative of us as in the most radical," Ventura says, "is now becoming free to feed on the outer world and grow." He asks if this living dreamworld we are creating is part of an evolutionary process of learning to use the power of our psyches. The human psyche is one of the great forces of nature. Our new technologies expose us to this force as nothing else ever has. Ventura asks if we are beginning to learn to live within the nature of this power, to ride its turbulent forces, and to harness its positive potentials.

The turbulence of this dreamworld may exist because of our past inability to give balanced nurture and expression of our natures, and connect positively to others and the rest of our world. Or it may be the inherent form of a powerful generative energy. Madness follows if we are unable to find coherence in this generative force we are unleashing into our physical world. Can we find ways to channel it, take responsibility for it, direct it and use it to create a more powerfully embracing union between ourselves and the fundamental forces of nature? The rituals and disciplines of traditional spiritual processes channeled and directed intensive connection with the forces of nature. Through this they gave strength and structure to our interaction with the unexpected. We need to find equally successful support today in a world which daily inundates us with the same powerful forces. Regardless, a new dimension may be emerging in our interaction with our surroundings.

CHANGES

The primary thrust and outline of our future unfolds slowly, as powerful forces contend turbulently within our lives. Are we to become a society of trivial lives cocooned in comfort, mesmerized by media, surrounded by a nature of plastic plants and hamburger stands? Will we be a nation of surfers, hermits, hikers and mystics immersed in an interplanetary Zen Garden? Is our future one as swimmers in a sea of dream fantasies or as servants to a synthetic silicon intelligence, our own potentials bypassed by the evolutionary unfolding of our universe? Our future depends on what new visions and greater purposes come to stir our hearts and galvanize our actions. It also depends on what small and unseen changes shift the foundations and balance of our lives.

As modern society succeeds in meeting our immediate and obvious needs, the question of what ends we seek becomes a vital one. Do we really want another television set, or is it *happiness* that we really seek? Being loved, respected, wanted; feeling useful and part of something meaningful; gaining and employing skills; learning the joyfulness of giving rather than getting - these are ends with value far beyond what we confusedly seek today.

If we seek these ends, there are more direct and effective ways to attain them. The values and ways of working, living, and relating to the rest of creation that have dominated our lives and our current economic patterns won't do. Such goals require fewer material resources than consumed by the food and consumer products which we currently substitute for them, and which give such meager satisfactions. Clarifying our goals in life can release vast resources to new dreams and new goals.

New dimensions for the design of our surroundings are emerging, as brain researchers probe deeper into the operations of our consciousness. We are discovering ways for our surroundings to give more powerful stimulus, respite, and nurture for our various actions and support for our unconscious mental processes. The intense informational stimulus of our electronic environments is calling forth carefully designed "Zen" environments which stimulate, entrain, and reinforce the nonconscious integrative processes of our minds.

The influence of the natural and artificial electromagnetic environments in which we live on our lives is being proven. This

is calling forth new ways of designing our homes and communities in harmony with the life-giving environmental fields in our surroundings and shielding them from harmful energy fields.

Some years ago, I went with some friends on an extended canoeing trip in the Quetico Wilderness of Canada. It was curious to discover that this prolonged immersion in the depths of the wilderness didn't really feel much different than sitting for a couple of hours in a nice place near home. We paddled our aluminum canoes, ate our packed-in food, caught a few fish, saw the vapor trails of jets overhead. If we wanted, we could have picked up the daily news on a radio. If we needed, we could have been airlifted out.

We had no dependence on our surroundings for our sustenance. We gave nothing to it. We had no enduring relation with it. We were just passing through - tourists on a liquid freeway. Our surroundings changed, but our relationship to them remained that of the urban world we thought we had left behind.

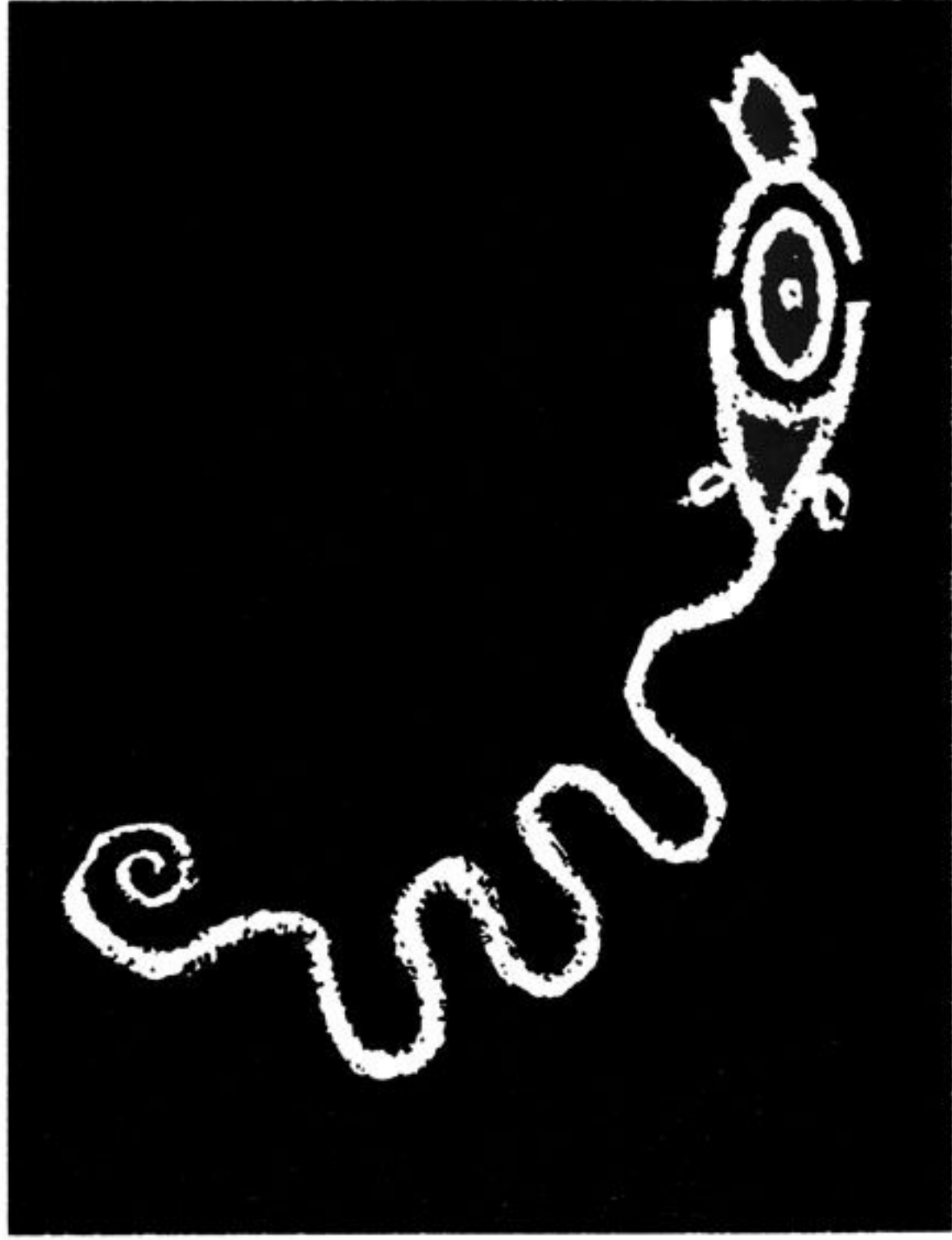
Having *more* nature around us does not change our relation to it. A deeper and more vital relationship requires something different - *from* us. It requires we stand and *be* in a place, not just "passing through". It requires us to be there in sickness and in health, in storm and in sun, giving and being given to in turn. It requires taking responsibility for our attitudes and actions and their impacts. It requires acknowledging dependence and interdependence.

Even more, however, a deeper relationship with nature requires a basic change in the driving forces within us. It is hard to look a person or a tree in the eye if their life or death means nothing to us, or if we are indifferent to the impact our actions may have on them. To act as our society has acted, it has been necessary to cut ourselves off and withdraw our love, for love would not let us act in such ways. Many of our relationships have thus been poisoned. Until we are willing to let go of the separateness and self-centeredness we nurture in our technological society and learn to give our love unstintingly, we cannot open ourselves to the depth of relationships that underlie and join all nature.

True wilderness, in any case, has vanished from our world in our lifetime. No part of the world today goes unseen by the daily orbiting of our electronic eyes. No wilderness is unwashed

by TV and radio emissions, or untouched by radiation, acid rain, or other global impacts of our actions. Nowhere is out of reach of rapid emergency or military action. We are being forced by the sheer magnitude of our actions to take responsibility for their effects, and those effects cannot be known without gaining a far deeper understanding of the interaction of complex natural systems.

What we seek in nature is perhaps not wilderness, but wildness itself. This is not the savage or destructive wildness of myth and movies. It is the unbrokenness, connectedness; the uncowed wildness of living nature. Within it lies unity with all - the openness to let flow from us and into us the freedom and generative power of love.



WHY A SACRED WORLD?

THE SACREDNESS OF EVERYTHING

The existence and inviolability of a sacred world and sacred places is vital to our lives. People of other cultures have almost invariably inhabited a sacred world - a world in which their every thought and action was immersed in an unbroken web of bonds. Where those bonds have been broken, destruction followed.

We have commonly believed that "science" has disproved and freed us from such traditional beliefs. Yet rather than disproving the need and value of a sacred world, our modern questioning and searching has more and more clearly invoked the need and rightness and value of making ourselves part of such a world.

Contact with other cultures and religions has undermined the *singularity* of the claims of individual religions. It rings hollow today to hear that there is only one correct name for God or only one right or proper or valid path to spiritual growth. Closer contact with other traditions has given us instead the *more valuable* knowledge of the universality, commonalty, richness and variety of religious and spiritual experience throughout the world. It has given us the knowledge that again and again when needed, human culture has brought forth an individual or a pattern of beliefs that can embody and convey to others the needed roots of spiritual growth.

Archaeological study has unquestionably "disproved" the origin stories of many cultural and spiritual traditions. It has, however, also proven the astounding accuracy of oral histories and traditions extending back thousands of years. Such origin stories are always the *guesses* of a culture, from the limited knowledge they have, of what might have come before. Our modern "scientific" creation stories are no different. They get disproved, modified, and evolved every few years as the expanding boundaries of our understanding encapsulate the old.

Where we have erred is that spiritual experiences have not been alive enough in our own lives to help us separate belief in them from belief in historical stories that usually are joined to them. People have consequently defended the absoluteness of ancient religious writings because they felt if they didn't defend their belief in that, they couldn't also defend their belief in their central spiritual tradition. The people who "disproved" the origin

stories also consequently concluded that there was no more basis for the associated spiritual experiences than for the origin stories and other religious writings.

But what *do* we see today? Our modern world has revealed an even more awesome universe than known by our ancestors. It has shown that we share the commonality of language and communication with elephants, bees, ants, whales, trees and rocks. It has shown that we share the wonders of birth, life, and death with stars, galaxies, and the stones under our feet. It has shown that our own bodies and our planet are created from the ashes of stars, and share the same life force with ants and viruses. We are seeing revealed an origin story for our time which is even more wonderful, humbling, and empowering than any of the past. Our sciences are closing the circle on the past it once challenged. They are coming to affirm the validity and need of sacredness, and of spiritual growth. They are acknowledging the importance of action bounded and guided by the health of the seamless web of interconnection and interaction which permeates our universe.

It is time to reaffirm the sacredness of our world, and with it, the role of spiritual perspective in resolving problems - environmental or otherwise.

DO WE *NEED* SACRED PLACES?

The whole concept of sacred places is alien to our culture. Yet it is vital for *us*, more than for the places themselves, that we hold *all* our places sacred. *We cannot separate self respect and mutual respect with others from respect for the natural world and other forms of life.*

How we shape our surroundings cannot be separated from how we shape our lives. The places we make function as mirrors to our actions. They reflect the good or ill, passion or indifference with which we act, back onto the people whose lives they touch. Places, as well as people, draw sustenance from how they are held in our hearts. How we feel towards them does strongly affect our lives.

We need to hold places sacred, because we need to hold ourselves and all else sacred in order to be whole. We need special sacred places because we need to be able to touch the

power of the forces of nature, of events and beliefs which we value.

The friend who once commented how tourism was destroying the cathedrals of Europe made me realize that all places live through the reverence with which we hold them. Without that reverence, they don't exist, in a very real way, in the lives of their community. Unseen, unloved, unmaintained, and abandoned, a place has nothing to give to those whose lives it must sustain. Those people in turn fall into the same dereliction, or seek other places to hold their spirits.

We lessen the soul of all places, and ourselves as well, when we take without giving. We lessen their souls when we come to them without reverence to life and to land, to people and to place, to ourselves and to the creation of which we are part. This is the root destructiveness of tourism, and also where we can find a healing power for our land and our lives.

WHAT MAKES PLACES SACRED?

All places are not alike. Some move our hearts, for good or ill. Some we scarcely notice. There may or may not be intrinsic qualities in a place which by themselves cause that place to be held sacred. Places which are held sacred vary immensely in their nature and in the reasons for being valued:

* **PHYSICALLY SPECIAL PLACES**, with unusually powerful patterns of nature, can draw us apart from our everyday lives and into awareness of primal forces. Sacred mountains, lakes, the Redwoods, Glacier or Yosemite National Parks rarely fail to make a powerful impact on us. Special places are *anomalies* - places that are notable as being unusual or different. That differentness may be of intensity, or may be differentness of contrasting topography, geology, hydrology, plant or animal life. We are drawn to that specialness, and take notice of the patterns inherent within it. This in turn helps our consciousness become more closely linked with other parts of creation and be energized by its interconnectedness.

* **PLACES WHERE OUR ACTIONS DON'T DOMINATE**, such as National Parks or wilderness areas, allow us to shed the self-centeredness and self-importance of our actions

and dreams and become aware of the greater context within which we are embedded.

* SPECIAL PLACES ENHANCED BY ENLIGHTENED BUILDING have in rare cases been able to embody particularly powerful visions of our universe and our place in it. The layout of the temples, lakes and waterways of Angkor Wat in Cambodia embody without parallel their society's pervasive vision of the sacred act of distributing the waters and phrana of life throughout the land. The palace and gardens of Louis XIV at Versailles give an unmatched expression of an absolute monarch's "power over nature".

The chess pavilion on Hua Shan in China conveys a transcendent sense of "living among the Gods". Zen gardens in Japan convey a depth of focused personal action attainable only by plumbing the depths of knowing. The feng-shui of Chinese pagodas or Alpine village churches communicates a potent sense of balance and peace with nature. The Kailasa Temple at Ellora, carved out of living rock, conveys a primordial intimacy with our planet, economy of means, and sure and living sense of the power of sacred imagery. Together, these suggest the inspiring power which can, on occasion, be evoked through our building.

* "NO"-PLACES, by merely putting some limit on our actions, remind us in unequivocal terms of the necessity to limit our dreams and use of power. By saying "no" to access or actions, they convey the significance of limits - of not letting *anything* become all-powerful. Prohibitions on killing or interfering with the sacred cows of India is a powerful statement of honoring the rights of other life. The Shinto shrine at Ise, in Japan, is a series of rectangular concentric wood-fenced enclosures deep in the forest. What is enclosed can be seen by all. The empty, gravel-covered spaces contain perhaps a sacred rock or a small enclosure holding a sacred object. The physical message is clear - a place kept apart, which we respect by not intruding.

* PLACES OF IMPORTANT HISTORY OR CONTEXT, such as the Dome of the Rock in Jerusalem, the Lincoln Memorial in Washington DC, or the Agora in Athens, hold before us events, actions, lives, and places which have stood witness to values we hold high. Abraham Lincoln's memorable address at Gettysburg acknowledged unforgettably how the sacrifice of so many lives had indelibly hallowed the ground there.

* PLACES WITH SPECIAL ENERGY CONDITIONS

have long been held sacred. Hawaiian birth centers, favorable Chinese feng-shui locations, English cathedrals, Texan "vision-quest" sites, and the Hopewell Serpent Mound in Ohio, all give documentary evidence of the proven ability of places with unusual electromagnetic field conditions to favorably influence human activities either materially or through our belief systems. Some have a level of radioactivity in the rocks which affects our mental processes. Others have a pronounced fluctuating magnetic field induced in the earth by action of the sun's energy emissions on the earth's magnetic field.

The act of using a place for sacred purposes in itself acknowledges and grants power to a place. Traditional cultures have used sacred places for many spiritual purposes. Some sites were used for burial - acknowledging that the graves represent tangible connection between the past and the present, and opportunity to link with the energies in the earth. Chinese, Samoans, and early English all located tombs by geomancy.

Other sites were used for spiritual renewal, vision questing, purification or location of temples and shrines. Bear Butte in the Black Hills of South Dakota is a famous vision questing place for Plains Indians. Cedar groves, the Delphi Oracle, location of temples and cathedrals from Japan to Europe have all been based on special places which were seen as touchstones of renewal and strength.

A third use of sacred places is in terms of healing - birth places, fertility shrines, healing springs. Some of these are used for meditation, some use the waters and muds or vapors for healing. Some are used as ceremonial sites for performing healings. Animals as well as humans instinctively seek certain places that seem to have the power to restore our spirits or physical health.

Other sites have been used to represent tangible linkages between a community and their universe. Places such as Stonehenge, Machu Pichu, or the Chaco Canyon solar observatory gave detailed information on when to organize the years ceremonies and activities; an acknowledgment of the predictability of nature and life and a people's ability to grasp and understand it. Other simpler sites gave people a place to greet the sunrise or attend the sunset - to connect with the rhythms and powers that governed their days. Yet other sites gave connection with history

and myths; or the relics connected with spiritual leaders and the places of historical spiritual events.

The American Indian writer Vine Deloria, Jr. notes that the sacredness of land is first and foremost an emotional experience. It is a feeling of unity with a place that is complete, whatever specific feelings it may engender in an individual. He discriminates between two fundamental categories of emotional responses to sacred places: *reflective* and *revelatory*. Most experiences are reflective - experiencing the uniqueness of places, meditating on who we are, on what meaning our actions or beliefs may have, and apprehending underlying unities and sources of strength we did not suspect.

"Revelatory experiences," he says, "are another thing altogether. They tell us things we cannot possibly know in any other way, giving directions through which a new future is possible. Encountering a holy place always involves the manifestation of a personal spirit of immense and unmeasured power, a real spirit of place with which our species must have communion thereafter."⁷

Through all of these means, certain places have gained the power to move our hearts and influence our lives. Some places are hallowed for their beauty, others for their intrinsic power to affect the spiritual state of people visiting them. Some are made sacred only by circumstance of the birth or martyrdom of a saint at that location, and are infused with the power of the sacred through people's reverence for those events. What is unique and held to be sacred in one area may be commonplace and unworthy of note in another. The real significance of sacred places lies in a different dimension.

SACRED IS A *VERB*

While there may be certain power in particular locales, that is not what appears to be most significant and universal about sacred places. *The important thing about sacred places is that someone finds them to be sacred, and holds them sacred.* The overriding power of sacred places comes from that action. They exist only relative to us - to our perception and our action of relating to them as sacred.

The power of sacred places arises from their role in marshaling our inner resources and binding us to our beliefs. When our hearts and minds hold something sacred, we hold it inviolate, we honor it, and we open ourselves to allowing it to affect us deeply. Doing so, we focus our ability to be affected and strengthened by our beliefs

Our act of "holding sacred" is root, not where we choose to carry out that act.

In our act of "holding sacred", we give a place power to affect our lives. In holding it sacred, we grant power to it and acknowledge the power in it. As an icon, or through its own inherent patterns, we acknowledge its ability to impact our awareness of certain relationships and their value to us.

Sacred places thus forge and strengthen bonds between us and the universe in which we believe. They empower us by affirming the wholeness of the universe we see revealed about us, and by reflecting our chosen position and role in that universe.

The inviolability of sacred places is essential. Through that act, we affirm the primacy in our beliefs of the values which those places embody.



BUILDING WITH A HEART

PRINCIPLES

The power of sacred places lies within the scope of our own actions as much as in the great monuments of the past or remote and isolated places in nature. Great achievements, such as Angkor Wat or Chartres Cathedral are wonderful. They give us a sense of the possible. Few of us, however, have the power of a Khmer king, the real estate of Yosemite, or the honed skills of a Zen master. What each of us does have, however, is more than enough. There is opportunity in *every* action to show what we love and hold sacred.

We can't build a church tower today whose height can compete with the financial towers in any city. To make a sacred place today, we have to jump outside the logic of the past and the conventions of the present. We must reach more deeply into our own inner forces, and create new ways. *To convey sacredness, our surroundings must demonstrate a power that is unattainable through non-sacred ways of living and acting.* A place of worship today may need to use something like "emptiness" rather than size to convey values. It may need to take the form of a meditation garden, an empty room, or a sanctuary inviolate to all of us rather than a massive place of assembly in order to evoke a spiritual mindset.

Making sacred places does not require esoteric skills. It requires only that we look for ways we can make our surroundings connect us more powerfully to each other and to the other life that encompasses us. The first step, of knowing the need and power of a sacred world, unfolds the way. With it, we begin to see simple ways to manifest that love and sense of "honoring". And those actions in turn bring us to more and more powerful tools with which to express that new sense of our connection to our universe.

This is the wonderful challenge we are faced with today - creating surroundings which are sacred, in which *everything* is sacred, not just "capital S" special and isolated places. This already beginning to happen. As we realize the vital importance to us psychologically of holding things sacred, everything we touch and do manifests that new belief.

BEING AT HOME IN THE UNIVERSE

Throughout history, the surroundings we have created have reflected the nature of the universe we see revealed around us. In finding harmony in our universe, we create our buildings in concert with it. Doing so, we strengthen our confidence in sensing the underlying power and nature of the universe and in our ability to fit within its flow and marshal it to our needs.

The sense of order within which we organize our places expresses our own sense of the order of creation in our universe. Immutable Euclidean geometry, topological organization, fractal growth rhythms - all offer vastly different opportunities. And all speak of different awareness of growth, life, and relationship.

The hierarchical order of a Chinese city, the radial symmetry of a Renaissance palace, the symbolism permeating a Navajo hogan or Plains tipi, the spiritual directness of a Shinto sacred spring or Shaker furniture, the sacred geometries of Islamic ornament or Gothic cathedrals, or the bold power of a 20th century skyscraper all reflect a special view of the universe, consistent with the beliefs and the world their builders dreamed into being. In doing so, these creations renew and strengthen the universe within which they are founded, and those who inhabit that universe.

A life-energy came to the Khmer builders of Angkor Wat in Cambodia from their gods, through their ruler, and into their lands. To distribute that energy, they linked their ruler's palace to the entire countryside with a cosmic geometry of irrigation and drainage channels and reservoirs. While harnessing the flood waters of the Tonle Sap and ensuring the success of their crops, they also visibly tied their entire countryside and their source of livelihood to the life-energy sources of their temples and palaces, and which they knew to imbue all life.

Feng-shui presents another way to connect with our universe - acknowledging and aligning with some of the forces which link us to our star and other heavenly bodies. The Chinese feng-shui tradition, and the divination used in siting temples and cathedrals in other countries, creates a subtle harmony between buildings and their landscape - one with meaning and affective power, yet not based on visual qualities such as geometry.

Greek, Roman and European Renaissance mathematicians and architects looked to "Euclidean" geometry as representing a vital underlying order in the universe, and consequently used it as a

basic organizing element for their architecture. Proportions of spaces, spatial sequences, shapes of domes, use of the 1:1.6 Golden Section ratio for proportions of buildings embodied the organizational principles they were discovering in mathematics and nature within their architecture.

Ornament is another means which has been widely used to infuse a building with our sense of cosmic order. Its opportunities are unique, being free of the functional and structural constraints of building. The delicate interlacing geometries of Islamic ornament reflect the unfolding of the limitless forms of creation from a single source, as well as the eternally transforming relationships that tie together all of creation. The sculpture of a Scandinavian stave church or a French gothic cathedral reflects each society's different, yet equally powerful view of their universe as purely and eloquently as does the spareness of Shaker or Japanese design, which uses the ornament of "discipline" to find a beauty of form devoid of excesses.

Our sense of our universe has undergone dramatic new unfoldings in the last century. Little of this heretofore invisible universe has yet found expression in our building. Until our cities and our homes touch and embrace the stars, the miracles of galactic creation, the wonders of life within our cells and within the atoms we are made of, they will continue to feel awkward, uncomfortable, and unsure of what they are and of what greater things they are part.

Aligning our buildings with the sense we have of our universe gives us the opportunity to affirm and clarify our beliefs. It strengthens those beliefs and our resolve to keep our actions in positive concert with them. And it renews within us the wonder and joy of being part of an awesome and incredible creation.

BEING AT HOME WITH OUR SURROUNDINGS

Powerful meaning is found, too, in how architecture ties us to the specialness of a particular place. No two places on our planet are entirely alike, and the communities of living things that each brings forth is as unique as the patterns of its weather, terrain, geology and that place's own surroundings. Each place has unique

powers to stir our hearts and minds, and brings into being a human community as uniquely molded to the potentials and limitations of that place as its communities of plants, birds, animals and insects. In becoming at home in these places and responding to the special kinds of comfort, challenge, and sustenance we find in each, we become unique kinds of people. Californian, New Englander, Southerner, or People of the Plains, we each come to have special qualities of our own to give to the tapestry of human society.

When we live close to these natural surroundings, we come to know and love them deeply and to build in ways which reflect our joy in being a part of them. Our buildings come to draw us into the web of natural forces of the place, and take form from the special spirit of each place. They take on the special qualities of snow country, desert, prairie, piedmont or bayou. Such buildings vent or hoard heat as needed. They shield from or welcome the sun and wind, depending on the season and place. Their palette of color is attuned to the space-filling white light of snow country, the pastels of fog country, the green light of the forest, or the golden sunsets and turquoise waters of the tropics. They know their world, and are fully a part of it.

Winter in the Northwest is endless, wet, and dreary, as oppressive as the burning summer heat of the Southwest deserts. Yet the oppressive Northwest winter is transformed into meaning and beauty when we walk in the silent mist-filled and moss-covered forests that once covered the region. The endless maritime rain finds meaning and value in the lush and towering forests, in the bountiful life that it brings into being as nowhere else on earth.

In the same way, the heat and dryness of the desert finds meaning and acceptance in what it in turn makes possible. It provides the solitude and freedom from distractions of more peopled places. It connects us with the overpowering sense of stellar space and time of its brilliant starlit nights. It brings us into touch with the epochal sense of geological duration and change that arises from an earth unencumbered by a profusion of life. These qualities are sensed nowhere else with the same power and intensity.

There are ways of building that do fit each of these regions and evoke the poetic power of that region in our lives. Paolo Soleri's *Cosanti* residence in the Arizona desert fits into the desert itself. Earth covered concrete domes and vaults nestle into the ground, tempering the heat of the day and cold of the night, giving shade or sun when needed, while blocking the piercing desert

winds. There people, like other inhabitants of the desert, can retreat to the coolness of the ground in the day and come forth for the business of evening, night, and dawn. Northwest homes of log and cedar shingles, with wide, sheltering roofs, nestle almost unseen among the great dripping conifers, protected from, yet celebrating, the endless rain, and snugly warm in the sunlight when it does appear.

The seed of Persian dwellings, and their image of Paradise, is not a building at all, but a garden - a cool and verdant oasis in the desert. An enclosed garden, a tent or pavilion within, is a "house" in the spirit of the desert and the nomadic tradition of the culture. In a traditional Japanese house, people insulate themselves in quilts rather than closing off their homes and sit on the verandah listening to the silent fall of snow around them. The screen-houses of Cape Hattaras provide shelter from the sun and open to the summer breeze, but not to the mosquitoes and horseflies.

We have been slow to become comfortable with nature in the varied regions into which our culture has spread. In the polar latitudes we huddle inside, away from winter, waiting for the warmth of spring. In the South we build sealed air-conditioned buildings cut off from the flower-scented outside air. In the Pacific Northwest we shy away from the ever-present misty rains, as if fearing we might dissolve from their contact.

Things are changing, however. Spurred by the Canadian architect Arni Fullerton, an interesting movement has developed concerned with "Winter Cities", bringing people together from winter climates around the world. The project has made considerable advancement in dealing with the technical problems of winter living such as snow removal, winter cars and clothing, and building insulation. More significantly, though, it has focused on making winter a positive thing in people's minds rather than a burden. Their original search found only *one* picture of winter in all of Canada's tourist brochures. Now tourism brochures burst with the excitement of winter. Winter sports and festivals abound. Snow gardens and skylights are sprouting up on homes in order to see the winter night sky and the aurora borealis. A dramatic excitement and enthusiasm for winter is developing, and people are relating to winter as an exciting, loved, and very special part of their world.

In the Pacific Northwest, we found a similar abhorrence of rain. Following the Winter Cities lead, we have been working on "rain gardens" to celebrate our endless rains; and slug races, mud and mushroom festivals to take advantage of the unique features of our region. We have designed star rooms - sleeping rooms under wall-to-wall skylights so we can stay close to the stars. In every house design, where possible, we place morning rooms, moonrise rooms, and sitting places to follow the rising and setting of the sun and moon and the cartwheels of the stars across our skies, and search for ways to celebrate the rain as it tumbles around us from the stars down to the sea.

We are learning to stay aware of how the moon moves the tides of our feelings in harmony with those of the ocean. Being in touch with the sunrise and sunset, we stay in touch with the rhythms of work and rest in nature - rhythms of giving and absorbing that are important to acknowledge for our own health. With window seats, doorsteps, verandahs, porches and outdoor rooms, we are creating places to live and work that nestle between protection and contact with our surroundings. We are finding that a good building keeps a healthy native environment around it in order for us to learn the attributes and oddities of life long adapted to our particular place.

A building can draw us deeply into the forces of nature. There is a famous story about a Japanese tea master who was given a piece of land with an outstanding view of the Inland Sea. When his teahouse was finished, his first guests arrived, eagerly awaiting the view. They were shocked to find that he had planted a hedge that totally blocked out the sea.

Before they entered the teahouse itself, they bent to drink the traditional cleansing dipperful of water. Just as the water in the dipper touched their lips, a hidden opening in the hedge exposed a view of the waves breaking on the rocks below.

Inside, when the master had finished the tea ceremony, he quietly slid aside the shoji screens and brought the dramatic view of the sea below together with the taste of water that still lingered on their lips and in their hearts.

We don't need a perfect site or the discipline of a Zen master to create a home that is "at home" in its surroundings. What we *do* need is an attentiveness to our actions and a willingness to take full advantage of the opportunities that present

themselves. A new window can let in the moonrise or the daily rhythms of the sun. A skylight over our beds can bring us close again to night and the stars. New south windows can bring in needed warmth and sunlight. Trees and vines can give shade and coolness.

Fixed windows made openable can allow a breeze to pass through with its messages from afar. Materials, colors, and furnishings can draw on sources native to our region. A tiny garden outside our window can keep us close to the dripping moss, ancient rocks, or sunlit leaves of our more distant surroundings. And photographs or sketches can remind us of those rare and wonderful places where a uniquely powerful spirit shines through with power and clarity.

HONORING OTHERS

One of the central attitudes that thread through this deeper way of building is a sense of honoring, of demonstrating respect and appreciation. The tortured life of a spruce root that had grown squeezed among rocks on a beach once opened my eyes to this. It showed me the many ways our buildings can deny or express the seamless web of love, awe and respect that is part of the sacredness of our world.

We found the old, twisted spruce root on the beach after a storm, dragged it home, and eventually made it into the handrail of our stair. Its gnarled shape silhouetted against the soft light from inside nudged my mind every night as I came in from the dark.

Part of the root's specialness, I realized one day, was that it still held the history of its past life. Most building materials have had their history cut, sanded, and varnished away. The contortions of an old tree, like the wrinkles and stoops of an old person, tell of the adventures and struggles of their life. That life is worth sharing. *There is a beauty in that history and the shapes of natural materials, a value in honoring those lives that have been given up into the making of our buildings.* Incorporating the twists and bumps of unprocessed materials takes more time and effort. It need not be done, however, for *every* piece of rock or wood - just enough to keep us aware of the lives that have been given up into the making of our places.

The concept of honoring others goes far beyond how we use materials. One of our most basic human needs is to feel of value to others, to have a sense of self-worth, human dignity and meaning to our lives. Yet how do we honor and respect the dignity and self-worth of others when we build or furnish our buildings? Do we give the carpenters, masons, and furniture makers any latitude to do their best rather than their least, or any encouragement to put their hearts instead of just their time into their work?

Think, if you were a builder, how you would consider your work differently if an owner put \$1000 in the budget for you to choose a way to make the place you're building special. That "1% for heart" would most likely cause you to start thinking about how to make *every* part of the building a little bit better. You would probably end up expressing that attitude in the whole building as well as just the part where you put the extra budget. And you would both feel different about your work while doing it and about the product once done.

The concept of "best - not least" may cost more - initially. But it also gives more in return. It is more deeply loved and better maintained, and is far cheaper than the cost of our social ills that stem from lack of self-worth and satisfaction in work. *Everything* does not have to be hand done and elaborate lest it become overwrought - just enough to allow others to take pride in their work. It allows them in turn to give a special contribution to our homes.

Even with initial costs, we can choose the alternative of a smaller but better-quality home, or less but better-quality furniture. A home half the size of today's is still as large as the average built just twenty years ago! And think for a minute how quickly we are willing to demand a minor savings that dehumanize the people who craft our homes, while at the same time wasting far, far, more on sloppy debt patterns on our purchases! It is a question of *values*, not cost.

How we arrange and use the insides of our homes also conveys a sense of what we honor most highly. The English build a parlor to honor guests. The Japanese place an honored guest at a meal *in front* of their tokonoma so that others will associate the guest with the specialness of the flowers and art displayed in it for the occasion. In ages past, the fire was the heart (hearth) of the

home. Now we arrange our living rooms around a TV like worshipers around an alter.

By using the traditional design wisdom of a region, we honor the work, insights, and hard lessons of the past. By planting trees, we honor a will to have a future. In providing opportunity for birds to nest, wildflowers to grow, and squirrels to play, we honor the other lives with which we share our world. Whatever we honor - a TV, children, or a good cook - shows in how we design and use our buildings. It speaks forth clearly of where we place our values.

THE ART OF SAYING NO

In a wealthy society, we may occasionally need to be reminded that what we *don't do* - what we *leave out* of a building - can be as important as what we put into it. The trappings of comfort, convenience and luxury often stand in the way of simplicity, peacefulness, and harmony. *Richness, expense, and obvious beauty are not necessarily the best and deepest ways to move our hearts.* Learning to let loose of our limitless desires is as essential in our building as in our lives. Lao Tzu long ago reminded us that emptiness is the essence of a teacup and that the shaping and forming of empty space is the essence of making both a room and a window.

Some opportunities to say "no" can unfold new potentials for "wholeness". Saying "no" to a noisy "automatic" dishwasher releases funds to other use in a building. It enhances the peaceful quietness of our homes, and opens opportunity for the quiet meditation or talkative sharing of doing dishes. Taken farther, it leads to simpler ways of dish washing that eliminate the need for others to wash our dishes.

Saying "no" to wasteful conventional patterns can generate new ones that feel very different. Looking at the handling of human and household wastes leads to compost toilets or other ways to recycle our used nutrients back to the fields and gardens. It leads to eliminating packaging and maximizing material recycling, and minimizing initial and operational demands on our surroundings. All leave indelible marks on our living patterns, the nature of our buildings, and the actions of our lives.

Saying "No!" in design can be as powerful as in words. I've watched the indignant and affronted response of Westerners visiting the Ise Shrine in Japan, when they discover that the Shrine will let *no one* enter, and that what is inside is only a stone covered empty space! In its simple and powerful form, the Ise Shrine is a series of concentric fences which say, "Please! Recognize this as a part of our world to be kept free of our demands. What lies within is held sacred". It is sometimes important for us to be denied something, in order to recognize what the customary satisfaction of our desires may deny others.

Things can sometimes affect us more powerfully if discovered, rather than pointed to. A special view may be less to us if a

bench points it out than if we discover it ourselves and happen to find a convenient wall to sit on and enjoy it. Saying "no" to the bench, and building a wall instead may enrich our experience.

A building that shouts for attention soon becomes tiresome, because we need to actively put *ourselves* into discovering, absorbing and finding meaning in things for any depth of experience or usable understanding to emerge. A good building, like a new friend, is not knowable all at once. It continually shows new facets of itself, while others sink temporarily out of our awareness.

A good design, like a good servant, is hardly noticeable. Good design results in a room with the emptiness of Lao Tzu's teacup, not the bleakness of a jail cell. Non-essentials fade into the background, and our attention is focused clearly and fully on people, our relations with each other, with nature, and with the rhythms and events of the day. Service is the goal of a building and its furnishings. Saying "no" to an architect's ego may be necessary to be effective. Unobtrusive surroundings provide the quietude to absorb, digest, and embrace the world with our deeper mental processes. Shadows are as important as sunlight.

In many ways, restraint, or saying "no" to doing something can point the way to more effective means of achieving what we seek - be it in building design, our work, or our relation with others.

THE SOUNDS OF SILENCE

Lao Tzu's empty teacup drank deeply of the essence of space. That essence of the shaping and forming of empty space creates the potentials and specialness possible in making both a room and a window. Silence plays a similar part as the essence of the "music" in the places we live. I learned this well one night at the Taj Mahal.

It was a full moon at the Taj, and almost midnight. The restless tourists had left. With no one new to impress with the echoes of his shouting and clapping, the guard in the dome room finally stepped outside. The reverberations of his leaving quieted. The silence in the dome swelled to fill the majestic space. Even the sound of my breathing echoed. As my breathing settled into silence, it drew me deeper and deeper into stillness. The silence

was as eloquent as the finest music I've ever heard, and it penetrated into the core of my being. All the richness and beauty of the Taj was nothing compared to the power of its eloquent silence!

We need to stop occasionally and truly listen to our homes. What do we hear? What is the song they sing? A continuing drone of half-ignored music from a radio or stereo? The mechanical symphony of exhaust fans, clothes dryers, refrigerator motors, air conditioners, and furnaces? The neighbors' arguments, or the sounds of their TV? The noise of a busy street? The happy laughter of children playing? The songs of birds - or the silence of their absence?

The quieting of unwanted "music" and making space for the welcome natural sounds of life can be one of the most important contributions we can make to the peaceful feeling of a place. Most exhaust fans are cheaply made, short-lived, and noisy. A check on noise ratings of alternative models and their costs could suggest the value of a change. Would reinsulation of a home, or planting shade trees, allow the furnace or air conditioning to run less often? Do any of the furnace motor bearings need maintenance or replacement? Can we get by without a furnace - using a wood stove, superinsulation, or passive solar alternatives? Can washers and dryers be relocated to the garage, or their noise baffled or absorbed? How about replacing toilet valves or faucets with quieter ones, or installing silencer pads on doors?

Storm windows or double-glazing can cut down outside noise and save energy as well. If we're doing extensive remodeling, adding furring and sound insulation and putting new sheetrock on resilient channels can substantially reduce the noise transmitted from neighbors. Or maybe it would be a gift to ourselves to give our next-door neighbor a Walkman with earphones for Christmas, or the upstairs neighbor a rug or a carpet pad. Do you *need* a refrigerator? We've lived happily without one for almost seventeen years.

What about the good sounds of life? What can we plant to give year-round food for birds? Does our community have an insect spraying program that has inadvertently eliminated bird life, but could be replaced with biological controls? Maybe it would be worthwhile to learn to relax and enjoy silence. Radio and TV demand our constant attention, as if they are afraid that we will turn to another channel if they pause for a breath. Maybe we should.

We don't have to make their fears and patterns our own.

LOVE AND ENERGY

Every building that truly moves our hearts conveys one message over all - of the uninhibited pouring forth of love and energy into its making. This is the boundless energy of a universe that creates in exquisite detail and variety even its smallest and least significant elements. It is the love and perfection, as Wendell Berry notes, that an old woman pours into an intricate piece of crochet work she knows she will never live to finish.

This unstinted giving is found in the hidden parts of Gothic cathedrals - work whose perfection is visible "only to the eyes of God and to the heart of the builder". It spills forth in the exuberant carving of Indian temples or the intricate design of Persian carpets. It lies like a blinding white light within the sparseness and purity of a Shaker chair, or in the embracing warm glow of a country hearth.

In some cultures this attitude of giving has been developed to great heights. Many temples of India are scarcely more than a spiritually-centered framework to fill with sculpture. The temple construction is made possible through the giving of donors, and the sculpture itself is created as an act of devotion, offering, and spiritual growth by the worker. Once completed, the temple is never repaired, but allowed to return to dust in its own time. The giving, not the gift, is what is of vital importance. In replacing the temple, others must have their own opportunity to reap the reward of giving.

Such an act of love or giving is the single most powerful act in making or use of a place, and is not restricted to temples or religious practices. The extra touch put into a door by its builder, the love with which a new marriage bed is built, or a window added to see a favorite tree outside - all echo that love long beyond the lives of the makers.

The most mundane building can be transformed through the spirit with which it is used, expressed in the flowers in the window, the well-scrubbed doorstep, or the smell of fresh-baked bread. What counts is that someone designing, building, paying for or us-

ing it has done the *best*, not the least, they could. And that comes not from necessity, but only from love.

REFLECTIONS IN AN OPEN WINDOW

Giving our full attention to every detail in designing and building our places can uncover unexpected potentials. Mirrors, for example, may seem an inconsequential part of our homes. Yet getting rid of mirrors can do wonders for our spirits, and therefore the spirit of our buildings.

Bathroom mirrors reinforce every morning a vision of ourselves at our bleary-eyed, hung-over worst. They focus our attention on external appearances rather than internal realities - in both ourselves and others. Without mirrors nudging our consciousness of externals, we stop seeing and thinking about ourselves, stop being so concerned with the outside packaging of people and things, and become more attuned and responsive to important inner qualities.

Relocating a mirror inside a closet or medicine cabinet door, or on the back of a bathroom door can make it available when needed, but out of sight and out of mind when not wanted. A mirror we can't move can be covered with fabric when not in use or have pictures taped on it to cover it up. Replacing a mirror over a bathroom sink with a window into a garden can result in a major shift in the values embodied in a building and conveyed to its users. A bathroom with wall-to-wall mirrors and one with a window open to a garden look into very different worlds.

Giving our full attention to details, we begin to find where we have lost some of the richness of meaning we recognize in buildings of other ages. We see that Japanese architecture does not "flow" from inside to outside, but very specifically and carefully recognizes and creates places for being "in between". Windows and entrances become very different things when they unfold into special places for joining the inside and the out, the public and the private; places for the ceremonies of greeting and saying farewell. We can rediscover the specialness and infinite variety of window seats and doorsteps that occur when two different worlds touch.

SIMPLY LIVING

The aesthetics and life-style of a materialistic culture deeply permeate the way conventional homes are built and furnished. Simpler patterns of living and alternative approaches to home furnishing can free considerable amounts of time, energy, and resources for other uses, while strikingly affecting the spirit of the places where we live.

My own living patterns have been dramatically simplified several times. Once, I became frustrated with belongings that constantly needed fixing, moving and tending. Selling virtually all my things, I traveled for a year in a van, with nothing but a few changes of clothes. This happened again several years later when our newly built house burned down the morning after we had finished building and moving our favorite things into it. These experiences opened my eyes to both the good and the bad influences of our belongings and broadened my sense of how we can positively "furnish" our homes.

One of the most extraordinary kitchens I've ever been in contained nothing but a couple of butcher-block work surfaces with open shelves underneath for pots, an old stove, and a cupboard for dishes and food staples. No fancy cabinets, appliances, or storage - not even a refrigerator.

After looking everywhere without success for something to eat, I was later amazed at the meals that were created in this simple kitchen. It made me realize how much the usual kitchen is merely an expensive storeroom for equipment and meals processed elsewhere. *A real kitchen consists of little beyond a good cook and space to work!* A small kitchen garden gave fresh vegetables and herbs. Leftovers were transformed into something new and eaten the next day rather than being left to mold in the back of a refrigerator. When I asked my friend how she survived without a refrigerator, she said with a puzzled expression, "Why would you *want* to eat old food?"

Where we fill our rooms with expensive furniture, many cultures have developed the simpler custom of living on the floor. Persia, India, and Japan are outstanding examples of how to live simply, inexpensively, yet often eloquently, with a minimum of furniture. (Floor living, however, may not be suitable for those with chronically stiff joints!).

A home may be spare, like a Shaker kitchen, or filled with a clutter of well-loved and well-used memorabilia. Rather than an expenditure of money to obtain an expensive aesthetic, both approaches involve the simple use of existing materials to give special meaning to our surroundings. Folding foam couch/beds, hanging canvas chairs, mattresses and pillows for both sitting and sleeping, as well as tables that can be converted in height or put away when not needed, have opened up new opportunities for living comfortably (and simply) in large or small spaces.

One good test of a home is how well it can absorb the vibrant life of children. A house that can't take a little dirt, a little clutter, a little banging around, may be imposing too many restrictions on *all* who live there.

Instead of automatically filling our rooms with furniture, we may choose to face the question of what really makes a room alive, heartwarming, and comfortable. Part of the answer must be found in our own hearts - what things have special meanings and associations for us personally. And part of the answer depends on how we organize a room. Setting aside some space - perhaps a table or a wall - for specially loved things or an ever-changing display of flowers in season, or artwork, or "found objects" like rocks or shells, can allow us to establish the spirit of a room more easily and quickly than with "furnishings".

Inexpensive clamp lamps, swing arm "luxo" lamps, bare porcelain lampholders with spotlights or globe bulbs, and inexpensive paper lanterns can provide considerably cheaper and more effective lighting than more expensive conventional fixtures and table lamps. New mini-fluorescent fixtures with warm-white lamps are useful for some applications. More importantly, rooms don't need to be uniformly bright from corner to corner to have effective lighting where needed. In fact, softly lit and shadowy spaces can be far more comfortable and restful, and more creatively stimulating.

Keeping belongings in a separate storerooms, rather than storing them in expensive bureaus, chests, and cabinets, can put our possessions out of sight and out of mind until needed. It can also permit us to have dinner, to sleep, or to work, in different rooms depending on the season, our needs, or the event. This can free our rooms to be more powerfully supportive surroundings for our current activities. Light can be used to create color - especially

if we live in a rental apartment we can't paint. A light shining on an orange bedspread or colored wall hanging can fill an entire room with a warm glow!

Good design is a place beautifully honed to essentials. Objects, colors, patterns, volumes, materials, and meanings all need to be brought together in ways that create a harmonious and unified whole. They need to create a coherent meaning, while satisfying our particular needs simply and fully.

THE FOUR ELEMENTS

A fireplace is an archetypal image of home, comfort, and security. It is so familiar we hardly pay attention to it. Water erases gravity and fatigue, fills a primal thirst, and lulls us peacefully in concert with the seas within us. Air is the breath of life, earth the ancestral matter of our being. Rock is a primal representation of solidarity, strength, and endurance. *Experiencing fire, water, earth or air intimately, and in fresh and new combinations, can add new vitality and meaning to our places.*

Curling up on a granite boulder still sun-warmed from the day, or napping on a rock nestled in an imprint made by life a hundred million years ago awakens new awareness of our place in our world. Bathing outside in a tub with the snow flakes falling on your nose, or inside with a fire crackling next to the tub, refreshes our sense of solace and protection. Sleeping in a bed open to the stars or sitting watching curtains of fog blow across the moon and into our room brings us close to the primal forces of our world.

The archetypal senses of a roof as shelter, of walls as protection, of a hearth as warmth, or of a trickling spring as a source of precious water are elemental to our relation with the world around us. In finding new forms of expression for that relationship as our attitudes towards nature change, we gain a renewed and richer sense of our connections with the world which gave us birth. We feel deep and elemental needs, and restore elemental relationships and connections which have existed since the dawn of time.

We do not make a house into a home by filling every corner with furniture, art, pillows, or bric-a-brac. "Another end table here," "a chest for that wall," "a picture to fill that empty

space," are the architectural equivalents of junk food sought in an attempt to satisfy a deeper hunger. That hunger - in both cases - is for meaning, for love, for a sense of self-worth, for a sense of our place in the universe. Any home that satisfies that hunger - and also meets our modest real needs for shelter and comfort - is a home with a soul. *We can create a home with a soul.*

Such a home has fullness, and a sense of peace and rightness, that fills our hearts whenever we enter it. Though few would admit it, how we make and use our homes and other buildings is a spiritual act that reverberates throughout our lives.

In the end, all that really matters is that we approach wherever we live with full attention and an open heart. Our hearts will guide us in deciding how we will inhabit a place. An open heart will embrace any new place and bring forth from it and from us what is needed for a good life. A full heart will find and express in how we inhabit a place the "wholeness" that brings us to hold our places sacred. A bouquet of flowers, a song, the smell of dinner in the oven, and the laughter of friends, can transform any place into a happy, heartwarming abode.

ONE HOUSE

Once we are free our minds from the conventions of exploitive energy use and economic measurements, we can get close to the spirit and sacredness of place. We then *know* we have the means to build right, to build in balance, and to build wholly. That way of building requires we pay clearer and deeper attention to every act in design and building, and develop a deeper knowing of both the purpose and process of shaping our places.

Getting a deep *knowing* of *something* in our lives pays immense dividends. A deep knowing becomes a touchstone by which we can test and understand other, very different, things we encounter. Such a touchstone acts in a totally different way than our customary flitting from the surfaces of one interest to another. A deep knowing brings with it a love. We get excited about and come to love anything we really get involved in. This works both ways - once we love something, we come to really know it. Either results in good things! That knowing gives us an intuitive sense of how things should fit together in anything we encounter.

Details of a few buildings designed in this way can perhaps show the different spirit that can be achieved, even today, by building in a sacred manner:

The goal of the first house, which we built some seventeen years ago on the Oregon coast, was to show it was possible to create a home with a *soul* - a home filled with peace, and which connects us intimately to the world around. Walking into the house, its silence speaks eloquently. There are no furnace fans, no exhaust fans, no refrigerator compressors or dishwashers turning on and off, no sounds of toilet tanks refilling. The bathroom has operable windows for ventilation, not mechanical fans. The house was built with a compost toilet to eliminate nutrient waste and water pollution. The "refrigerator" is a traditional "cool box", trapping cool night air to keep perishable foods. Earphones are available for music. TV is not present. The sounds heard are of nature, people, and of silence.

With a woodstove made of recycled auto engine blocks; recycled lumber, furniture, sinks, glass, appliances, and solar collector panels made of recycled printing plates, the external demands of the house's construction were minimized. Heating is by passive solar, solar hot water, and wood heat using waste wood from the

property. Foot-operated valves on sinks improve hygiene as well as energy and water efficiency.

The bath and the bedroom open to the moonrise and the sunrise. The dining space faces the sunset, the living room the ocean and midday sun. Inside and outside are relative terms in this house. The entry is sheltered from rain, and it's woodpile gives assurance of security as well as convenience. The basalt pavers and entry steps have been part of the mountain the house was built on for 20 million years. The fir, cedar, hemlock, and stick spruce which support and enclose the house are all native this place.

Within the entry of the house, the floor is still part of the earth itself. From the entry, you sense the floor of the house as the platform raised above the ground which it is. The edge of that platform in the entry acts as a seat for removing shoes before entering the house. Stepping up to the floor level and going further into the house to the living room, you realize suddenly that you are now outside again! There is in good weather no wall to the room, which is entirely open on one side to the trees, ocean and sky. The outside is a part of the heart of the house. Butterflies and hummingbirds flutter in and out. A cleanup crew of bats enters each evening to empty out spider webs and remove other insects that have entered during the day. At night or during 100 mph winter storms, sliding window panels close in the room.

The connection between inside and out is special for the conditions of each space. Upstairs spaces within the sheltering roof have low double casement windows, allowing the rooms to be used as "floor rooms" as well as "furniture rooms", and still connect to the outside. The narrow deck outside the living room is set below floor level so it doesn't block views and so that sitting in the sun on the edge of the floor is convenient and comfortable. A small roofed alcove permits sitting outside on rainy days. The sleeping alcove off the living room doubles as a cozy sitting area, with sliding panels to shut it off at night. Its window wall slides open to give access directly to a small sunny morning deck. The bath has windows open to sun, moon and the ocean, a door to the outside for drying off after a hot bath. Instead of a mirror over the sink, a window opens to the garden.

Mirrors in the bathroom are tucked away inside the medicine cabinet and on the back of the door, so our attention is not constantly drawn to how we look rather than how we are. Both the dining area and the bed alcove are raised from the main floor

level to give informal sitting along the edge of the living room and kitchen, and the dining table can be moved to the edge of the platform to accommodate both floor and chair sitting.

Storage is tucked under the bed and dining platform, in the bed headboards, under the stairs, and in every nook and cranny so that possessions are handy but do not overwhelm the main spaces. Outside, the area around the house has been allowed to grow up into a native wildflower meadow for the birds, bees, deer and elk.

The second house was also recently constructed on the Oregon coast. In it we were trying to get at a fresh sense of the four elements - earth, air, fire, and water - and how we could in a fresh way get close to them and gain strength from them. The location gave part of the tools. Water was a major part of life - ocean, fog, and eighty inches of rain a year. Because of that, we tried to use water to develop a fresh sense of the heart of a house.

In some cultures the heart of a home is the hearth, in others the table, in others the sacred center pillar or ancestor's shrine. Here we wanted to take the *bath* as the center. The bath can be a place of peace, rest, communion with the elements - a place to shed the world, relax, and seek inner peacefulness.

We placed the bath physically in the center of the house, away from distractions, quietly lit with light borrowed from perimeter spaces. We built a stone fireplace between the living room and the bath. By putting the fireplace there, with cast iron doors on the bath side, we could combine fire, rock, and water, without the self-consciousness of a special and separate fire in the bath. We had warmth and comfort in the bath, along with a source for heating the water during cloudy weather. Fire and water together opens our eyes to the archaic, elemental forces which make our lives possible, and which we so often put out of sight and out of mind.

The bath formed both the physical and spiritual center of the house. Above it was to be a skyroom - a sleeping and sitting space in the roof peak whose entire roof was a single ten foot diameter pyramidal skylight opening to the wheeling of the night stars, the wonderful darkness of our coastal nights, and the drama of winter wind and summer fog. There *are* times on the Oregon coast when the clouds aren't there. Then the stars are - by the millions!

To be able to curl up there in the midst of that radiant universe made a wonderful place to be. With a mattress floor, back pillows, and windows on all sides to the ocean and mountains, the peak of the house above the bath gave a private place for being with the outside elements. Below, the rest of the house clustered around the bath and accommodated the conventional everyday activities of living. The skyroom got dropped, unfortunately, from the final plans, but not before we could clearly envision what such a place could be.

The Visitors' Center recently constructed in Cannon Beach, Oregon is notable in the strong recognition to spirit of place given by both the owners and the community, who asked that the building design give it particular emphasis. It is also significant in the amount of support we were able to gain from business, tourism and foundations for expressing that spirit of place through architectural crafts in the building.

The former Chamber building was a surplus W.W.II recreational barracks, and had acted as an ad-hoc community meeting hall for many years. The new structure was planned to carry on that tradition, to enhance the community space with the architectural crafts, and to share it then with visitors to the community. We got an arts consultant excited enough about the project to apply for and receive an \$84,000 foundation grant to incorporate architectural crafts into the building. The consultant had been already trying to convince the state to incorporate arts into their welcome centers. She wanted to show that people seek different and uniquely local experiences when they travel, not more of what they have at home, and more than interested in our project as a demonstration.

The building form and materials reflect both the regional traditions and the particular needs of the project. The outside lights are in the shape of jellyfish. The water off the roof is celebrated and enjoyed instead of running hidden through pipes. The stained glass in the dormers focuses on the phases of the moon and the tides so much a part of oceanside life. The floor in the Information Center, of local basalt, has brass inserts in the pattern of the Pleiades - with starfish instead of stars. The fireplace is of native beach rock, with sculpture inserts showing forms emerging out of the stones themselves. Metal brackets on the roof trusses are in the shape of leaping salmon (the fabricators called them "steel-heads").

It was instructive to discover in the process of working with the various artists that while all were in strong agreement of the importance of spirit of place, there was an immense difference in the depth with which that spirit was perceived. The collaborative effort was not wholly successful, and it may be that Art (with a capital A) isn't the best way to express spirit of place today. I do feel that we showed in this project an initial sense of what is possible and what we can go beyond in the future to a deeper expression.

Asking what the users of a building need can often help find more effective patterns closer to the heart of what we build. In a Head Start Center we asked what would make us feel best as a kid coming in the door. "The smell of good food!" was the immediate answer, so we made the kitchen the physical and organizational heart of the Center. With the kitchen openable into every room, the cook immediately became a friend and bite of food for every kid, a cup of coffee and a sympathetic ear for every harried parent, and an extra eye for everyone's safety.

The lobby of the Center we similarly stretched into a comfortable Commons - a place for community volunteers and staff to work, a place for parents to find a moment of peace and rest in an often tumultuous day. In the kids' own space, a play structure was designed to bring them close to the ground and sprouting spring bulbs outside the window, to a skylight to watch clouds and rain running off the roof, and to unexpected mirrors to give them new views of themselves.

Designing a building with a soul requires focused attention to every decision in design and construction, so that each element answers its need in the same spirit and relation to others.

FOUNDATIONS

Making places which have a soul, and which can enrich and sustain our lives *is* possible. Though such places may be outside of the experience of most of us, there are some guidelines that can help our process of learning their nature.

- * *Evaluate, protect and enhance the feng-shui of the site*
- * *Minimize waste and impact on resources and connected systems*
- * *Make where we ARE paradise*
- * *Focus on inner rather than outer qualities*
- * *Seek durability - build for eternity*
- * *Let nature work for us*
- * *Provide rewarding work in design, construction and use*
- * *Honor life and the power that begets it*
- * *Create silence and peace*
- * *Connect us with the stars*
- * *Give our spirits places of shelter and nourishment*
- * *Honor all things*
- * *Celebrate death*
- * *Connect us to the life around us*
- * *Put us in touch with the seasons*
- * *Touch the spirit of where we live*
- * *Connect us with the universe*
- * *Help us touch invisible worlds*
- * *Create intense and fresh experiences*
- * *Touch the heart of all you make*
- * *Learn to say no - learn restraint and simplicity*
- * *Create places for our hearts and minds*
- * *GIVE the unexpected*
- * *Affirm sacredness and meaning in our buildings*
- * *Provide proper topology for which can occur in the place*
- * *Pay attention to economics rather than finance*
- * *Embody sustainable values,*

and most simply and importantly,

- * Put love and energy into the place

TOUCHSTONES - *SEVEN TESTS*

Once designed, there are a few simple tests (without any right answers) that we can use to sense whether our efforts are moving in the right direction.

1 TIME: *THE TEST OF DURATION*

This test asks if the qualities of a design are truly enduring, or a flash-in-the-pan enthusiasm which will become an embarrassment tomorrow.

Roll time back a thousand years. Does the design feel comfortable with its neighbors? Would the people find its spirit embracing the same deep-rooted values of their lives?

Roll time forward a thousand years. How does the building feel with the patina and bumps and wrinkles of time upon it? Is it mellowed and enriched, or tarnished and tattered? Did it have enough lasting value in it to be cherished and loved, or will it have been long demolished and forgotten?

There is a hoary strength and a nourishing peacefulness in the timeless qualities of a building that truly fits our hearts and spirits. Once known, those qualities can be immediately sensed in any situation. Buildings of different periods express those qualities in unique ways specific to their time and nature, but within that uniqueness is the oneness of the same needs gaining satisfaction.

2 ARRANGEMENT: *THE TEST OF INVISIBILITY*

This test looks at serving, at our egos, the spirit of place, and the un-self-centered bringing forth of that spirit.

Like a good servant, a good place fulfills needs - giving warmth, security, happiness, and joy - without calling attention to itself. A flashy building that screams for attention may provide momentary pleasure and interest, but soon becomes tiresome. When we find ourselves again and again gravitating to a certain place, its usually because we feel especially good being there,

though we may be hard pressed to figure out what invisible combination of things present and absent create that specialness.

Close your eyes. Forget what the place looks like, and feel if it does its job well and invisibly. Spend a day in it in your mind. Curl up in its sunlight. Clean house. Even if nobody else ever knew of the place, or whether you designed it, would you be happy? Think of designing a place. What qualities would permit it to escape your notice, yet attract you back to it again and again because of how good it feels and how well it fulfills its purposes?

3 COST: *THE TEST OF INVESTMENT*

This test tries to separate freedom and value from expense.

Just as between people, the relationship between people and places is richer, more rewarding and more enduring if based on love and giving rather than economics and "payment". An older, paid-for building can be used more generously than an expensive new one. A building that does as much with one brick or one watt of electricity as another does with five conveys a sense of assurance and confidence as well as frugality and economy.

A wall that offers a place to sit as a free bonus while holding back the dirt, gives that sitting place more freely and less self-consciously than a purposefully made bench. And a place that does not demand recognition for the owner, builder or designer is freer and more giving to those who use it. A place that gives more is loved more, and is given more in return - in our feelings towards it and in the care, maintenance and enhancement of it in our use.

What real investment has the place required - in work, materials, energy, love, and frustrations? Has that investment been repaid? What does the place give in return? Is it old enough to be free of the demands of those who initially put resources into its making? What can it give in addition to its primary intended purposes?

The investment test asks us to see what *kinds* and *amounts* of things have been invested in a place, and how effectively that investment produces a good place. It reminds us that excess is as harmful as meagerness, and that we need to discriminate between things that harm and those that enhance our abilities, our relationships, and our lives.

4 OPENNESS: *THE TEST OF CONNECTION*

This test looks at whether we design a place as something isolated and separate, or as something that is enriched and given meaning through its connection with other things.

Does the design of a place close people off from, or bring them into closer touch with the rest of the world and the rhythms of nature? Does the design itself adapt readily or resist changes in its use and additions to its structure? Does it gracefully accept the changes of time, or demand to be kept in the pristine condition of youth? Does it bring people together and cause good things to happen?

A good gardener plants a tree, then leaves it open to respond to the nurturing forces of its surroundings, rather than forcing it to remain in conformance to a limited preconception. A good builder does likewise.

5 HONOR: *THE TEST OF WORTH*

This test asks how well gifts are acknowledged and repaid, and how the act of giving itself is encouraged and respected.

Does the place honor its surroundings, its materials, the things which were given up to make its existence possible? Does it honor the work which went into its making, its heritage, and the future? Does it give the people using it a sense that they and their activities are of value? Does it reflect a questioning in its design of what it can give to heal, enrich, or create greater harmony within the community of place it is joining, and to its present and future users?

6 GRACE: *THE TEST OF IMPORTANCE*

This test asks if we are working with the right questions, and whether we have resolved the basic issues before considering refinements and less important details.

Consider the place in terms of what the *I-CHING* says about grace and beauty:

"Grace - beauty of form - is necessary in any union if it is to be well ordered and pleasing rather than disordered and chaotic. Grace brings success. However, it is not the essential or fundamental thing; it is only the ornament and must therefore be used sparingly and only in little things.

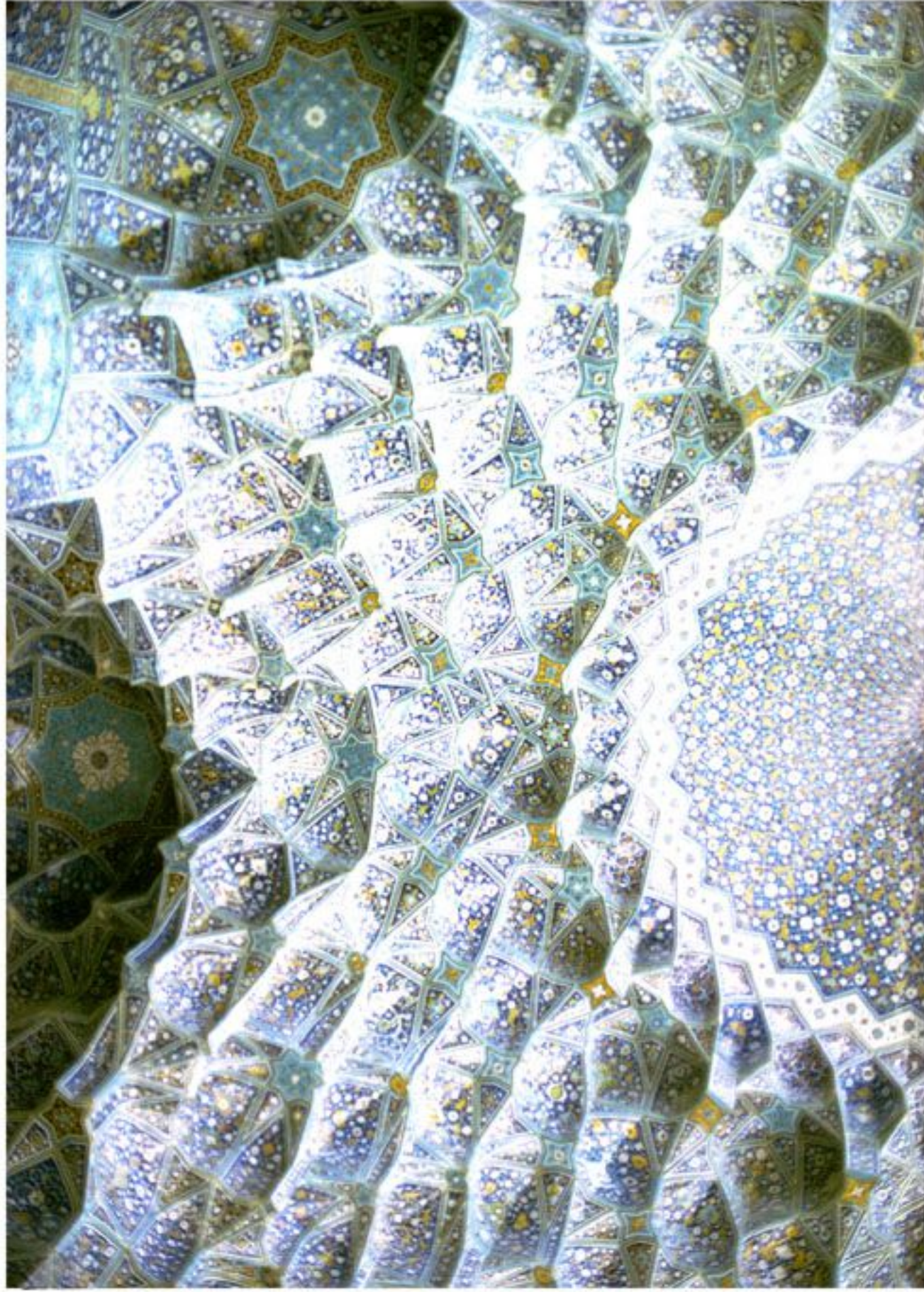
"In human affairs, aesthetic form comes into being when traditions exist that, strong and abiding like mountains, are made pleasing by a lucid beauty.

"...beautiful form suffices to brighten and throw light upon matters of lesser moment, but important questions cannot be decided in this way. They require greater earnestness.

7 HEART: THE TEST OF RIGHTNESS

This is the simplest and hardest test.

Set aside all the words, images and games of our minds. Does the place have a soul? Does its personality fit and support us and how we want to use the place, and the place where it itself is located? If so, that's all we really need to know. The rest is refinement and polish.



GEOMETRY AND ORDER

GEOMETRY IS NOT SACRED

The use of particular "sacred" geometries in the making of places has been felt to be essential in many cultures. It raises the question of what role the shape and arrangement of things *does* play in the power of places and our relationship to them. We can look at the use of geometry in the past, and it can teach much about how and why geometry was used in various traditions. Doing so may well result in more questions and doubts than conviction as to the conventional links between geometry and sacredness.

A variety of geometric systems have been used to give specific meaning and visual qualities to the architecture of different periods and cultures. The Greeks used the Golden Mean (a proportional ratio of 1:1.6) frequently in the plans and elevations of temples. This ratio is commonly found in growth patterns in nature.

Romanesque architecture used semicircular arches and vaulting; gothic architecture used *segments* of a circle for arches and vaulting. Temple designers in India used a grid to lay out temple plans and their courtyard enclosures. Palladian architecture in the Italian Renaissance used simple geometric ratios (including the Golden Mean) to lay out plans, elevations and volumes of interior spaces. The Dogon builders in Africa used the mathematically sophisticated but intuitively accurate catenary curve in their mud brick vaulting, as did Islamic builders.

The European Renaissance used symmetry widely. Twentieth century architecture and Japanese domestic architecture shunned symmetry and used asymmetrical balance as a basis of design. Some periods and traditions ignored geometry, some worshipped it. New kinds of geometry, such as fractals, are beginning to be considered today as the basis for inner ordering and for generating of all kinds of natural and artificial structure.

On a gut level, I still find little inspiration from either current or ancient buildings which depended upon simple geometric analysis as the basis justification in their design. For every situation where a powerful place has been made using a particular geometric system, there is another which achieves equal or greater power while violating every tenet of such geometry. Even a recent detailed study of the geometry possibly used in design of the Pantheon in Rome failed to change what has always been my gut reaction towards the Pantheon - a somewhat ugly,

ponderous and somber building. The Pantheon's value has always seemed to me to lie in its tremendous structural achievement in spanning a huge space with a single dome, rather than as an architectural or spiritual whole.

Geometers would assert that geometric analysis in design gives greater power or coherence to a building. If a building as innovative as the Pantheon *did* have any significant architectural or spiritual power, why didn't the Romans replicate it? Part of the reason has seemed to me that the structural enthusiasm resulted in a building that didn't fit its use - the Gods were relegated to marginal niches around the edge, while the main and dramatic space was left to the worshipers. Not good for the dignity of the Gods!

To the degree that the builders imposed a Euclidean geometry onto the shape and composition of a domed building such as this, it showed a glaring ignorance of structural properties of domes. Underneath that pure and supposedly sacred geometry of the Pantheon dome there has always been a frightened, corseted mass trying to break out. Bound together by hoops of timber and steel, with a waistline weighted down by bulging layers of concrete to keep the dome from cracking open, is a reality that has nothing to do with the surface geometries. Shouldn't geometry have a stronger fit to its application?

Geometers often make an analytical analogy to architecture as "frozen music". But how universal is the musical system they refer to? Does a voice or trombone, for example, just create sounds at certain musical intervals? Does the music of different cultures use the same tonal ratios? And which parts of the building are notes? Looking at drawings of geometrical analyses of buildings, I invariably see a lot of other possible and potentially more "significant" notes that might not come out to the simple ratios discussed.

There is an underlying assertion in most geometric analysis that the builders used the postulated system in their design process, and that it was an important part of that process. Where is the proof, or some concrete clues that this might be so? I've seen it in original drawings for Indian, Japanese and other buildings, but did, for example, the builders of the Pantheon use the postulated geometric analysis in their design? If so, was it a matter of significance or convenience? And even if they did use esoteric geometric in their design, why should we copy it? Should we also

copy their religion, their use of slavery, and the limitations of their structural knowledge?

There is a danger in reading intentions into other people's actions as justification for the universality of our own beliefs. Solar advocates in the early 1970's used the Anasazi cliff dwellings at Mesa Verde as an example of sophisticated solar design. In reality, the vast majority of Mesa Verde's cliff dwellings face east or west, not south, because that is where the cliff alcoves occurred in the sides of mostly north-south canyons. Almost all accessible alcoves had cliff-dwellings, not just the few south facing ones. Their builders sought the vital water source from the springs which formed the alcoves, and possibly protection. Solar design, when it happened, appears to have been an incidental bonus.

Architectural registration exams still ask you to say that Gothic architecture is a better demonstration of the role of structure in architecture than Islamic architecture. The actual development of vaulting and construction in Gothic cathedrals clearly shows it to have been a spiritually-based *esthetic* development rather than a structural one. The entire "flying buttress" system of construction used in gothic cathedrals was only a cumbersome byproduct of failure to understand the structural forces in vaulting.

Here, in contrast, the *Islamic* builders were true masters. Instead of using circular or spherical arcs for their arches and vaulting, they used what we now call catenary curves, keeping the support material of the vault in line with the increasing forces of the weight of the vault as it moves closer to its supports. Observation, not preconception. What we glorify by calling the "scientific method", but rarely use ourselves.

Japanese architecture is frequently pointed to as an example of the evocative power of modular design, geometry, and ornament-free structure. What we see of structure in the wonderful Japanese temple roofs often turns out *not* to be structure at all, but actually *ornament* - a false roof hiding the real structure inside. Similarly, Japanese architecture employs not one but several "modular" systems - each with problems and limitations and elaborate means of disguising and covering their warts and pimples.

Similarly, the "sacred circle" of tipis, kivas, and yurts, has repeatedly been used to assert that rectangular buildings have no soul. The power or absence of power in tipis and hogans and kivas

and yurts, and mini-and mega-geodesic domes doesn't come from their circular geometry - some have power to move our hearts, some don't. Not all kivas were circular. For every Indian tribe that used circular spaces there were others that used non-circular spaces (and un-built places) to create equally powerful places. And it would be difficult to assert that Japanese teahouses which fit none of the rules of circular geometry have less spiritual power than that supposedly given only by the circle.

Every site, program, construction material, technology and cultural tradition holds a range of inherent geometric potentials that fit together easily or with difficulty. The successful ones combine into coherent wholes that unite ease of construction, power of expression, and the complex gestalt of a culture. But none of those wholes have inherently more or less potential of expressive power than another.

If we are going to study the past for inspiration, we need to study it with care. Otherwise, we create false gods and we diminish ourselves. We fail to see, or to learn how to see, real achievement. We fail to know things deeply enough ourselves to accomplish anything of significance. When we later discover that what we imagined into the past wasn't there, we are likely to infer that there was nothing else of value to be learned, and no way to make places that avoid the spiritual emptiness of our buildings.

Whenever we see drawings of geometry imposed over buildings, we need to look beyond a pretty diagram and ask some questions. What significant design elements *don't* fit into the geometry, or only come close to fitting? How many symbolically more vital analyses had to be discarded because they didn't fit? If you throw enough lines at a building, you're bound to hit something sometime. LeCorbusier's geometric design system, for example, had so many options that anything would fit it with a little juggling, and the resulting design didn't look a bit different from one *not* using his geometric system.

In the Pantheon, recessed coffers were used to lighten, stiffen, and reduce the cost of the dome. Reasonably, the builders used a whole number of coffers - no "fractional" ones. *Whatever* number of coffers was used, it is inevitable that geometers would come up with *some* sacred significance for the number, even if it originally occurred merely because of the size of forms the builders had available. It seems that there has to be some greater

justification as well as proven value before assigning significance to the geometry used in construction.

Geometric analysis seems to assume greater vitalness of certain geometric relations as opposed to others. What are they? Why are they vital? How does a particular building, in contrast to others, embody them powerfully?

Geometers quote Aristotle and Plato, "The circle is of all lines most unified.....Can there be...any greater good than the bond of unity?" But compare for a moment the different expression of that circular unity in a farm silo, in the Pantheon, and in Islamic faceted vaulting and ornament.

While the unity and bond of the circle remains unbroken in Islamic design, it gains a unique power of expression through the dazzling manifestation of interrelated complexity, richness, and variety which arises from it. The use of a circle, in itself, does not create great beauty, meaning, or power in building. How it is used does. Some might even say, looking at the human form, that a circle doesn't have to be round to be a circle, and that some of the most wonderful unities and encirclements have bumps and bulges and rough spots which in no way blemish the wonder and power of their oneness.

What conclusions are we supposed to draw from geometric analysis? Are there rules or guidelines that should be used? What parts of the building are significant enough that they ought to fit into a geometric analysis? Is the use of geometric analysis in design supposed to give power to the design? If so, what power, and do people really sense that power?

YANTRIC GEOMETRY

With one important exception, I have never found that the employment of a geometrical system - whether Palladian, symmetrical, asymmetrical, golden mean or other - has been a truly significant generator of the power of places I have visited in any part of the world.

That one exception is in the Kailasanath Temple at Ellora, India. In the galleries of this wonderful rock-cut temple are sculp-

tural panels, cut directly into the bedrock. The panels pictorially represented certain allegorical scenes of various gods. Even with the damage and patina of hundreds of years, and without knowledge of what they were supposed to represent, I found them beautiful. Quietly resting against one of the cool, elaborately carved rock pilasters of the gallery one afternoon, I suddenly felt one of the sculptures leap off of the rock and into three dimensions, radiating a powerful energy. Art history books never mentioned anything like this!

I learned later, when studying the processes used for sacred building in India and other cultures that these sculptures were indeed unusual. The arms, legs, torsos, and other elements of the sculpture were arranged in a specific "yantric" geometry. This geometric arrangement was meant to resonate with the "geometry of consciousness" of the students, acting both as an aid to meditation and as a demonstration of the efficacy of the spiritual practices.⁸

Contemporary researchers, such as Anne Tyng and Dan Winter have studied in more detail the geometric linkage of the ordering of energy and consciousness. They show how a geometry of energy builds up from the direction of spin of atoms, through the helical ordering of DNA molecules to even the ordering of our thought processes.⁹ This interconnection between levels of organization, energy and geometry suggests that there *can* be a powerful experiential effect resulting from use of particular geometry in the making of space. I have yet, however, to experience any effective application of this potential geometry/energy/consciousness linkage beyond that unforgettable sculptural program at the ancient rock-cut temple at Ellora.

Sacred statuary, such as that at the Kailasa Temple, has been specifically designed and used for the last thousand years as supports for psychic and spiritual training. The science behind the geometries of such statuary is being rediscovered today, along with detailed evidence of how it acts upon our mental processes. These kinds of sciences, along with new understandings of the architectural geometric designs of Islam and of the roles of fractals and chaotic attractors in generating form and order in nature are working towards the birth of new kinds of geometry and order in architecture, which may find a specific or perhaps a more general application in sacred building.

There *are* several ways in which I do find geometry to be of value in the design process itself:

LAWS OF FORM

The most fundamental mathematical processes (we can call them geometries) deal with the primal actions of consciousness and awareness, of learning to make distinctions and to sense the existence of underlying unifying relationships and processes in nature.

G. Spencer Brown, in *Laws of Form*, says, "*A universe comes into being when a space is severed or taken apart. The skin of a living organism cuts off an outside from an inside. So does the circumference of a circle in a plane. By tracing the way we represent such a severance, we can begin to reconstruct, with an accuracy and coverage that appears almost uncanny, the basic forms underlying linguistic, mathematical, physical, and biological science, and can begin to see how the familiar laws of our own experience follow inexorably from the original act of severance.*"

Working with these formative processes in the making of a place is geometry on one level. Echoing those geometries in the physical arrangement or ornamentation of the spatial enclosure of space is not the same, though it is an acknowledgment of the existence of the deeper level of action.

At the time of their discovery, the rules of our conventional geometry represented both an immense leap in understanding nature and the apogee of that period's understanding of the physical world. Because of this, its knowledge, demonstration and use at that time *did* contain symbolic power, but that power has subsequently been overwhelmed by that of other tools and understanding.

TOPOLOGY

As there is an outer, physical geometry to the physical arrangement of objects, so there is also an "inner geometry" - the *relationships* between the forces which give rise to the physical object - whether a crystal, a building, or a human being. Paying attention, and getting right, the arrangement between activities,

and between forces which influence their course of unfolding can play a vital role in the right feeling and action of a building.

The geometry which operates on this level is called *topology*. Topology is a *qualitative* rather than *quantitative* geometry - one that cares about basic relationships, not exact size and shapes. It deals with the properties that remain unchanged when the shape of a figure is distorted at will. Topologists don't see any difference between a donut and a coffee cup. The coffee cup is only a donut with a dent pressed into the surface to hold the coffee. This kind of geometry is a good way to find what aspects of shapes are a result of circumstantial conditions and which are essential relationships. It's sometimes called 'rubber geometry'.

With it, we can find what ways shapes differ or are similar and how they can be substituted in a design. We can also concentrate on solving organizational problems without having to worry about the resulting geometric problems at the same time. In feeling the way towards a design that fits well with the purpose of a place, it helps resolve first the essential questions - "Does this belong within or apart from this other?" "Do these things coincide, or should one encompass these other things as well?"

I find that when these questions are answered well, the circumstantial geometry of adapting to the particular details of site, budget, program, etc. resolve themselves without imposition. And the fitness of that topological organization generates a quiet power of rightness irrelevant of the final design geometry. *Shape has meaning when it grows directly from the structure or relationships which are inherent in that particular organism or situation.*

Sometimes when things look almost alike there may be small, unnoticed things which cause them to act entirely differently (like a room with a column inside, which topologically changes it from a disk to a donut). Sometimes, too, things which seem to be quite different are topologically alike, and can act the same way in certain situations. Looking at the inner and outer shapes of things carefully and coming to notice their various qualities can help us understand the changes in structure, linkage, function, and other qualities that take place in dynamic situations.

GEOMETRY AS RITUAL

Geometry may also prove of value as a *process* of establishing relationships between a designer and the forces of nature in a place. Its importance here is in being a ritual for centering, clearing, and focusing the designer's mind on the situation at hand.

Look, for example, at traditional practices for determining north/south orientation for a building. One common method was to mark the rising point and setting point of the sun, moon, or stars. By connecting those points with a line, an east/west direction was established. Constructing a second line perpendicular to that one established the north/south direction.

This process required you to be on the site for some time, at different and significant times of day. It caused you to acknowledge cycles of the forces in our environment and how they are connected. Locating north by the Polar star at night, or south by the shadow length and direction at mid-day does the same. They establish an inner orientation and connectedness, out of which a design grows which is cognizant of those forces.

Today we may use a magnetic compass and deviation correction table, or a satellite GPS system to locate and orient ourselves. But they give only direction, and fail to orient us to the forces and rhythms of nature within which we need to build and live.

The issue of geometry and sacred geometry in truth is asking differently the basic questions we all are asking:

* *From what does the spirit of a place arise?*

* *Where does a place or an object or a person get the magic that penetrates our own spirits, causes our hearts to pound, and forges an unbreakable bond between us?*

* *Where does power come from?*

Many writers speak of "sacred geometries" or "sacred places" because of the power those individuals feel in them. Yet when we find places which violate every rule of sacred geometry, and every criteria of "sacred places", but which have equal or greater power, we need to inquire further where the power originates.

The surroundings we create, like all our acts, truly embody every nuance of our beings. They expose to the world, in concrete and steel, all our loves, our blindnesses, our passions, our fears, and our greed. They don't lie. If we don't like what we feel through them, perhaps it's more important to look in the mirror at ourselves than to seek some magic geometry which will give our places the appearance of some imposed meaning. If we find power in them, we need to look to the source of that power within us for understanding of its nature and operation.

The value and role of geometry in the building of a sacred world remains an important, but so far unanswered question. It is an opportunity to explore, sort out, and verify a great number of different possibilities, and to build on what we discover and verify, not what we only speculate upon.



SYMBOLISM AND BUILDING

THE IMPORTANCE OF MEANING

Advertising shows the obvious power of symbolism. The use and power of symbolism in the design and building of our surroundings is virtually neglected. Today a "symbolic gesture" is almost synonymous with a futile attempt to influence events. Yet symbolism is a potent force, and an unconscious but central element in most of our everyday decisions and actions. The symbolic content of our physical surroundings is as vital to our well-being as that of our electronic environment is to our consumeristic behavior.

When we look back at the symbolic meaning that people's surroundings and buildings had in other cultures, we tend to belittle the power of symbolism. We may feel no power ourselves through the symbolism and meaning that was attributed to places and things. This is not a failure of the power of symbolism, but of our failure to understand the powers with which symbolism connected in those cultures or our own. The power of life and death which an absolute ruler held over the inhabitants of a country, for example, was often immediate and very real to those inhabitants, but of far less meaning to those of us living far removed from the reality of that power. Symbolism of that power was a very real "reminder" to such people, but without equal meaning to us.

The connections made with spiritual symbolism in sacred building are similarly meaningless and powerless if we are unable to comprehend what real connections were made and what powers were tapped. If we see an Indian anointing a phallic symbol with oil in a temple, we perceive one thing. If we develop a ritual ourselves for aligning our values, beliefs and actions with the generative and regenerative powers of life and death, we are likely to see and feel something quite different. Yet there may be no difference.

In traditional cultures, the layers of symbolic meanings associated with every physical object surrounding a person have at least as great an importance as the item itself. The sacred central pillar of a house, the east or south orientation of a doorway, the geometry of a structure itself, the choice and process of obtaining materials all are used as constant teaching and remembering tools for making and keeping people aware of the forces, cycles, and relationships which permeate, generate and sustain life.

We see those connections of other cultures abstractly and without their power. The symbolic levels of our own surroundings are so different and so fully enmeshed with our lives that we don't see them. The automobile, the TV, the freeway, suburbia, billboards, spiritless buildings, segregated zoning of cities are all so "normal" that we don't see them and the peculiar kind of connections they represent.

As long as we were ignorant of the nature and importance of many of these forces, it is not surprising that we were immune to the value of connection with them. And as we are discovering or rediscovering the importance of things such as nutrient cycling and symbiosis; of the importance of mutual respect in sustaining balance and relationships; of the interplay and co-evolution of various forms of life, we are finding that it is those very things which underlay the symbolic reminders and associations most commonly attached to a person's surroundings in other societies.

Rina Swentzell, a trained architect of the Santa Clara Pueblo in New Mexico, has spoken eloquently of the difference between 'modern' and traditional approaches to the role and meaning of building. "Form, matter, substance and structure are primary concerns in 'modern' design," she says. "In contrast, pueblo builders focus on *symbols*. Architecture for them is a metaphor for expression of spiritual meaning."

"When a community is founded, the *center* of the community is located first, before any action is taken on layout or construction. This process is gone through to acknowledge, to pay attention to, to connect with the forces of the world - the mountains, the stars, the clouds, the animals and the birds. The water spider is asked where the center of the universe is, and there the community is built. If there is any question, the rainbow is asked also where the center of the universe is. A human place is only significant in how it connects us with larger forces in the world. It takes us out of our small concerns and makes us aware of what affects us and what we affect, and what we are part of. That center is marked with a mere stone - no monument. It may be a very inconspicuous stone, and it may be located far from the geometric center of the community."

"That point is the opening to the underworld. It connects us with worlds that happened before and simultaneous with this one. That center is where energy flows and connects with other

levels of existence. It is the point where the earth breathes, where its breath moves throughout the cosmos. It is the point where movement happens and where we breathe of that movement and are alive. We breathe the same breath the earth breathes. The Tewa word "*o wa ha*" means water/wind/breath - the life that connects all living beings, including the earth. Ants are as sacred to us as we are - they breathe of the same essential breath of the cosmos."

"The plaza is next defined, and after that the houses. Houses are blessed, healed, and have the same breath permeating them as we do. A house is not the walls. It is the energy that flows through it. People who use it leave their breath there, and it too becomes part of what the house is."

"When an animal is killed, it is talked to, its blood is drunk. This ensures the continuation of life. That concept of continuation is important. The entrance to a kiva is usually from the top down - an entrance back into the earth again. The underworld is not evil - it is what underlies, what has come before. It is a touchstone to go back to to understand today. We are always looking for ways to create sacred places, special places. People today think of themselves as "special" - as something apart. This is wrong to us. We feel we are children of the earth, as is all that surrounds us, as we were formed of and breathe the same breath of life."

"The Tewa word "*wowa tse tuente*" means seeking life. "*Wo*" means medicine/healing. "*Wowa*" means life. "*Tse*" means walking. Together it means walking through life as gently and carefully as possible, paying attention carefully to each thing we do. When you do that, any structure you build will be full of your energy. We are capable of giving every moment of our life sacredness. The concept of architecture and professionalism is at odds with this, which is why I don't practice as a professional. It makes a distinction between people and takes away their ability to make their lives and places sacred."¹⁰

The Tewa community founding ritual ensures that the people of the community are centered with their universe before they begin a new enterprise, so that the actions that follow will arise naturally from the proper set of values. It insures that the community stays in touch with its past, its roots, and the roots that preceded even its existence. It recognizes that our actions affect others in long lasting and subtle ways, and that certain patterns must be followed to ensure people the opportunity to contribute

energy to the community. It ensures that they observe closely, and intuitively verify, the rightness of the relationship of the proposed village site with the surrounding mountains, streams, winds, and habitat for food sources. Their symbolism acts to marshal their inner forces to give power and rightness to their actions. This is far more than is given us by "modern" building.

Many cultures, such as the Tewa, have had strong, rich, and deeply held symbol systems which guided and directed how they related to the natural world, the shaping of their homes and communities and gave them rich and deep meaning in their lives. Doors or alters oriented to the rising sun, the sacred fire or center post, a certain use of geometry, sculpture, arrangement of things, use of materials, or ritual in making and use. Our culture has lost the commonality of such shared symbol systems, and lost their power - for they *do* have power. Their absence leaves a powerful void. Yet the nature of our culture contains something of equivalent power.

The certainty of a common symbol system ensures a level of cohesion, power and meaning in our surroundings. Its limit, however, is that a *deep and living* understanding of things cannot be just passed on from one generation to another. It has to be created, recreated, forged and transformed anew inside each of us. Growing up immersed in an existing tradition makes it easy to accept it as given, with no incentive to go through the arduous process of forging an understanding within our own lives.

Our culture does not give the assurances of tradition. Instead, it in theory gives the incentives and abilities for each of us to make that search ourselves. That fire of fresh creation (true, deep, loving and connected) is the power we feel so strongly in great places, and whose absence we equally feel in our everyday lives and surroundings. It is that which exists in the spirit of a place deeply in harmony with its universe, its surroundings, its culture and itself. And it is that which we must grasp to imbue our surroundings with life.



ENHANCING THE SPIRIT OF BUILDING

THE INNER AND OUTER PRODUCT OF WORK

The making of a building produces more than the building itself. *There are inner as well as outer products to all the work we do.* The inner joy of discovering new skills, or of creating something of beauty can be more important than the outer results of work that we expect.

Until recent history, the design of our surroundings was considered too important to leave to the aesthetic conjurings of architects. The design of homes was firmly embedded in spiritual traditions so their making, orientation, and features would embody how people saw their universe, their world and their place in it. Important government and religious buildings were designed only out of living spiritual training, ensuring that they clearly manifested and reinforced good relationships among people and between people and their beliefs. In addition to ensuring the proper design of the buildings, the traditional process of conceiving and constructing a building provided, in many cultures, an important means for spiritual development of the workers.

The painter of a Tibetan *thanka*, designer of an Indian temple, maker of a gothic Christian sculpture, or carpenter of a Japanese temple all follow a similar process of preparation and action. All the needs and relationships are carefully studied. The designer then meditates upon what is being designed, allowing unconscious processes to meld all the complex demands into a coherent and powerful whole. Then "the temple is built in a single night" - a vision comes, complete in all detail and spirit, of the temple or sculpture or woodwork. That deep touching, exploring, feeling, and mingling - searching for, trying on, and suddenly finding the spirit that is sought, before even considering such things as geometry, is vital.

This is the essential making of a place - unity, wholeness, rightness, fit - and how it arises. It provides a powerful and essential touchstone which guides, and against which is tested, every major and minor decision in the process of actual design and construction. The visible designing and construction which follows is merely the recording, clarification, and embodiment of that deep inner sense - even taste - of the place. Without it, things go awry, and the spirit and power of one thing does not build upon that of others. With it, you know immediately that this detail or that color

or opening is or is not right, and each adds to the others like voices in harmony to create a powerful and pure creation. This process of envisioning and the giving form to the sacred relationships embodied in our work provides a vital vehicle for our spiritual and artistic development. It provides a mechanism for feedback on our achievements and failings, as well as for inspiration to others.

The construction process of a building equally provides opportunity for developing the spiritual qualities of both the worker and the building. At the Ise Shrine in Japan, for example, the construction process has developed into a unique vehicle for spiritual training, one that takes on far greater importance than the design of the buildings themselves. For over fourteen hundred years, the buildings have undergone a continuous cycle of regular replacement with new ones every twenty years. Construction is simple. Posts are set directly into the ground, walls are built of solid planks. The roof is thatched only once, when new.

Once consecrated, the buildings are left untouched until an exact replacement is built and then consecrated twenty years later. The process of birth, death, renewal - of each creation having its given span of life - has direct expression in the structure of the shrine itself. Even the siting of the buildings takes a distinctive quality from this central focus on the ongoing process of renewal and rebuilding. Each building location consists of a *pair* of neighboring sites. A replacement building is built on the empty site adjacent to the existing building. Once the new shrine building is consecrated, the old one is torn down and its site left empty until the next cycle of reconstruction takes place on it in turn.

While the buildings have not become more permanent or sophisticated over the centuries, the quality of their making has become almost ethereal. The surfaces of simple timbers are planed to glasslike smoothness. Joints are as true as if of one piece. Each act of its making - from planting the trees to their selection, cutting, working and placement - has been imbued for a millennium with such purity and mindfulness of action and total understanding of worker, tool, material and purpose, that it draws the breath away in awe. A prayer is recited before first laying a saw to a standing tree, with the carpenter vowing to commit no act that will extinguish the life of that tree. It is a development of technique far different from aesthetic refinement, one that provides ongoing sustenance for the spiritual power of the builders as well as the building. It is a process whose timeless power far overshadows our meager ways of building.

The primary concern is the sustaining of the process of building as a living tradition. As such, it is a vehicle of repetitively honed skills and relationships between builder, materials, nature and the universe which give the builders a cyclically repeated opportunity for their own growth as well as maintaining the tradition. If several hundred years passed between rebuildings, the skills would be lost, as well as the meaning which they have come to hold to the workers.

The Shinto process is building taken to its ultimate power as a sacred act. Few situations in everyday life can be devoted so exclusively to that one dimension of life, but every situation can reflect its essence. The existence of the Ise builders acts as an ultimate referent and comparison to all who know of it. Like an outstanding vocalist or flutist, it gives all who act in that field a sense of the possible.

This is the same perfecting of the inner product of work that was traditional in Gothic cathedrals, where the perfection of work in the hidden parts of the cathedrals was known "only by its maker and God". It can be found as well in the painstakingly detailed sculpture and ornament of an Islamic, Thai or Indian temple. It underlies the "throwaway" sculpture of the Inuit which has served its purpose once the spirit of the object was found and revealed within the piece of bone or stone - the object itself left forgotten in the debris of the spring melt.

The goal of singing a song is not to reach the end as quickly as possible. It is a journey of bringing forth out of an opportunity the greatest possible beauty, growth, and understanding. The goal of building, as a sacred act, is likewise not to slap something together as quickly as possible and get done. It is to take the opportunity of the need for the place and use it to develop the greatest possible power in the building, the builders, and the users. Cost, time, and effort thus spent is gauged in terms of *effectiveness*, not minimums.

Sacred building seeks the greatest achievement possible through the available expenditures. If available, twice the effort to gain three times the beauty or power is a sound investment to both the maker and the society. In the words of Tsunekazu Nishioka, Japanese temple master carpenter, "...a carpenter dedicates himself spiritually to the construction of a temple. . .When you think that a tree takes a thousand years to grow large enough to use for a

temple column, and that temple may stand for a millennium or more, even a decade spent in its construction is infinitesimal". One should take the time necessary to build well.

Focus on the importance of the process of building for both the builder and the community does not decree that the product need result in a Shinto shrine or a spare Shaker building. That sparseness, the minimal expenditure of effort to achieve chosen results is but one form that arises from placing spiritual value on the process of building. It also results in the exquisite and finely detailed mathematically interwoven ornamentation of Islam, in the profuse sculptural towers of south Indian temples, the carefully crafted light fixtures of Scandinavia, or the exuberance of Italian design. It can be found both in the "leave nothing but footprints" attitude of American Indians towards natural sacred places, and in the towering urban cathedrals of Europe. It recognizes and demonstrates the twofold nature of creating - the enhancement of our skills and understanding, and the creation of things desired for a becoming existence.

Such work is also a means of restoring wholeness to our lives and our minds. Without it, our minds have been trained to analyze, tear apart, and isolate specific patterns - in our lives, our communities, and in nature. Work gives purchase to our dreams and disciplines our minds to purpose, value and meaning. *Physical work puts the mind in service to the reality of the physical world. Sacred work additionally puts the mind in service to the heart.*

In sacred work, the mind learns to stretch and pull gently aside the web of connection within which each thing is embedded, to observe and understand each connection in situ, without rending the fabric of its wholeness. Sacred work acts upon, enhances, and enriches the wholeness of the web of life rather than tearing it apart in the process of trying to gain a grasp of its individual parts. It is the base process for acting and living within a world of wholeness.



CITIES OF PASSION AND LIFE

CITIES OF PASSION

It is our dreams, our passions, our distinctive cultures and ways of life that give shape to our cities and give them the power to move our hearts and affect our lives. Cities, like buildings, have personalities and reflect their makers. Present efforts to improve the sustainability of our urban and cultural patterns have so far ignored this vital human component of enduring patterns.

Not unexpectedly, the cities that stand out in our minds are those that are tied to *passions* - our own or someone else's. A place we value is often one which has developed distinctive and unlikely character out of the quirks, enthusiasms, ardor or zeal, of some individual or group which shaped its nature and its destiny. A city can have the best conceivable design of green space, homes, neighborhoods, efficient transportation, and material and energy efficient construction. But that alone does not make it capable of moving our hearts.

We need places we can love, and enjoy, and about which we can be fervent. We need to discover how to make the communities where we live able to raise our passions and move our hearts.

Part of the specialness of places that touch our hearts is the *spirit of place* - those unique qualities of a place - its climate, geology, history and community of inhabitants that make it distinctively different from other places and which gives root to a unique personality and spirit in its inhabitants.

Most memorable and special to us is the unique and powerful expression of a culture which can arise from within those special conditions. Think of the "Paradise Gardens" of Isfahan in the desert, the Anasazi cliff dwellings at Mesa Verde, or the incredible water and temple systems of Angkor Wat harnessing river floods for a sustainable agriculture and tying it into the cosmology of their beliefs about the universe they inhabited.

Think of the powerful Itsukushima Shrine in Japan, whose red-orange buildings float on their reflections in a tidal bay, as the festooned fishing boats assemble for their annual blessing. Consider the Winter Cities of Canada, which have grasped the power of imagery, meaning and emotion of winter living and transformed their communities into a wonderful celebration of winter

with ice skating, winter festivals, skiing, snowmobiling and sled dog races.

Another important part of the power of great places, particularly urban ones, is the shape of a community livelihood which grew out of unique environmental, historical, cultural and technological conditions. Venice and Amsterdam both developed into centers of international ocean trade at a period when boats were the most effective way to move goods. Canal systems developed in both cities, particularly as Venice was created from a series of marshy islands.

New England mill towns, in contrast, developed around the conversion of water into mechanical power to run manufacturing operations. In both cases, once other means developed to fuel the commercial passions which brought them into being, the dams, millponds, canals, mills and workshops have been discovered to have qualities of their own which can contribute to the specialness of life in that place. They have become a free gift of the past to the life of the community today!

The passions and driving force of individuals like Shah Jahan in India, Haussman in Paris, or L'Enfant in Washington DC have shaped the dominant nature of some wonderful cities. In others such as Rome, the refinements, transformations, and creative power of two thousand years have interacted to create their special magic.

In Nikko, Japan are located the funerary shrines of several of Japan's great shoguns or military rulers. The buildings themselves are intricately carved and gaudily lacquered, built through the "contributions" of tributary lords to the Shoguns. But what is most striking and memorable about a visit to the shrines is their setting. They are approached through long graveled avenues set between stone walls in a deep forest of towering cryptomeria trees, which contribute great power to the setting and contrast to the buildings themselves. The trees were not there originally, but were planted by one of the lesser lords, who conceived of their planting either through a stroke of genius, or as a clever way to avoid paying a burdensome monetary "contribution".

And think of the enduring wonder which graces a village like Amien or Mt. St. Michel in France, where a quest for expression of the exultation of life and creation transformed an entire community into a magical manifestation of that power.

An all too infrequent passion is the pleasure of a community enjoying life and itself. Getting off a train one night in a crowded station in Sendai, Japan, I was suddenly surrounded with the sounds of laughter, singing, and merriment instead of the sounds of frantic travelers normal to such places. This was a city worth getting to know!

Some towns and villages in Spain and in South America have an evening tradition of the "passerada", where people gather in outdoor cafes and in the squares and enjoy the spectacle of the young and old eyeing each other, making overtures, beginning and renewing friendships. Paris, France, has its sidewalk cafes. Italian and Greek neighborhoods are filled with a continual banter of give and take among their residents.

Many places which are powerful in our memories and emotions are the legacies of the wealthy and powerful, but some also arise from layer after layer of everyday acts of the everyday people living in a place. Amish villages and farm country show an indelible mark of their nurture of place, as do Swiss mountain villages where traditions of vibrant flower boxes in every window have evolved, giving a special spirit to even the simplest village.

Love of a place can evolve invisibly merely out of our act of *belonging* to it. The rock buried by the Southwest Indians in their ceremony of village founding would not necessarily be in the middle of the planned village, or a special rock, or prominently visible. It was importantly, however, a mark of relationship. It said, "In this specific place we will live. Our lives will be centered here, and we will see the universe and our surroundings from this point. Our lives here are a connection with this place." And out of that commitment arose a sense of connection with a meaningful, valued and loved place.

Similarly, the great cities of China have been built upon an image of the cosmos, the nation, nature, and our place within it which gives a unique and potent meaning to the lives of their inhabitants.

A couple of years ago I visited the Makah Indian Museum at Neah Bay in the extreme northwest corner of Washington's Olympic Peninsula. The museum contained wonderful objects made by the tribal ancestors found in a former village preserved by a mudslide for over a hundred years. Like most tribal lands, this

was a poor one. The museum had restored a vital sense of their history, achievements, and self-esteem, as well as bringing in outside tourist dollars, and had seeded an empowering cycle of development. Most wonderful about the museum was the tone of a people young and old alike proudly sharing the achievements of their families and ancestors in contrast to the academic and institutional feeling of most museums.

It was obvious that other tribes on the peninsula were jealous and envious of their neighbor's good fortune, and I started thinking how even a small village with few resources could empower itself. I thought about drumming, about singing, about dancing, storytelling, wood carving, boating, cooking, gardens, furniture making, or quilting. There are thousands of interests about which people become passionate.

Any community - large or small - can develop such a passion. It takes only a few people excited about something, then getting together to invite someone to teach a workshop, then developing their own skills, inviting other communities to festivals and competitions, and bringing together outstanding people with the same passion. Soon the community becomes known for that passion and it begins to shape their lives, their spirits, and the physical and emotional structure of their community. In the process the whole community becomes something unique and wonderful for others to visit, share and experience.

Think of Spain and bullfights, Indianapolis and car racing, Milan and opera, Kyoto and Zen gardens. One small town on Vancouver Island in Canada, has become known as "The City of Totem Poles" from the efforts of a few people to preserve crumbling historical relics and breathe new life into a traditional skill.

That deep delving into an interest gives us a taste for things well and thoroughly done. It makes us aware of how much more we can achieve and what we gain personally from *everything* we do. It becomes a touchstone in our own experience by which we can weigh the depth of understanding and rightness in talk or action on any subject.

Anything deeply delved into develops wisdom, weirdness, and wonders. All are worth aspiring to.

It is clear, when we reflect upon it, how good it feels to be moved by the places where we live or visit. The power of those places evokes a similar will to self-esteem, to dreaming great dreams, and summoning the will to achieve them. We can transform our communities into something which draws forth and heightens the love of residents and visitors alike - in the physical fabric of the city, in the celebrations it supports and nurtures, and the way of life it empowers.

A community which does not enjoy itself does not enjoy life. It has no great passions, and dreams only small dreams. Such a community has not learned the incredible drama of life of which we are part, and is not capable of creating sustaining bonds within itself, with its neighbors, and with the natural world in which it is embedded.

It is *human* passions and failings, dreams and difficulties, that dominate the spirit of place of cities and give them the power to arouse our feelings and our will to maintain, refine, and enrich them, and to ensure their life into the future.

Make our communities places to love. That is the sustaining force of life. When we have communities we are passionate about, we will want them to endure and will assure the changes in infrastructure, land use, building practices and patterns of living essential to that survival.

CO-HOUSING TO CO-MMUNITY

Our living patterns have altered dramatically from the multi-generational family to the nuclear family to the sometimes wonderful, sometimes desperate fragmented hodge-podge pattern of lives and relationships apparent everywhere today. Our present urban patterns do little to provide the support, help, and meaning for lives that are often struggling alone with the web of time, role, financial and emotional entanglements that overfill our days.

One of the first attempts to generate new alternatives in living patterns has been the Scandinavian co-housing movement.

In co-housing, individual living units are made smaller and shared facilities built. A "Commons" containing shared dining facilities, lounge, library, laundry, child care, workshops, gardens, or other facilities allows access to such resources with less cost to individuals.

Frequently residents take a part of their meals in the commons, and rotate the chores of cooking and cleanup. The community reward (and cost) is in time shared with neighbors in such shared activities as well as the administration of the cooperative bringing new friendships as well as a release of time in which to develop and enjoy them. The concept of co-housing is taking root in many countries struggling with the realities of modern life.

For many people, however, this may not be an appropriate living pattern. We may wish for an alternative to the food being offered at certain meals, but not feel like cooking. We may not want constant intimacy with some of the neighbors. We may be too solitary or too gregarious for those around us. We may wish a wider community or not want the time-consuming work of large-group decision making.

What co-housing has most importantly achieved is to acknowledge the absence of neighborhood in our communities, and to intentionally seek to recreate its benefits within an area under control of its residents. The successes of co-housing projects should alert us to the needs and opportunities for a richer and less prescriptive sense of neighborhood *wherever* we live.

A neighborhood can provide a variety of simple and inexpensive "eating-out" options as well as more elegant ones. It can provide a richer variety of housing options and community services than can a co-housing project. Most importantly, in the pattern it provides for public and community services, it can generate greater and more varied opportunities for fellowship, service, making friends, obtaining help, and celebrating the richness of our lives.

The spirit of our community facilities, and the patterns of how we interconnect them, can in itself give much to the creation of community, to the generation of good health, friendships, and a healthy human dimension to our lives.

The post office in our neighboring village was for many years in a small storefront. Next to it and almost sharing an en-

trance, was a small cafe. The town had no home delivery of mail. Because the mail was posted just about coffee-break time every morning, an interesting community dynamic developed. During the long rainy winter, people would come to the cafe for a good morning warm-up and hello with their neighbors. They'd go next door, pick up their mail, and return to their coffee cup to peruse it. News was shared, problems discussed, advice given - often in excess!

In addition to a counter and small tables, the cafe had one very large round table in the middle, seating from six to a dozen or more depending on who dropped in and pulled up another chair. The "Round Table" became a heart of the community. Any stranger who sat down and joined it immediately became subject and part of conversation, and left no longer apart from the community.

This kind of subtle but important linkage can play a vital role. If the elements of our everyday needs are served in a way that nudges us into opportunities to connect comfortably with other people, they can do more than just their primary and obvious functions.

Food shopping, getting a newspaper or magazine, picking up a book or a video, doing laundry, getting a haircut....there are many everyday acts that can be linked with a comfortable place to sit and catch our breath and relax. When there is a tradition or configuration which encourages sharing tables, conversations spring up, acquaintances and friends are made, community is born.

Bars, pubs, and tearooms once filled part of this community function. But they often have an atmosphere, behavior, commitment to stop, or purposefulness which does not attract and evoke the kinds of opportunities and connections we want.

"Eating out" can be an important element of community. Like the co-housing shared meals, it can be a savings of time, energy, and commitment to meal preparation. It can be, with the proper eatery design, a wonderful meeting place for people of all ages, of similar interests and values, or of diverse and foreign ways of life. It can be a place of convenience and speed, or of lingering to savor food, place, community, friendship, advice, and just people. Particularly for a society moving towards more isolated individual electronic connections, it can be a wonderful balancing force.

A community has to acknowledge that there are mental and spiritual dimensions to our health and well-being as well as physical ones, and that most of our worst diseases today - from crime to child abuse to drugs - are diseases of the spirit, not of the body. Because they arise out of lack of self-esteem, mutual respect, and of being of value to our families and communities, their healing involves both activities and environments which nurture and restore those vital dimensions of health. Our neighborhoods need to nurture *community* health as well as individual; *spiritual* health as well as physical.

We need within our neighborhoods access to nature, solitude, and physical exercise within convenient walking distances of our homes. We need similar access to spiritual touchstones for nurture of our inner balance and serenity, as well as access to community itself. We need to rediscover what our lives can give to others and the value of that to the giver, the receiver, and the community.

We need places to shop where we are greeted with a smile of recognition and connection with the lives of our community. We need living places for the old and infirm close to shopping and where people can easily drop by for a chat with them or to help out for a few minutes.

Co-housing has demonstrated what is missing in our neighborhoods, and the will of people to regain it. It's time to put together what is needed for real neighborhoods, where we can become and enjoy the value of community.



GIVING LIFE TO EXISTING PLACES

GIVING LIFE

Breathing life into existing places and restoring their sacredness is a transformation that occurs first in our minds and hearts. When we come to acknowledge the sacredness of people, places, and things, they *become* sacred. They may still have many attributes which would benefit from change, and there may still be many ways to increase their power to move our hearts, focus our minds, and align more deeply with our spirits. Many ways exist to seed those changes.

MAGIC IS AFOOT

A scarred, eroded ravine of redwood stumps. Rough sheds from an abandoned prison camp. A tiny site jammed up against a remote highway. A perfect recipe for creating a wonderful place that transforms every visitor to it? Yes - if we add two more ingredients - a generous and loving human spirit, and time.

The power of our own spirits to transform desolation into a sacred place was clearly demonstrated to me by the Big Sur Inn on the California coast south of Carmel. I'd flown out to San Francisco from Minnesota during a Christmas vacation many years ago, which in the winter was like walking out of a black and white movie into a Technicolor world. I'd rented a car and headed down to Highway 101 to see the legendary Big Sur coast. There, squeezed in between the highway and the steep mountainside at one hairpin turn were a couple of dilapidated shacks with a sign saying "Big Sur Inn". I was hungry, and it looked like a place to stay which I might be able to afford, so I pulled in.

It was Christmas Eve, and the only room they had left was an odd space wedged between a roof and a storeroom in one of the outbuildings. The room was so cramped that I almost had to open the window to get both my feet into the bed. They left me a flashlight so I could find my way down the ladder and through two buildings to a bathroom. No electricity, no heat, no TV, but a roof. Pretty basic, pretty weird, I thought, but I was ready for an adventure.

An adventure it was. I returned later from exploring the tide pools among the rocks below the Inn just in time for dinner. There were a few individual tables in the dining room, but most of,

the odds and ends of guests ate with the owner and his dog at one large table. The food was good, and the owner was better. He soon had everybody happily sharing their lives and dreams. One guest kept on rather pompously. The owner finally waved the waitress over and motioned her to give the guest a bottle of wine to either loosen him up or shut him up. I began to get interested.

It turned out the owner had built the Inn some forty years ago, long before tourists had discovered the area, by hauling in old buildings from an abandoned prison camp. It was cobbled together with baling wire and chewing gum, and looked ready to collapse if anyone sneezed. It didn't collapse, however, and much to my surprise, kept us dry through a couple of pretty good storms. But the fascinating thing was that somehow that old man and his dog had filled the place with a wonderful spirit, which infected everyone who came in the door.

He kept suggesting that I take a walk up the canyon behind the Inn. So finally I squooshed out into the mist and headed up the muddy trail into a cut-over redwood grove where huge blackened stumps eight or ten feet across and equally tall loomed out of the mist among the smaller sprouts of second growth. It was pretty grizzly. The more I looked, however, something else became visible.

Everywhere, amidst all that death, the power of new life arising was incredible! New trees had sprouted from the roots of logged stumps. The cambrian layer of the stumps themselves was sprouting new growth. Other stumps were acting as nurlselogs for new seedlings. The side branches of fallen trees had turned into full blown trees of their own. Cut logs had sprouted new growth through the inch thick bark, and sent roots down to the ground. Redwood roots in the crevices of the scoured-out creek bed were generating new sprouts.

Everywhere I looked, this indomitable will to live was expressing itself in new possibility. I finally came up to one huge stump, which still contained the notches cut by the loggers to get up to their cutting boards. I put my feet in, and hauled myself up. Sticking my head over the top of the stump, I saw something deeply carved into the top of the stump, ten feet above the ground, and still visible beneath the moss. Pulling myself higher, I made out what it said. *"Love life"*.

Walking on in the gathering dusk I came to oddly shaped hollow stump "homes" named after the seven dwarfs, to more wonderful thoughts carved painfully in hidden corners, to wonderland places for a world of children, and throughout it all, an incredible spirit and regrowth of life. When I returned to the Inn, I stopped in by the fireplace to warm up before going to bed. The owner was sitting there quietly reading. He looked up as I came in, without a word. But in his eyes there was a wonderful twinkle.

I learned that night not to judge anything as incapable of being transformed into something wonderful. The decimated redwood grove had been transformed into an affirmation of life. So had the Inn. And so definitely, was the owner. I knew then which of those gardens had to be nurtured first.

SWEEP THE STREETS

A Zen center on the West Coast some years ago moved to a new location in a fairly rough area. Neighborhood residents were disillusioned and frightened. Shops were closing, crime increasing, and bad going to worse. The Center members wondered how they could reach out and help stem the deterioration of the area. The abbot looked outside, and said, "Sweep the streets."

They did. They went out every morning and swept up the broken wine bottles on the sidewalk in front of the Center. Nothing happened. Then they began sweeping the sidewalk along their whole block. Still nothing. They began cleaning up the debris in the street, and sweeping the street. People looked at them as if they were crazy, yet every morning, day after day, they would go out and sweep the street. They swept it carefully and thoroughly, hour after hour.

Eventually things started to happen. People would stop and ask them why they were sweeping the street. "It's dirty and dangerous", they would reply. "Well, why do you care?" came the response. "It's our community," the Zen sweepers answered, and continued sweeping the street.

It began to feel a little different on that block. There was no longer the feeling of violence coming from broken glass everywhere. With non-threatening people out on the street, other

passers-by began to relax. Some would even smile. Things that happen on a deserted street stopped happening.

Other people began to clean up the area in front of their places. It began to feel safe enough to sit on the stoop in the evening. The Center opened a natural foods grocery, with fresh produce brought in from their farm in the country. The store was clean, the people happy, the prices fair, the produce good. Everyone was treated with respect. People began to come farther and farther to shop there. The store stayed open late, which made the street safer.

I was visiting a friend in the Center one night, when a shot rang out, and a scream from a building across the street. The Center building emptied out instantly, and dozens of people were everywhere - on the street, in the building across the street, on the rooftops. When there was need, there was help.

The neighborhood began to reknit, revive, and heal. Flowers appeared in window boxes, and happy sounds from windows. People began to sit out on the street and talk with neighbors. A community, a sense of trust, of caring, and of giving developed. Soon everyone was helping sweep the streets.

ONE ROCK

I was asked once by some people who had a small and very poor spiritual center how I could help them make the building they had just obtained feel more sacred. They had, of course, no money. I was supposed to wave a wand and magically transform their building for them.

I thought a while, and said to them, "Go get a rock. It doesn't have to be a giant rock, or a fancy rock. It needs to be large enough to take several people to bring. That kind of rock doesn't cost anything. Just find one you like. Bring the rock and place it in front of the door of your building where people can touch it as they enter. Draw a circle around it and your building. Get together and scrub out your building from top to bottom. I will come and talk to you about that rock. Each day, as you enter the building, you should touch the rock. And every year you should take the rock back to where you found it, and replace it with another one."

"When I come, what I will talk about is this. I will tell how, billions of years ago, stars were born, and later died. Their ashes were swept up into the formation of new stars, which later died in their turn. After those star children died, their fragments became swept up into our own star, into this planet, and into this very rock. Rock made from those star ashes crumbled away from around this rock and formed soil, and nutrients that washed into the sea. They became transformed into algae, and trees, and birds, and ourselves."

"We are stardust, and the children of the stars. Our bones are the breath and cinders of stars. Our lives are a twinkle in the ongoing dance which is the life of our universe."

"This rock is also stardust, and one of our ancestors, born many million years ago, before our kind of life was possible. Honor this rock, and remember when you touch it going into your building or when you look up at the stars at night that we all - our buildings, our rocks, and even the sun whose energy feeds all our life - are stardust. Think of ourselves as pieces of sunkissed space-rock, quickening in consciousness, beginning to reach out into our past and our future with a growing sense of humility, wonder, and joy!"

"This patient and humble rock will act as a touchstone to remind everyone entering your building of all it has come to represent in your minds. It will thus protect and keep sacred in your minds all that lies within or enters within the circle. And the actions of those who enter your building with that spirit in their mind will come to slowly transform it. But this power lies in your minds, and must be renewed from time to time. And you must give onward to others what has been given to you by that rock."

Pray, clean, simplify, heal, plant, nurture, honor, and give. Those are the magic words that make existing places sacred.

OPEN TO THE UNIVERSE

Gardening seems to be very different from building. A building is built - its shape seemingly cast in stone for eternity. A gardener, in contrast, plants a tree, then other forces influence its growth. The sunlight or shade, competing vegetation, the fertility

and health of the soil. Storms and frost. Genetics. Infestations. Accidents. All of these influence and direct the growth of the tree in a unique path. The gardener may respond periodically by pruning, fertilizing, watering, or removing competing vegetation. Each time, the sense of the garden desired has to be weighed against the peculiarities of the tree's growth and the state of its surroundings. And each time the gardener works on the garden they remanifest that sense of purpose and nudge the garden's change and development towards it.

In reality, the life of a building is not that different from the life of a garden. Uses change. Interiors are rearranged and redone, walls knocked out and put in, doors and windows changed. Other buildings are erected nearby or torn down. Landscaping is planted, matures, changes, dies. Patina of age develops or is removed. Each owner's sense of the universe alters a building in small or large measure. They may paint it an ugly or beautiful color. They may ignore it or restore it. They may add on, tear off, open up or close off. The furnishings and arrangement of each user are different.

There are innumerable ways that our actions can alter a building or place and express the sacredness of people and place. They follow in due course and in their own pattern when we hold that sacredness in our hearts. Our awareness of this inevitable process of growth and change can be accommodated or resisted in the original design of our surroundings and in each action we take to sustain or modify that design. Our buildings are part of a dynamic, changing universe, and they need to anticipate and accommodate that change in both their making and use.



ECONOMICS OF A SACRED WAY

BUILDING REAL WEALTH

Clearly knowing our goals as individuals and as a society is vital to effectively pursuing them. Speaking at a conference a few weeks ago, I listened to presentations on several "resource efficient" or "sustainable" research houses which have recently been built. They contained many notable achievements. Job site recycling was reducing the construction waste stream by 80% or more. Efficient levels of insulation and new window construction were dramatically reducing operating energy needs. Many novel building materials were being tested - for increased durability or use of waste materials. Carpets were being made of recycled soda pop bottles. Roof tile were being made of sewage sludge and fly ash. Sheetrock was made of recycled sheetrock and newspapers. Wood structural members were being made of shredded and reconstituted waste lumber. Yet something nagged at my mind.

That evening, my mind wandered back to our own house I had built seventeen years earlier. I had used an interior floor construction made out of tongue and groove 2x6 lumber supported by wood beams 4' on center. It was economical, and gave both a finished wood floor above and a beautiful wood ceiling below at no extra cost. I compared it to the masticated-wood "efficient" floor system. Both used virtually the same amount of wood.

With a coat of linseed oil, mine provided a beautiful and long lasting ceiling and floor that honored the wood which went into its making. It could be built by anyone, with locally-produced materials. Their's required a frequently replaced topping of soda-pop-carpet, installation of newspaper-sheetrock ceiling below and frequent painting by potentially toxic paints. Their's required an extensive industrial infrastructure of factories and transportation, high-toxicity chemicals for glues, etc.

The most important difference, however, was that their "resource-efficient" means were an end in themselves. In our house, the means chosen were a means to effectively pursue a far different and more important goal - creating a house with a soul, one that honored its world and nurtured the lives of those whom it sheltered. *Two people, or two societies, can cross the same point in space and time, and yet be moving in far different directions.* We need to know where we want to go.

I explored this question further in what became a top international award winning entry in the 1993 *"Sustainable Community Solutions"* competition sponsored by the American Institute of Architects (AIA) and the International Union of Architects (UIA). I focused the entry on *"Building Real Wealth"*, because I felt we needed to see that many things we have sought and considered wealth really weren't, and many things that represented *real* wealth we were either ignoring or allowing to be destroyed.

Sustainability requires we perceive and ensure our real wealth: a lasting supply of world resources, biosystem health, and the capabilities of human and global systems. It is these things, not the number of automobiles or VCRs which set the boundaries on the possible for a society.

Knowing these essential foundations of real wealth, we can see that both biosystem health and the capabilities of human and global systems can be improved. *Sustainability, we can see then, can be a framework for generating and increasing real wealth, not merely ensuring our survival.*

Knowing what constitutes real wealth, we can see that a wealthy world is one with a healthy and growing diversity of life-forms, communities and capabilities. Similarly, a wealthy community is one with a meaningful sense of its place in the universe, a healthy and growing diversity of capabilities, individuals and lifeforms, and a satisfying spiritual, emotional and material heritage, life, and prospect. And by the same basis, a wealthy individual is one with the love and respect of others and the ability to give; equitable opportunity for the physical, emotional and spiritual health which the natural world can sustain; and opportunity to develop and employ innate capabilities and to be of real value to the community. *True wealth, we have seen again and again, does not depend on material goods. It ties more directly to happiness, a sense of meaning and belonging.*

Sustainability in our built environment is essential to the wealth we enjoy as individuals, communities, and as a world. It is essential to ensuring a lasting supply of world resources. It is essential to biosystem health, and it is vital to the capabilities of human and global systems. Our towns and buildings consume, *but they can also release and make available* land and resources presently held hostage by our ineffective systems. The surround-

ings we build can enhance or damage our health and productivity and that of natural systems.

Design for sustainability in our built environment can give leadership in sustaining and improving our real wealth. It can give a clear demonstration both of more effective and equitable ways of providing for our needs and of more effective, less material ways to attaining happiness, a sense of contribution and being of value.

A framework for sustainability outlines the dimensions of change necessary to move our industrialized societies and our built environment into patterns which are sustainable both internally and in relationship with the natural systems which envelop and support us. It shows first off, dramatic order-of-magnitude savings (90% in virtually all areas) possible in the real financial and economic costs of supporting our communities and our lives. Those savings, and the resources they release, can make our living patterns affordable and also available to the entire world.

Sustainable energy and material use, efficient land use and buildings are necessary. Alone, however, they are not sufficient to create sustainable communities. Institutional and value changes are even more basic requirements for sustainability. They provide unexpected opportunities and rewards for both architecture and society.

Wealthy societies inevitably generate inefficient institutions. Restructuring them can release vast resources for other needs, and expand the effectiveness and availability of their services. Physically, this permits better facilities for various institutions, "better fitting" design, and surroundings that reflect back to us better values and a true sense of aptness. *Real wealth is not needing transportation, health care or other institutional services.*

It is increasingly clear also that the emotional, symbolic, and artistic dimension of our surroundings are vital to nurture of our minds, spirits, and will. They give the deeper meaning, richer impact, and connection inescapably needed for sustainability. Our values are reflected and embodied in our surroundings. Through our surroundings' emotional, symbolic, and spiritual dimensions they marshal and direct our inner resources.

Our spiritual connection with our surroundings, other cultures, and natural systems is key as well to sustainability. Peace,

harmony and meaning - with our dreams, with our neighbors, and with our surroundings, are crucial to any sustainable community.

The true challenge of sustainability to architects and community builders is more than a technical one. It is showing that there is power and greatness in sustainability and that life in such communities can move our hearts, give richness and meaning to our lives and create better places to live. Sustainability requires our lives to be rooted in dramatically different values. Values such as equity of wealth and power and respect for others are essential for reducing crime and permitting us the comfort of our communities.

THE ECONOMICS OF SACRED BUILDING

The economics inherent in sacred building, honoring people and places, and resolving the diseases of the spirit that pervade our society is far different from our current one. Importantly, its material, financial, and spiritual costs are but a fraction of our current expenditures. Even more important, it also yields far greater dividends in terms of sustainability, environmental quality, wise and effective use of resources, and human happiness.

All economics derive from distinctive assertions of value. E.F. Schumacher has clearly demonstrated the different nature and importance of a "sacred economics". His path breaking "*Buddhist Economics*" made clear how much *more* viable an economics with a clear spiritual base is compared to one without.¹¹

Work, in conventional economics is considered as something to be minimized. It is viewed only as a cost of production to industry and as a means for obtaining an income to workers. The Buddhist point of view, Schumacher observes, considers work to have at least three important functions: to give us a chance to develop our abilities and skills; to enable us to overcome our self-centeredness by working with others; and to bring forth the goods and services necessary for a becoming existence. Work, it reminds us, is a vital element of developing self-esteem and respect for others, and its importance in preventing major social problems is obvious.

"A Buddhist economics", Schumacher continues, "will clearly distinguish between two kinds of mechanisms - those which enhance our skills and power, and those which turn our work over to a mechanical slave, leaving us servants of that slave". He thus points out the vital distinction between a machine, which replaces human work, and a tool, which enhances and empowers it. Beyond generating income, work is vital in Buddhist economics for its nourishing and enlivening factor of discipline, opportunity to display our scale of values, and its central role in developing our character. Full employment, in enriching work, is therefore the core element in a Buddhist society.

Schumacher suggests that although the Buddhist is mainly interested in liberation rather than material goods, it is in no way

antagonistic to physical well-being. "It is not wealth," he says, "but attachment to wealth which stands in the way of liberation. From this standpoint the goal of a Buddhist society is not the multiplication of wants, but obtaining the maximum of well-being with the minimum of consumption."

"Modern economics considers expenditures for transportation, medical services or recreation to be a measure of economic success, but to a Buddhist," he says, "they are just the opposite. Expenditures for medical services can as readily reflect a measure of *illness* as one of health." A successful Buddhist economy would strive to achieve physical and mental health and fulfillment with the *least* expenditures of effort.

Similarly, conventional economics makes no distinction between renewable and non-renewable materials and sources of energy, as it accounts only the immediate cost of making available what is accessible. A spiritually-based economics points to the essential difference between non-renewables such as iron and oil, and renewables such as wood and solar power. To use non-renewables heedlessly or extravagantly is an act of violence against our surroundings, our children, and others who do not have equal access to them.

We need to note also that what passes for "economics" in the conventional business world today has little to do with economics - the flows of materials, energy, work and wisdom into the fulfillment of our dreams. Conventional economics is more truly *finance* rather than economics. What it measures is not the actual economic costs, but a measure of them after they have been twisted out of recognition through the financial rules, legislation and taxation promulgated by special interests to escape payment of costs and to divert profit into their pockets. It has been demonstrated again and again that *our current economic patterns are far from the most "efficient" in terms of production and distribution. They are efficient only in centralization of profit and power.*

New economic measures are beginning to force consideration of true economic costs and real benefits.¹² Added investment in "green" offices which nurture the physical, mental and spiritual health of workers has been demonstrated to result in 8-15% *sustained* improvement in "productivity".¹³ Full-cost accounting is beginning to require public policy, for example, to factor in costs

of air pollution and accidents in evaluating transportation alternatives.

We cannot sustain belief in the sacredness of our world if we act in accord with conventional economics and its values. In a system based on energy-slaves and resource destruction, our work has to compete for profitability with projects which exploit people, resources and energy. We too become exploited, drawn down to the same level, and unable to support the sacred aspects of our world.

If we hold our world sacred, we need to implement an economics in our lives which is consistent with our values and beliefs, and carefully manage our interactions with people and institutions that operate from an economics based on other beliefs. We can change our own lives, and what we can affect around us into accord with a sacred view towards the world. We can reshape our agriculture, eating patterns, our homes, transportation demands, forestry, materials recycling, energy use, community, and rituals to a sacred economics and world-view, and move towards living sustainably with the land.

Having made a sacred connection to our world based on honoring and respecting all forms of creation, and even with the values and wisdom to guide and limit our demands upon it, we still have to contend with the omnipresence and power of our juggernaut fossil fuel society. Its pulls are strong. It is easy, it glitters, it pulls people to it like a magnet. It *has* great power of its own. It is almost impossible to avoid interacting with it. It is essential to understand it - and to change it. Its existence requires that we take special initiative to choose *how* we will interact with the surrounding world of conventional economics. It is both possible and necessary to find niches where we can fill needs of others and convey a special relation with our world while earning the "foreign exchange" to buy our Sonys and Hondas.

The Mennonites in Florida have taken their agricultural heritage into specializing in landscaping and landscape maintenance, teaching how to nestle gently into the natural world. The long persecuted Jewish community learned to specialize in business and finance which gave it the mobility and security it needed. Seventh Day Adventists have developed a special commitment to health care. The Farm commune in Tennessee specialized in midwifery. Gurus and spiritual advisors are probably India's greatest export commodity. American Indians

are, of necessity, developing a reputation for expertise in the legal world.

Once we've developed the skills to design and build our homes and communities in harmony with our surroundings - in materials, energy, style, spirit and process, we can share and spread those skills and also do work for others, as the solar adobe builders in the Southwest have been doing. Once we've learned to deal with our own illness of the spirit, we can use those strengths we've developed to become healers, counselors, and spiritual helpers for others. There is no better help for an alcoholic than other AA members who have been to the bottom themselves.

Once we've learned to heal our surroundings and develop sustainable economies of our own, we can become *real* economists, organic food producers, or environmental "scientists" for others. Once we've learned the strengths and wisdom that comes out of our own values, we can see the real strengths and weaknesses of traditional and modern knowledge, meld them together into a new wisdom, and become teachers and users of that wisdom in many fields.

The wisdom and value of sacred economics goes beyond supporting our own individual feelings of connectedness and health. Economists such as Lester Thurow have shown that it is a vital key to economic survival in the coming decades.¹⁴ Our conventional short-sighted, profiteering economics is now finding itself in global competition with other equally large and powerful economic systems, such as Europe and Japan. These systems, however, are operating on very different principles - ones much closer to that of sacred economics.

In those systems, workers, and customers - rather than stockholders - are the primary concern of management. Immediate monetary profit is given lower priority than strategies for long term economic success such as market share, value added, and enhancement of productivity of workers. Investment is made in training and skill development, in research into new processes and products rather than draining money out of successful operations. Mutual support is given between firms. A lower rate on investment is accepted in order to support expansion of capabilities. Quality of physical infrastructure is valued.

We are already faced with competition from this new brand of economics. The mayor of Sapporo, Japan explained several

years ago the unusual thinking behind that city's successful development of innovative transit, snow removal, water, sewage and park systems long before their path breaking economics was apparent.

"The only valid thinking is long-term thinking", he said. "If we know something is going to be best for us in the long run, we do it. Doing it slowly, and doing it right, cost less in the long run. We were too small a city for a subway, but we built one, because we knew we would need one someday. Doing it now was far cheaper than waiting until we needed it and would have had to change our whole city to make it work. Having it in place, our urban fabric will grow to support rather than oppose it, and we have the use and benefit of it in the meantime."

The improvements necessary in our society for successful competition in the 21st century are identical with learning to honor and respect others, working to meet others' needs, and to improve everyone's well-being. They require learning what our real goals for happiness are, and that limitless expansion of consumerism is not the route to attain those goals. New rules are emerging into a very different game of economic competition and success. Becoming aware as individuals of how to think, feel, operate and live as part of a sacred world is a key to success in making the transition to survival and well-being in our rapidly emerging future.

We can't succeed in *any* economics until we heal our spirits. That is clear, and the basic priority. We can't work well with a diseased spirit, and the product of a diseased spirit causes further illness. Healing must come first.

Touching the spirit of place in our building offers a solid beginning point to work towards a sacred economy in today's world. The act of holding our world sacred defines how we approach the process of changing or using our surroundings, while giving us the inner strength and support of that world as a vital touchstone. It helps us develop esteem for both ourselves and others, and a feeling of rightness or "success", regardless of our material wealth.

Bringing us closer in contact with the spirit of place helps us heal our own spirits and to know and love the place we live and to live in balance with them. It charges us to limit our demands for resources to our needs rather than our greeds, and to the kind and

magnitude of demands that our world can sustain. It requires that we honor what we take, and *give* in return. Doing so, it gives us the strength to carry that wisdom into the rest of our lives.

THE HIDDEN COSTS OF HOUSING

How can we afford the extra costs that appear obvious in an economics that supports the sacredness of people and places, and invests heavily in things such as people's self-esteem and satisfaction from work?

The first answer is that those costs - however large - are less than the costs of the "diseases of the spirit" that have developed as a result of ignoring the sacred dimension of our world. The second and more exciting answer is that sacred economics gives us new insights into the actual performance of our economy. What it shows is that beneath the apparent efficiency represented in the facts and figures spewed out by "modern" economics, our economy has become incredibly wasteful and ineffectual. Immense resources are presently wasted, and can be made available for application towards this or any new goal of our society.

In an economic system where large individual monetary profits have been encouraged and subsidized, economic patterns have evolved which produce such profits. No one bothers to investigate other economic patterns which don't produce immediate large monetary return for themselves, but which might entail far lower overall costs for providing health services, housing, education or other products and services.

In 1973 I did a study which showed we could reduce energy use in our society by 90%, improving our quality of life in the process.¹⁵ This sounded crazy to people at the time, when conventional wisdom felt we couldn't even slow the *rate of increase* of our energy use. Since then, however, we have actually cut our energy use per \$ of GNP in half, and other countries have reached or exceeded that 90% goal for improvements in energy efficiency. Autos have been tested by a dozen firms which reduce gasoline consumption 85% from our present fleet average. Auto designs have been proposed with 150 to 300 mile per gallon fuel efficiency. Homes have been tested in every climate that reduce energy use by 90%. The associated resource, environmental and economic benefits of this are as substantial.

In 1981 the State of California held an Affordable Housing Competition, looking for ways to lower the cost of housing, which conventional wisdom had suddenly determined to be unaffordable.

I became curious, because it seemed that sophisticated engineering and production should have made housing *less* expensive. If not, all we needed to do was to change back to older ways of building. When I looked closely, I found that no one had ever bothered to put together the *total* cost of housing to see what the dominant costs were, how they had changed, and how they *could* be changed.

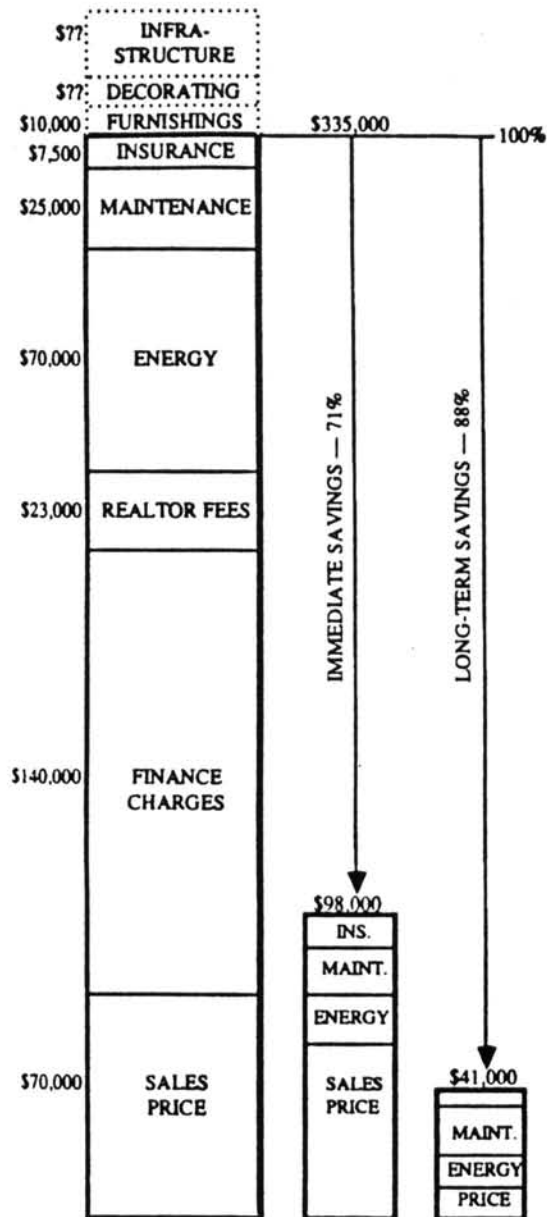


Figure 1. Lifetime Costs of Housing

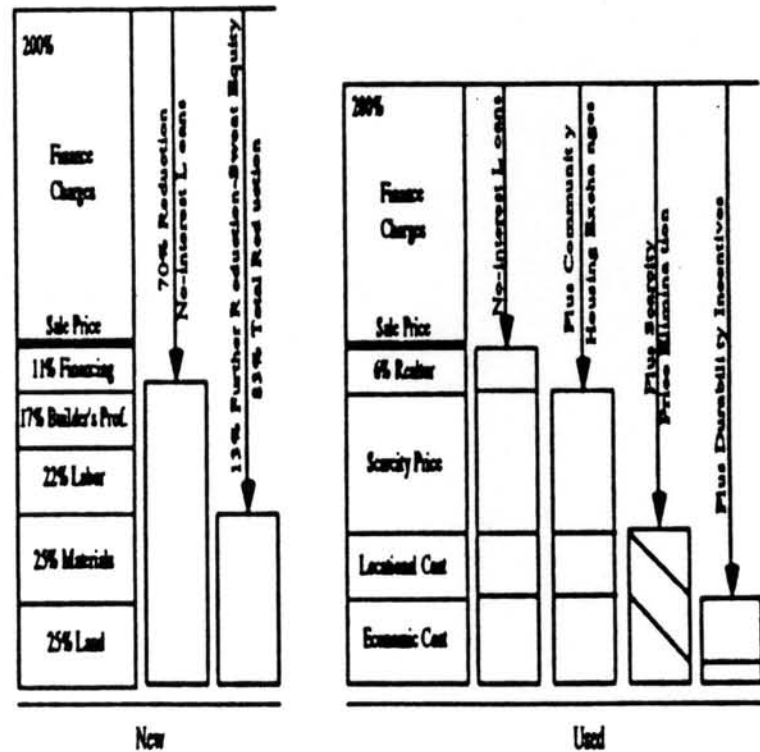


Figure 2. Purchase Costs of Housing

Builders weren't looking at operating costs, financial institutions weren't looking at durability, no one looking at renters' costs.

On the back of an envelope, I laid out two columns - the overall costs of a house over *its* lifetime, and a person's overall costs of housing over *their* lifetime. I found that finance costs and energy operating costs made up over 60% of an individual's overall costs. We already knew it was possible to reduce the energy use and costs by at least 90%, and knew of alternatives to existing financing patterns that could show comparable savings.

I then looked at durability. Durability is essential. It's role was forcibly brought home to me years ago while looking at a photo of the Kieou-long River Bridge in Foukien, China. The bridge was somewhat crude - just slabs of granite spanning from one pier to another. My eye was first caught, however, when I realized the scale of the bridge. Each granite slab was 60 to 70 feet long. The engineering was masterful - within a few percent of the ultimate strength of the material. The effort of quarrying and placing the stones must have been immense. I then looked at the date of the bridge and realized it had been in use for over three thousand years! Whatever the cost, it had been repaid hundreds of times over. Durability pays!

Increasing durability so that housing lasts 400 years instead of 40 years reduces the construction cost of housing used over a person's lifetime by a similar 90% in a single stroke. Looking at each piece of the overall cost, seeing how each affected other and total costs, and finding new patterns which sought to minimize costs rather than maximize profits, I showed how we could reduce housing costs by an amazing 75-90%. (Without major technological change, all those profits had to have come from increased costs to the users or society in some way.) I was stunned, and so were the competition judges.¹⁶ Still, no one has done anything about it!

The state of Oregon recently completed a study of developing a new 150-200 mph passenger rail transportation system for the state, connecting to other states and to transit and highway rental car systems. Not only would such a system give dramatic savings in travel time, but its initial cost was found to be less than constructing more freeways. More startling, its overall capacity cost was found to be as little as *1/40th* that of our existing highway/automobile system! Little room for individual profit, but major improvement in public benefit.

More effective economic patterns such as these are now being shown for virtually every sector of our economy. We've shown that same potential for achieving greater effectiveness along with a ten-fold reduction in costs in higher education, agriculture, sewage and water treatment, transportation, health care, and business operation. These illustrations give a hint of the magnitude of resources that become available when we begin to build a world in which we value and respect and pay attention to the needs of all people, places and things.

BORROWING TROUBLE

A quick look at one of the myths of conventional economics can both show how hard we've had to work to avoid seeing through it, and the resource savings possible in changing the patterns based on it.

We're told that time-payment, pay-as-you-go, or credit buying, has benefits that justify the cost. We are able to have use of what we're buying while we pay for it instead of having to wait until we've saved the money for its purchase. Some truth there...maybe. But if we back off to a slightly broader perspective, we see a very different picture.

After fifteen years, we've bought and financed five cars, let's say, and given ourselves the same rationale each time. But if we compare a situation where we've financed each car to one where we've paid cash, we'd see very significant differences!

After the first purchase, we're not going without a vehicle in either scenario. Debt financing ends up with possible use benefit during the first vehicle's life, but with having to finance *five* vehicles. Pay-as-you-go ends up with possible partial inconvenience during the first vehicle's life. But it ends up with interest payments gained on savings for 12 years instead of financing charges paid out for fifteen years! To gain that, all we had to do was to have gone without, used transit, driven a junker, or shared during the use-life of the first vehicle.

We only benefit from credit or debt financing the *first* time we use it. On subsequent purchases financing is a major expense (often doubling the total cost of purchases) that we're trapped into

with no real benefit, because payments on the original debt prevent us from saving for subsequent purchases. This is true for credit cards as well as larger credit purchases.

We can also see that if we adopt a pay-as-you-go pattern generally, the savings generated quickly allow us to immediately pay cash for purchases rather than having to wait until we've saved up the cost. This eliminates even the original justification and value of debt financing.

These alternatives represent *major* differences in cumulative costs. Look at our personal expenditure patterns as a whole, including car and home payments, credit card purchases, etc. Added up, *we're talking a cost difference amounting to maybe ten years of net income. And this translates into perhaps fifteen years of our total pretax income!* A pretty heavy price for sloppy thinking.

In the public realm, debt-financing such as bonded capital improvements results in our paying double what those improvements would otherwise cost. Debt financing in the public realm is one of perhaps a half-dozen baseline reasons our public expenditures have become unaffordable.

A city needs a new \$10 million sewage treatment plant and votes in a 30 year bond issue to pay for it. No one mentions that the actual total cost to pay off the bonds is probably \$20 million, not \$10 million. A few years later the city needs a new school, then a new hospital, then street improvements, then a new landfill or water treatment plant. There's always something. Because of the \$10 million finance charges on the first debt, the city can't revenue-finance subsequent needs, and has to bond-finance them, and successive ones also.

The reality is that capital investments are a consistent ongoing process of every city, county, state or national government. The government that plans ahead sees roughly what improvements will be needed, and when. Then they get those needs queued up so that each can be financed in turn out of current revenues. Improvements are obtained at half the cost and with freedom of action that the debt-financing entity has lost.

Many higher education systems, for example, now have an ongoing budget item for construction. Campus A gets a new physics building this year, campus B gets a new gym next year,

and Campus C gets some new dormitories two years later, all financed out of current revenues.

Proponents of public debt-financing point to low interest costs, and talk about inflation resulting in "lower cost of repayment dollars". Interest rates on loans, however, already include a projection for anticipated inflation in addition to interest rates for the lender. And all expenditures, as well as income, in later inflationary years have to be paid for in those worth-less dollars.

The repayment period of most public capital improvement bonds is long enough that interest represents a higher proportion of repayment costs than on personal loans, and means that more old loans are having to be pay for each year instead of paying cash for current expenditures.

Looked at in aggregate, by examining the financial records of typical public bodies over a forty or fifty year period, we can clearly see:

- Consistent patterns and levels of continuing capital expenditures, virtually all debt-financed after the first occurrence of debt financing.
- Repayment demands each year of twenty to thirty years of old debts, not just current ones.
- Total debt service on old debts each year running about as high as current expenditures (excluding their commitments to future debt costs).

Aggregate patterns of expenditures, and real world records demonstrate clearly that revenue financing instead of debt financing would consistently achieve the same series of improvements - but for half the cost.

Revenue financing vs. debt or bond issue financing means big bucks. State and local governments in Oregon alone currently issue somewhat over a billion dollars of bonds per year. In rough figures, this debt load results in an equal amount of debt service costs per year. A billion dollars a year for one small state may not buy a trip to the moon, but it can help us accomplish many needed goals.

There are a number of actions which can help ensure us the freedom to choose affordable ways of purchasing:

* *Require ballot information on the total cost of bond issues to encourage us to support revenue-financed alternatives.*

* *Enact state statutes which require or encourage revenue financing for public capital improvements.*

* *Enact legislation to protect state and local jurisdictions from being forced into debt financing to pay for mandated projects.*

* *Eliminate tax-deductibility of corporate and personal debt service.*

* *Develop alternative auto and home financing institutions based on saving rather than repeated borrowing.*

THE ECONOMICS OF GIVING

If we go one step further and change our perspective towards our relationships with others from one of taking or receiving to one of *giving*, even greater potentials open up. *Giving* may sound like a ridiculous basis for economics. But the majority of our expenditures are for *wants*, not needs - things that connect with our dreams, our self-esteem, not our physical well-being. And the economics of giving creates unexpected dividends for the inner resources of both the giver and the recipient of a gift. And the power of those inner resources is vital in overcoming the diseases of the spirit so endemic in our society, in creativity and progress in every field, and ultimately in our own sense of health and happiness.

When we *give* our time or possessions to someone, we do it because we feel better having done so. When we are given something or some help we need, we feel grateful because it was something we couldn't take care of by ourselves. Everyone gains, and feels good towards each other. When we give something to someone else, it usually is something we don't want and which the other person does. Occasionally a gift is something we value greatly, but one of which we value even more the other person's enjoyment. When we offer to give our time to someone else, we usually do it because we expect to have fun working with them. Our real skills are so familiar that we rarely understand their value to others. But to a receiver, they are a valued expertise they are lacking.

In conventional buying and selling we always end up uncertain whether the other person is taking advantage of us or whether what we are buying is worth what we are paying for it. We frequently end up with the unhealthy feeling that we got a "raw deal", or the equally unhealthy feeling that we got a "steal". Giving ends up with gain for everyone, and we don't even have to pay taxes on it! Such win-win situations have a far different economics of benefit than our conventional, exchanges. An economics of giving does have constraints on scale, reciprocity, and sense of community - but that is true of most anything which truly gives honor and respect to all parties involved.

Perhaps most important, an economics of giving operates on a crucially different dynamics. In a consumer culture, we ask ourselves, "What do we want?" In a *giving* culture, we ask ourselves, "What can we give, what can a new situation give, what can our work give?" As an architect, I became aware that clients always came to me with lists of "I wants". When I started suggesting that we also ask what we could create or give through their project, whole new possibilities began to open up.

For example, the program we were given on a YMCA project detailed the gymnasium, fitness center, locker rooms, offices and other facilities needed to house the Y's program activities. What was left unmentioned was the "people places". We said, "What can this project really *give* to kids." What those program spaces needed was "complex edges"- places to sit and watch older or more experienced players, or to watch and learn new activities, or to learn enough of the basics of an activity to get up the nerve to step out on the floor.

There needed to be places to hang out, to make friends, to relax between activities, eat a snack, rehash an exciting and well-played game, or just to get up the nerve to try something new or difficult. Meeting such needs costs little in space and dollars, but makes a tremendous difference in how effective a program is in helping kids grow physically, socially and emotionally. They change a mere program into a cherished part of our lives and our memories.

In schools, we need to focus our programming on who the schools are supposed to serve - asking what we can give to help students reach out for the learning they need, instead of just institutional classroom program needs. Students need a "home base" -

something more than just a locker; and then they need direct access to library, computer, labs, shops, work, play, friends, - and help - not just a sequence of anemic premasticated classes. We need to give what will help them attain relevance, self-esteem, expectation of meaningful employment based on their learning, and self-motivation before any chance of real learning can occur. School buildings, as we know them, may or may not be part of the solution, and pouring money into fancy facilities may be counterproductive.

We need to touch the living heart and inspiration that brought each of our institutions into being, look freshly at our culture and our selves, and see what new and exciting opportunities they can generate with today's conditions, today's technology, and today's needs.

It is curious that Christopher Alexander's books are virtually the only architectural resources that start from the basis of "what intuitively feels good", and that his work receives so frequently a negative response from professionals. The intuition of our hearts and tummies is often far truer than the sophisticated theorization of professional fads that come and go as regularly as the seasons.

We have the wealth and resources to do virtually *anything* we really put our minds to. A sacred world is likely to generate a more prosperous, happier, and more effective economic system than our present one. It is likely to be able to achieve more in all fields because of its wiser use of resources and selection of goals. And it unquestionably will give us all a sense of being an integral part of and of value to a greater and more wonderful whole than we have today.



LIVING IN A SACRED WORLD

IN BEAUTY WE WALK

Living in a sacred world is different. Acknowledging the sacredness of our world brings us face to face with the need to change our patterns of thought and behavior. In it we realize, for example, that our patterns of "majority" democracy is only one pattern of democracy, and one that is able to ignore the often valid needs and concerns of almost half of a community. It is not infrequent that a course of action is approved that is actively opposed by almost as many as support it.

Paying attention to and incorporating those minorities into a democratic process changes it into a process of "consensus" democracy - such as has been formally used by Quakers and other cultures for generations. In consensus democracy, no decision is fully accepted until *everyone* agrees to it. That process sounds impossible, but calls forth an honest effort to understand the feelings and needs of others and accommodate that real complexity into a solution that is workable for all.

Such a process is more cumbersome at reaching an initial decision (as majority democracy is also, compared to a dictatorship). Consensus democracy results, however, in a more comprehensive evaluation of factors influencing a decision, in unanimous support for implementation of the decision once reached, and in affirmation of the importance and value of each individual involved. Better decisions, more effective implementation, and better spiritual and mental health of a community are almost always worth a slower deliberation.

Looking at ourselves from the perspective of a sacred culture, we see that today we are asked to fragment ourselves into mutually contradictory roles. We're split into eight hours a day producer, eight hours a day consumer. In that split we're supposed to be half-time rational and efficient, half-time irrational and accommodating subjective and induced needs. We're asked to be spiritual one hour a week, and secular the remaining hours, and to somehow mesh the contradictory values of those worlds in our lives. So why do we have mental health problems?

When we look at ourselves and our world as a whole, we see the absurdity of such fragmentation. We rediscover the value of making our work satisfying and our leisure productive and all of

our world both sacred and secular. And we begin to see what specific changes are needed in how our various systems operate.

Sacredness of other forms of life doesn't mean we can't eat. Because corn and cows are sacred doesn't mean we have to starve. What is involved is our *relationship* to what we eat, and the return we give for what we receive. We've viewed our relation with our world as a one-way street - *take* all, give none back. Obviously we can't restore life to what we eat. We have to give sustenance to other parts of the world, and sustain the health, well-being, and fecundity of the sources of our food. We also have to acknowledge the gift we receive in the life given up in our food, and give equally and in other ways to others. In a marriage we ultimately learn that we cannot be truly happy when the other person is not also happy. It is this kind of mutual support - the giving up to be given greater things - that underlies the relationships in a sacred world.

When we are dealing with people and things that are precious to us we treat them with care, and consider our actions involving them carefully. We develop ceremony and ritual to keep the relationships we value clear in our consciousness and actions. We begin to focus with almost Zen intensity on finding right action which benefits all concerned. Our actions then come to hold greater meaning and value for both ourselves and the world around us.

On a personal level, I can only suggest how these changes become apparent and lead step by step to new decisions and actions.

Over the last five years I have taken part in a series of conferences in the U.S. and in Japan dealing with sacred places and the spirit of place. At these conferences, representatives of more than twenty American Indian tribes and nations, along with Christian, Buddhist, Shinto and Ainu leaders, have worked with physicists, architects, lawyers, geomancy practitioners, and environmental activists to try to reach a deeper understanding of the interaction between people and place.

We found, as discussed earlier, that significant geophysical and psychological phenomena underlie those interactions. Our places, like all our actions, mirror and reflect back to us our beliefs - both good and bad. We found that where places are held sacred and honored, they give power and meaning; a sense of belonging

to the people; and a rooted health to their existence. Where people do not or cannot hold places sacred, their health, their community, and their land suffer.

We found it impossible to deny the existence of sacred places, their origins, and their effects upon people. *Having to acknowledge the sacredness of some places, we found we had also to acknowledge the sacredness of all places and all life, and to acknowledge the inevitability of honoring them in our lives and actions.* We had to acknowledge that this in turn draws us from a secular into a sacred society with all which that implies.

We found a sacred world to be the necessary root to a sustainable and viable society. In rereading the U.S. Constitution, we found that it does *not* decree the secular nation which has evolved in this century, but rather guarantees us the freedom to build our lives upon a spiritual basis without governmental interference. Separation of church and state deals with *institutional* separation and with freedom of process. It in no way denies the value of sacredness, or prevents us from creating a society based on sacredness that is institutionally separate from the government.

We discovered that our lives and our society change when we acknowledge a sacred basis to it. New actions become incumbent upon us from a spiritual perspective in response to our perceived "environmental" problems and how we relate to that environment.

We found first that "*crisis*" is the wrong way to view almost any situation. "Crisis" is a bureaucratic term. It says we should ignore all else and devote our full attention and resources to responding to one thing. Prime tenets of an environmental or spiritual perspective, however, are the *interconnectedness* of all things, the reality that any situation has *multiple* causes, and that any response to a situation has multiple and far-flung effects. A perspective of sacredness adds that all things are interconnected and *valued*.

All of our actions and beliefs and dreams are interwoven. When we find that a basic change is needed in how we do things, our first assumption should be that *all* of our beliefs, actions and institutions need to be reexamined and probably adjusted. They all derive from and reinforce the same basic patterns. A shift in any

of those patterns will likely require some shift in *all* parts of our lives - not a "crisis" focus on only one strand of the web.

We found, when we looked at our lives and society from a spiritual perspective, that our social institutions and our individual actions are both frequently counterproductive. Reexamining our own patterns, we would, for example, look at work, commerce, and vacations in a very different way. Our work, to begin with, should leave us satisfied and content with what we have produced, not physically and emotionally exhausted and needing "recreation". Putting energy into making where we live and work a physically, emotionally and spiritually satisfying place would avoid the need to search to the ends of the earth for novelty and satisfaction.

We would look at "vacations" as a time for pilgrimage and renewal, for bringing ourselves into mutually enriching contact with places, people, and experiences which can offer deepening of our humanity, spiritual growth, and enhancement of our physical and emotional well-being. Giving, we would discover, has a totally different economics than buying and selling. Everyone gains, and feels good towards each other.

Such new perspectives help us begin to see that spiritual actions are not only possible but vital in dealing with environmental problems. These same actions are also necessary to regain competitive economic status in our new global economy.

At minimum, they suggest a range of spiritually-centered actions that can help resolve environmental problems:

** Affirm the sacredness of our world in our hearts and our actions.*

** Relate to all people, places, and things with honor, love and respect.*

** Reevaluate what are the real goals of our lives. Determine what appropriate roles work, material goods, self-esteem, and success play in attaining those goals. Eliminate the patterns in our lives which do not well serve those goals, and revise those which do not do so with minimal impact on others and our surroundings.*

** Acknowledge our responsibilities to the rest of creation, and the right of the rest of creation to an undemeaned existence.*

** Transform tourism into ways to enhance well-being of people and places.*

** Replace current business patterns and goals with patterns that support a sacred view of our world. Use the currently wasted resources in these institutions to improve the health and well-being of all people and places.*

** Act as advocates for the parts of creation affected by our actions that are unable to speak to their own needs and role.*

** Act as advocates for the less fortunate throughout the world - for humane working, living, and environmental conditions. Implement actions to help achieve these goals.*

** Provide leadership in improving fuel and energy efficiency, CO₂ reduction, development of renewable resources and recycling of non-renewable ones to reduce conflicts over resources, environmental impacts, and stretch the capacity of those resources to benefit all life.*

** Initiate transition from legalistic to moral and spiritual controls for our actions.*

** Employ consensus decision making which acknowledges the needs and input of all.*

** Curtail our patterns of overconsumption of material goods and resources and depletion of non-renewable resources.*

** Demand and provide opportunity to all for rewarding, contributing work.*

** Give priority to equity of economic and political power rather than material growth.*

** Enhance personal health and safety and global security. Initiate military conversion, and use those resources to restore, heal, and enrich damaged places, people and thing.*

** Ensure that whatever religious practices, institutions and facilities we are involved with reflect, advocate, and provide leadership in achieving these goals.*

** Provide a challenge to greatness to ourselves, each other, and our entire planet.*

The earth we walk is sacred. The life grown of its blood is sacred. We too are sacred - to our selves and to each other. When we come to hold all this sacred, we approach it all with love. We give, and share, and celebrate our oneness with it all. We take only for our *needs*, and acknowledge and satisfy the needs of others. We live sustained and buoyed by that love and that oneness. Meaning fills our lives, our actions, and all that we find revealed in beauty around us as we walk this earth.

The Chinese character for crisis contains the character for danger - but also the character for opportunity!

TIME AND PLACE

We have all at some time stumbled back onto the past - accidentally or on purpose coming back to those places where important events occurred in our lives. The seats in the schoolrooms seem tiny. The trees are larger, or gone. The house we grew up in is gone, or changed, or possibly untouched by time. That special tree in the moonlight on our first date..... That wonderful place on the mountain. Many things, including ourselves, seem time-worn and older. All have the power to evoke memories and restore connections through time and across space.

The memories held in these places bring an inevitable re-valuing of our lives.

Places retain the reverberations of events long past that have occurred in them, and the cumulative patina from those events adds to the power of the place to affect our lives. Our family has stayed two summers in a house in Maine that has been in the same family for seven generations. The mark of all those lives and years, the happiness and pain, and the care or neglect of each time whispered to us out of every worn step and handrail, every coat of paint or wallpaper, every piece added, taken away or changed.

The generations in human places and the eons in natural places that constitute the history and legacy of a place surround us and put our lives and actions in a deeper context and meaning than in a place newly made. That past can give strength, or it can press us down with its weight. To walk a path in China worn down a dozen feet into the earth by four thousand years of footsteps, or along a road in India lined with the crumbling monuments of dynasty after dynasty can limit our dreams or give them added dimension, continuity, meaning, and direction. To live in Rome, surrounded by the civic and artistic legacy of two thousand years can inspire us or appear as unmatchable achievements against which we fear to measure ourselves. Much depends on us.

Even acknowledging our ability to alter their impact, places affect us powerfully - emotionally, symbolically, and physically. They act as mirrors of the values, dreams, and pettiness of their creators and users alike. Building walls or building bridges, our intentions are perceived by others. And we affect our places in return - even our attitudes towards the events which occur within them alters the place itself.

We now know that our surroundings are not inert containers for our activities. Our anger, indolence, reverence and passions are physically imparted to our surroundings through interacting electromagnetic fields, and in turn affect other present and future users of a place. Our feelings can set up a chain reaction for good or ill. The energies inherent and accumulated in a place also affect its users. That accumulated energy profile of a place can also be altered (cleansed or "exorcised" if you wish) through actions taken to counterbalance and modify it.

Places also affect us strongly through their role in the numerous "gateway" or transformative experiences, events, or times which create or mark powerful changes in our lives. These are not just milestones ticked off on a calendar, but major changes in our self-concepts, capabilities, commitment, dreams and resolve: Leaving home for the social environment of school. Becoming sexually active. Becoming an adult. Discovering that our physical or will power has exceeded that of our parents. Attaining a vision quest. Winning (or losing) a battle - with people, with nature, or with ourselves. Creating a family or a new life. Reaching an age where personal "success" becomes less meaningful than the legacy we can create with our lives. "Retirement". Near-death, death of loved ones, or old age and approach of death.

Each of these changes constitutes a transformation of our inner consciousness. Each requires an intensive focusing and clarifying of our inner energies to assess and respond to the new context within which our lives are moving.

Acknowledgment from society of the importance and difficulty of these transformations, and availability of places which embody that support and valuing, gives important assistance in successfully coming to grips with them. The assistance and insights of others who have proceeded us through these changes can also give meaningful support and encouragement.

Successful passage through these changes is essential to our individual and collective psychological makeup. It enhances our ability as individuals and as a society to deal with the issues that confront us in various stages of our lives. In some cultures people have recognized the fundamental nature of such changes wrought by these experiences by taking on an entirely new name. We often are truly not the same person as before.

Some of these experiences, by their nature, we have to struggle through alone and without support. For others, many cultures have developed rituals to acknowledge and mark the event, nurture, and express social support and value. In many cases also, special places have been set aside or created which play an important part in those passages.

The role of places in our passages varies. "Vision quests" frequently make use of natural places - sometimes powerful ones, sometimes not. Other cultures, however, use monastic retreats to special places created for meditation for the same purpose. The

village church, cathedral, temple or shrine represents a common expression of a community's wish to place many of these events of our lives into meaningful context, to provide support and evidence of their value. They allow us as a community to publicly affirm each of us as we pass through these gateways, take on new responsibilities and roles, and bring new capabilities to the benefit of the community.

The Romans built triumphal arches to celebrate the return of their victorious military leaders and armies. To march under an arch is in itself not an exceptional experience. But to be welcomed home through a gateway expressing the gratitude and honor of your nation, in the midst of a tumultuous welcome must have been an immensely powerful experience for all.

One of the transformations which affects us most powerfully is death - its approach, our loss of loved ones, our acknowledgment of the finiteness of our material existence. The Scandinavians in this century have created a uniquely powerful tradition of memorial chapels at their crematoria and cemeteries. Two of them, both in the same city of Turku, Finland, stick in my mind as showing the power of a sacred place in making the rituals of our passages nurturing and powerful, and how clearly our values are reflected in the places we make.

The mother chapel, the *Chapel of the Resurrection* by Eric Brygmann, is one of the most powerful spiritual settings for the celebration of death to be found in the world. It was built about fifty years ago, nestled among moss-covered rocks and aged trees. The pews in the chapel are offset at an angle in the space, curiously, it seems at first. Then we become aware that something else is being given equal space in the room.

Our attention is drawn not only to the symbols and rituals of human life within the space, but also through the open side of the room to the signs and rhythms of nature outside. The changing seasons, the birth, death, and rebirth of the plants, the glorious burst of beauty of the flowers climaxing the long cycle of renewal, the falling leaf, the passing bird all become part of our experience of the ceremonies.

The duality of the setting becomes powerfully united at the close of the memorial ceremony, when the dead are carried by the living through a special portal in the open wall, out into the forest, back into reunion with cycles of nature itself.

And the other chapel? The language is the same, the architectural words repeated carefully, the site is the equal of the older place, but what comes out is not a song of celebration but almost a scream of terror. The windows open upon precisely manicured grass lawns, the dead are removed by invisible machinery into the depths of the building. Everywhere technology is celebrated rather than humanity.

Down beneath the chapels sits a console, manned by a vision from Jules Verne complete with cap, cropped beard, and black uniform. He sits before three television screens connected to hidden cameras in each chapel. The artificial lights are changed automatically, the microphone levels adjusted, the doors opened and closed, the flowers placed and removed, the schedule carefully kept.

Death, more clearly than all else, reveals the limits of life and of the knowledge and technology we have created. That intellectual knowledge and technology has no role in the rituals of death. Its presence can only serve to mask our direct confrontation with the realities of our nature and our universe. It can only imply that our technology and knowledge are still in command, that things haven't changed. But they have.

Death rituals are for the dead, but also for the living. They are a ritual not physical but an experience almost wholly spiritual and emotional in nature. It is our interaction with each other; our experiencing together; our revealing, unfolding, and opening out our inner nature that is the essence of the ritual.

Today we are beginning to create places for conscious dying itself - for the terminally ill to face death with friends, within a web of human and natural support, and with ennobling surroundings rather than dehumanizing hospitals. What kinds of places assist us best to make highest use of those now short last days of our lives?

A friend recently commented on being present at the death of another friend. "He wouldn't die for the longest time. He couldn't let go of his amazement and wonder at the depth and power of love with which he was surrounded as he lay dying in the arms of his friends." Everyone present had their life immensely enriched and deepened by that occasion. Settings which support

and encourage such occasions and passages can contribute immeasurably to our lives.

I remember also a story about a hospital- was it in France? - which every morning as the sun rose, and every evening at sunset, lapsed into silence. Then from some corner of the hospital, someone would begin to sing. Sometimes it was a song of pain or of thanks; a song of memories, or a song of dreams. Sometimes the singer sang alone. Other times they were joined by those who were able. The singing was often brief. Sometimes it went on and on, its origins moving from one place to another. As it wove a web of sound throughout the place, it pulled together the spirit of all those present into a shared consciousness and evocation of their need and acknowledgment of the meaning of their life.

Design for the sacredness of place is not limited to the great passages of our lives. Recently a number of our friends had a local gathering to celebrate the Equinox. This was not a major passage but a repeated event in our lives. This time, however, we held the gathering in a home which had been built with a soul, and which was built with a special connection to nature and to the seasons. Our friends brought food and musical instruments, and we ate and made music and celebrated the evening.

But something different happened this time. Through the evening, as the sun set and the moon rose and passed silently overhead, our music became deeper and deeper, and the energy created among us and with the place grew more and more powerful. We crossed somehow that hidden line between the profane and the sacred. A potent event occurred that we had not experienced before.

The place made a powerful contribution to that experience. One of our friends said the next day that she had been there often before, and it had always been a wonderful place, but it seemed to say that night, "Yes! This is what I was created for!!!!"

We are relearning the importance of the oceanic changes in our lives, the value of ritual in enriching, supporting and deepening those changes, and the role of special places in contributing to that power. We are learning how to make good places which can contribute to and intensify both the power of our special experiences and that of everyday life.

In the process, we are transforming both our society and our surroundings from secular ones which deny and suffocate our

capabilities, self-respect, and relationships with others into sacred ones which affirm, celebrate and enrich the incredible unity and wonder of all creation.

FINDING TIME

Learning the true priorities in our lives frees us of many pressures, and gives us the freedom to draw deeply from the experiences we find important enough to immerse ourselves in.

When we built our home some years ago, we tried to build for eternity. We built well, and carefully. We mortised and pegged the joints to hold firm in hurricane winds. We sealed and resealed openings to keep out the water from winter storms that brings rot and termites. We chose the materials with care, and put love into their joining. It took us six months, without power or power tools, to reach the point where we could move in.

The next morning the house was gone, burned to a mass of smoldering charred wood.

As the reality began to sink in, my first agonized thought, over and over, was, "Six months of my life, of love and labor - gone, vanished, as if it never existed." I tried to balance it out. *Every* six months of my life vanishes. Do others leave more than a pile of charcoal at the end? What did this six months leave me with besides charcoal?

Occasionally it takes events as drastic as these for us to see what has enduring value from the time passed in our lives, and to see also the time and energy demands of our possessions.

Several times I've had the detritus of existence scrapped off of my life and have been given the opportunity to choose afresh which burdens to accept. Our fire did that, and helped me learn what was valuable and what was a burden about possessions. Several years before, tired of possessions that seemed to multiply their demands for care, maintenance, and use, I sold and gave away almost everything I had, left my job, and went on the road. Freedom! For a while. Eventually, I found that a freedom which did not give a leverage point to use myself well, to accomplish things, no longer seemed a real freedom.

After we rebuilt our house, we lived for seven years without radio, TV, or newspapers. People were appalled. Didn't we have a responsibility to keep up with the news? It turned out that we didn't miss much - we only became aware of the incredible redundancy with which we are deluged by what someone has determined to be "news".

There are times when our witnessing and sharing the heroism, power, or grief of events is important. That can affect our lives. And there are events both good and bad that should not go unwitnessed and unacknowledged. But most of what we spend our time watching is in truth trivial. Ignoring "news" never keep us from knowing what was happening in the world. The redundancy is far too great for that to happen. It just saved us from oversaturation with things we couldn't affect and shouldn't waste time worrying about.

Unknowingly, in doing this we moved our lives out of the "crisis" mentality which fills the world of bureaucratic "news", and into a more holistic and nurturing way of participating and responding to events. This removed a major sense of time pressure from our actions and allowed us to develop fuller and more fitting responses rather than knee-jerking with whatever could be done "immediately". We found we had gained several hours a day, freedom from needless worrying about the "crises of the day", and freedom from the endless barrage of advertisements. Not a bad deal for the price.

When I realized the things I wanted to accomplish with my life were unlikely to bring in money, a big decision was necessary. Either I gave up my dreams and earned a living, or learned to live my life differently to free time to pursue my dreams.

We chose the latter. We proceeded to free ourselves of ten years of work to pay a mortgage, by building our home with our own labor. We evolved a diet which is at once healthier, tastier, cheaper and less demanding on the world. We gave ourselves four hours of freedom a day by avoiding TV and unnecessary newspapers. I eliminated commuting by working at home. We heat with the sun and wood from our land. Our elder son freed himself of years of "education" by homeschooling after he graduated from the alternative elementary school we built.

I found the treadmill of modern living doesn't get us any farther than simple living. And the luxuries of simple living are

closer to being soul-satisfying and life-enriching. We've invested in friends instead of stocks. We watch sunsets and moonrise instead of TV. We make music instead of consuming it.

We still have had to take care of dirty baby bottoms and all the other maintenance work of living. But those chores of everyday living have returned us a deepening, and give us unexpected nurture for new experiences.

This is possible, however, only when we give those everyday acts our undivided time, attention, and commitment. It doesn't happen if we view them as something to be avoided or hurried through to get on to the *real* parts of life. When a pile of clean clothes or a sparkling window give pleasure in both the doing and the product, we are nurtured rather than drained.

What I was learning was the real meaning of *austerity*! Austerity does not exclude richness or enjoyment. What it does do is help us avoid things that keep us from our goals in life.

Affluence has a real cost. Its possibilities demand impossible commitments of time and energy. It fails to discriminate between what is wise and useful and what is merely possible. We end up foregoing those things necessary for good relations and a truly satisfying life to make time and space for trivia. Like a garden, our lives need to be weeded if they are to produce a good crop.

We hunger for rich and powerful experiences and bemoan the empty and boring ones which fill our lives. Instead, we should be relearning how to make each and every experience one filled with meaning, love, and joy!

A Lummi Indian friend told me once that when they get together to talk over a problem they form a circle and set a rock in the middle. The rock, with its million year history, is to remind them of patience. We need such a touchstone in all our actions to remind us that getting to the end is not the goal of singing a song, nor of scrubbing floors, weeding a garden, or grocery shopping.

Our concept of "time" has been a false one. Greed inflates the importance of time to where it controls our lives. We need instead to learn how to focus more fully on the present. We need to learn to choose what is important to do and not do, and to

rediscover how to allow ourselves the freedom to be fully immersed in what we are doing - be it extraordinary or mundane.

Washing dishes without the "pressure of time" doesn't take significantly longer. More important, how long it takes *stops being important*, and the experience isn't clouded by the constant pressure to be done and on to other, more important, things.

The pressure of time-worry changes our lives - whether talking with a stranger or doing some work which we could otherwise love. It causes us to draw back from opportunities which arise during our day which might be more time-consuming. Yet these can be the very opportunities that result in deeper and richer relationships and lives. A vicious circle develops where whatever we're doing gives us less and less reward, and we feel more and more strongly the urges to spend less and less time on it!

Some people have concluded that time is more scarce and precious than money. They say we should go to school longer, work longer, sleep less. But where would we find new dreams, and what would happen to those wonderful places between sleep and wakefulness where solution to problems so often emerge?

Once I thought it would be perfect if we could live forever. There would be time for everything! But now I visit older friends with empty lives, whose every day is a penance of endless time without fulfillment. Forever is not an answer.

Time vanishes when we are happy and excited and immersed in what we are doing. That is where we and our lives belong.

INSTITUTIONS THAT LIVE

Changing our institutions so they effectively align with our goals instead of ineffective intermediary products and substitutes is essential to our survival and our ability to live in peace and harmony with others and our world. These new patterns appear so much more effective that they suggest we can meet our global needs with the resources they have been wasting. Having institutions that work in harmony with life opens us to the same harmony in our work and interaction with them.

Large institutional and economic systems are good at channeling power and profits into fewer pockets. Almost all Americans felt our country getting poorer in the 1980's. In reality, the national economy grew well in that period. But *seventy-five percent* of that increase went to the richest 1% of the population, while most of us did end up poorer. Simpler, more localized, fine-tuned patterns are usually better and more sustainable at meeting our needs and generating real wealth. Documentation in many areas - agriculture, building, communications, health, shelter, energy, waste recycling, community building and appropriate technology shows the viability and benefits of more sustainable, localized patterns.¹⁷

We need to seek wisdom, not degrees, and learn the value of sharing knowledge with all. Huge cost savings for a higher education systems can be gained by replacing redundant lecture courses with videocassettes, making offerings available globally through satellite / videotape media, and separating the process of educational certification from providing learning resources. Released faculty and financial resources can improve research, meet other teaching needs, and lower tuition and public support costs. *Multi-lingual global application can give virtually free access to higher education for everyone on earth.*

We need to realize the value of replenishing natural systems. Restoring the health and productivity of over-exploited soils, forests, fisheries, agricultural lands, water and energy resources can provide astounding economic returns as well as making possible a sustainable base for our communities. The State of California's highly successful "Investing for Prosperity" program has become a model being implemented in other states and countries to productively invest in restoration and improvement of natural resources. \$5 million which was invested in reforestation alone has been projected to provide 18,000 jobs, \$448 million in timber sales, and \$104 million in increased tax revenues over the next 50-75 years.

It is important not to lose what we can't replace. We have known now for twenty years - since before the 1974 Oil Crisis - how we can reduce energy use by 90% and enrich our freedom, enjoyment and lives in the process. Savings come in many forms - embodied energy in materials, transportation / infrastructure costs, agricultural energy use, appliances, lighting, structure and furnishings, water conservation and space heating and cooling. Specific

technologies are now in the marketplace which can exceed even this goal, and which can make possible widespread and rapid implementation. Maximizing energy-efficiency, renewable energy use, and material recycling in all areas we affect is essential.

If we don't need something, we don't have to fight for it. Reducing the resource competition underlying global discord allows military expenditures to be converted to use healing people and places. Reducing our vulnerability to terrorist actions (which I outlined ten years before the World Trade Center bombing), is tied to the security implications of globalized economic dependencies. Enhancing the resiliency and self-reliance of our countries can minimize the need for military expenditures (our largest government expenditures) and free those resources for other needs.

It is far cheaper to avoid the need for services than to supply them, however efficiently. Our *"Make Where You ARE Paradise"* proposals twenty years ago outlined ways to reduce and avoid need for transportation and minimize associated costs. Transit-supportive urban land-use patterns are beginning to implement some of these potentials. High-speed electric rail systems are a key to integrated transportation systems. Analysis of the multi-modal system now planned by the Oregon Transportation Commission showed rail giving a potential for 33% savings (\$8 billion) in initial construction costs in Oregon alone. Once the infrastructure is in place, passenger-mile costs for additional rail capacity drop even more - to less than 1/20th that of highway travel. The crucial element is connectiveness between modes which can reduce the need for car ownership. 150-300 mpg cars now in development can reduce highway fuel usage by over 90% within 15 years.

Recycling our existing communities can provide equal magnitudes of savings. Reducing demands on infrastructure opens new opportunities for what the existing structure can support. New institutional patterns- and simple changes such as granny flats, infill and shared housing, home occupations, urban food production, and bed & breakfasts - can change the life of our communities. They minimize need for resources, transportation and consumption of land, while bringing our lives into closer contact with others and our surroundings.

Innovative ways to recycle auto-centered communities saves our investment in them and gives them productive new lives.

Honor the traditional wisdom of all cultures. Diversity is richness. Different cultures and traditions create different realities and different potentials. Knowing and acknowledging the value of these differences creates the foundation for the mutual respect needed for sustainable relations.

PROTECTING SACRED PLACES

Living in a sacred world, we look for new and better ways to ensure the protection of places we hold sacred. "The Law" is at best a fragile protection for anything. The small protection it presently gives to the very few protected sacred places is welcome. It must be remembered, though, that our legal system was developed and refined as a process to replace the web of secure relationships between people and places in traditional societies with more specific and easily broken "contractual" or legal relationships. Legal protection is limited. Laws change. Time, money, and other resources necessary for legal protection are often unavailable. Successful legal action depends upon the vagaries of an often philosophically hostile court system.

The most secure protection for a world we hold sacred is when it has become inconceivable for us to want to act harmfully towards it. Moral, ethical, and spiritual power is the real protection which underlies any legal system. We need to look directly to those powers to secure any true bonds between us and our surroundings.

The process of developing consensus on specific patterns of behavior towards our surroundings formalizes that protection and is vital to securing protection for our surroundings. Codification of that consensus in form of changing laws is necessary to support that consensus rather than contradict it. The successful implementation of a "Bottle Bill" and recycling laws in Oregon, for example, acted as a fulcrum in attitudes towards litter and trash in public places. People who were once content to leave their trash behind now are offended when others do, and ask them to pick it up.

Some progress has occurred over the years in terms of legal protection of sacred places - particularly those of American Indians. Protection of these places are significant, as Indian

practices involve individual access to natural places of "power" in their surroundings rather than historical artifacts of religious leaders or buildings for group religious assembly. Indian beliefs, like those of Chinese Taoists, affirm the concept that right consciousness arises from and is strengthened by contacts with sacred places. Many early treaties called for protection of the rights of Indians to access to certain sacred places. Those provisions have been violated, however, as much as other provisions of the treaties.

Current legal protection falls into two categories - protection of sites for cultural heritage reasons, and access for contemporary Indians for sacred practices. The Antiquities Act of 1906, the Historic Sites Act of 1935, the National Historic Preservation Act of 1966, and the Archeological Resources Protection Act of 1979 have progressively created a framework for possible protection of sacred sites with artifacts more than 100 years old, particularly on public lands. The leaving of artifacts in sacred places was contrary to traditional practices in many areas, however, and many important sites are not eligible for protection under current laws.

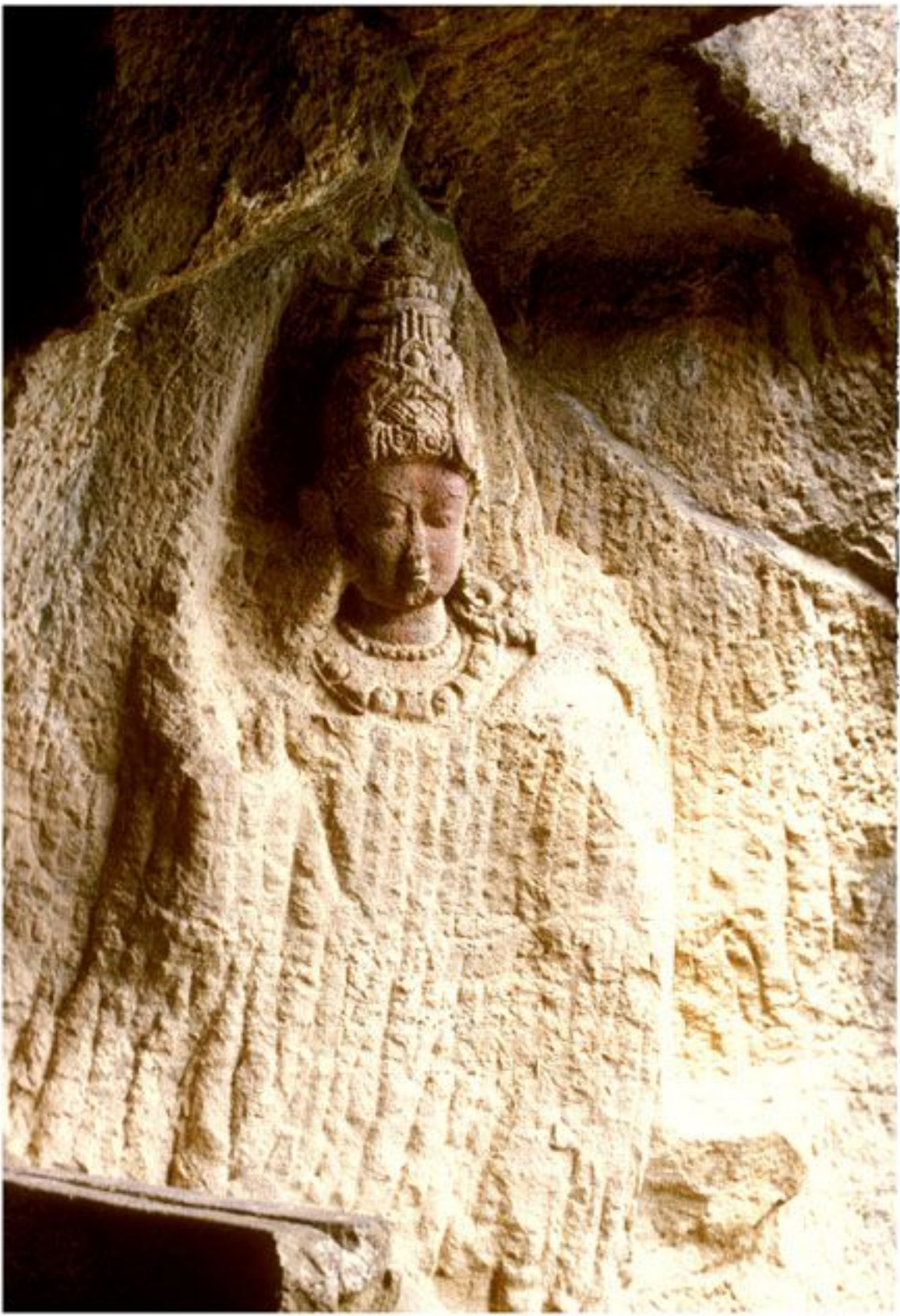
Protection for current access to sacred sites falls primarily under the American Indian Religious Freedom Act of 1978, which made provision for access to sacred sites as well as use and possession of sacred objects and the freedom to worship through ceremonies and traditional practices. A 1981 legal decision, *Thomas vs. Review Board*, also set important precedent in application of First Amendment rights concerning American Indian religion, stating that "religious beliefs need not be acceptable, logical, consistent, or comprehensible to others in order to merit First Amendment protection." These decisions have at least resulted in better support and coordination between government managers of parks, forests, and other public lands and traditional Indian religious leaders.

Beyond the protection of specific historical sacred places, the concept of *stewardship*, of our need to take on the role of advocate and protector for the natural world, is slowly evolving today into a meaningful practice. Christopher Stone's landmark essay, "*Should Trees Have Standing?*" made the case for our advocacy and protection of the rights of the natural world. This concept has subsequently been accepted by the Supreme Court and cases successfully argued under it.

Recent discoveries in natural science have underscored the amazing qualities and irreplaceable nature of the world that makes up our surroundings. Single fungal organisms covering tens of thousands of acres have been discovered in the states of Michigan and Washington. Bristlecone pines in California's White Mountains have been found which are more than 4,000 years old. Rings of creosote bushes in the California deserts have been found which have sprouted from continuous root structures more than 10,000 years old. The ability of redwood trees to sprout and resprout from broken off roots and limbs gives them a potential immortality. Biologists are beginning to view all the bacteria of the world as a single genetically interacting beast that rapidly absorbs and broadcasts genetic innovations among its parts.

Modern genetics is showing that whole hunks of genetic material - even whole organisms - are borrowed back and forth and incorporated within evolving organisms, including ourselves, *The lines between what is life and nonlife, between past and present, between what is us and what is other are blurring into inconsequence.*

The inevitable result is our broader identification with, and protection of, the whole of life and existence which makes up the universe of which we are part. We protect what we value, and what we identify with.



LEARNING FROM PLACES

TOURISM AND PILGRIMAGE

Our behavior towards our surroundings as both visitors and everyday users has a powerful effect on both the places themselves and on our own well-being. My awareness of the power of our attitudes to create, destroy and give power to a place came first into focus in a discussion on European cathedrals some twenty years ago. As I wrote about it soon after:

"Drinking wine one recent evening with Florian Winter, an Austrian visiting us on a global survey of renewable energy developments for the U.N., we got into talking about the destruction of European cathedrals by tourism.

'Each person came', he said, 'and took away a little of the cathedrals - in their camera, in their mind, or in the conversation - and now nothing remains'.

In that absurdity there is truth.

All places live through the reverence with which we hold them - without which they crumble to pieces, unloved, unmaintained, abandoned and destroyed. That reverence is the glue which in reality binds the stones and the blood which in truth sustains the life of a place.

For the life of a place lies in its relation to the people that share it. And it is that reverence first which is taken away, piece by piece, flashbulb by flashbulb, postcard by postcard, tour group by tour group. Without this reverence, a place has nothing to give to those whose life it must sustain, and they in turn lose their nourishment and fall into the same dereliction as their cathedral.

It need not be so, for the visit of a pilgrim differs from that of a tourist. A pilgrim brings love and reverence, and the visit of a pilgrim leaves behind a gift of their reverence for others to share.

We scorn the people of other cultures who are angered when we wish to photograph them and laugh at their belief that doing so takes away part of their soul.

Yet it does.

For what we seek - with photographs or our presence - is sought because it is something we lack, and that lack and our presence only prove them right and us wrong. By our taking we diminish us both.

And we lessen the soul of all places we visit, and ourselves as well, when we take without giving and come to them without reverence. Life requires reverence to life itself, to land, to people and to place, to ourselves and to the creation of which we are part.

That is the destruction of which tourism is part and from which tourism arises. It is there that we again must find the healing power for our land and our lives."

What exactly is the difference between tourism and pilgrimage? What can we give to a cathedral, or to any place we visit, to make it better? With tourism, it isn't the number of people that is the problem. I've been in places in Europe, India, and Japan where pilgrims come by the thousands and tens of thousands. It's not whether people are having fun or not. Many people on pilgrimages have more fun than most tourists. *There is something totally different in a pilgrimage.*

Think for a minute what "pilgrimage" represents. When somebody comes to give, to receive, to honor, they leave something positive behind. The mere presence of pilgrims acts as testimonial to the strength of their beliefs. Their reverence, their body language, their prayers, their road-weariness all speak to others of the power which had brought them from afar.

What pilgrims leave behind at sacred places also stands as silent witness to the nature of their visit. The image of pilgrimage that comes most strongly to my mind is that of people going into the cathedrals in France, lighting candles, and leaving behind them flickering lights which say, "someone has come, given, and gained something here". Something has been left by them which enhances the spirit of the place. It says someone held this place sacred and received something of value from it. That value is passed on from person to person through the ritual of candle lighting and prayer.

This testimony to pilgrimage shows in the piles of crutches at Lourdes and in the worn stone steps to ancient shrines. It shows in the prayers written on paper and tied on a tree at Japanese shrines. In India, flowers are left at shrines and temples. In Tibet

pilgrims add a stone to a pile left by others at a shrine. American Indians may leave a sprig of sage, a feather, or a bright ribbon. Such offerings are a message that someone has come, in a good way, and given something, rather than just taken something away.

In becoming pilgrims rather than tourists, we find ways to make our intentions visible in our own way so they can be shared with others. It may be participating rather than spectating. It may be creating a space of silence and reverence. It may be offering a song or a prayer. It may be leaving that sprig of sage, a couple of wildflowers, maple leaves, or a photo of a loved one. It may be lighting incense or a candle. It may be merely a smile connecting with people, or the polish of our feet on the floor. What it cannot be is standing apart, separate from the life of the place, or ignoring the reverence with which others relate to the place.

TOURISM, GUESTS, AND TRAVELERS

It used to be that when you traveled east of Istanbul, you left the world of tourism and entered the world of travelers. The effort was greater of getting there to begin with, of travel itself, and of communicating in unfamiliar tongues and cultures. The hazards for travelers were greater, and the beauty of the people and places less familiar or understood.

The people you met along the way were travelers, not tourists. They had been long on the road, had an openness and love for people and places, and of sharing their own lives with others. Their own lives and what they brought to the adventure of your own travel were often as interesting as the people and places you were intending to visit. If a person didn't have those skills or attributes of good travelers, they learned them fast or left. Aloofness, pride, or arrogance left you sitting in the dust unaided when you needed help of any kind.

A traveler is *there*, and part of the place and the time and the people there. A tourist seems *not* to be there - ignoring or not aware of other people, only superficially interested in the places themselves, unnoticing of their connections with the lives of the people who live there. Dragging a list of expectations to be checked off and carried back to another world which has never

really been left, along with the inevitable photographic mementos of "accomplishments", their presence is an interruption and an impediment to life in the places they visit.

Compare how we relate to guests in our homes to how we relate to staff and other visitors in a hotel. Numbers, the proximity to people's lives and their "turf" generate very different relationships and experiences. Totally different expectations of gain, giving, payment, sharing and experience are formed and met or left unmet.

Out of this awareness a whole new pattern of travel is developing. Home stays, bed and breakfasts, inns and other small scale, more intimate, people-centered traveling situations are beginning to replace some of the traditional patterns of tourism. We are learning again the value of being guests and of being hosts. We're learning to welcome guests, to be travelers rather than tourists, and to be at times pilgrims. The gifts of friendship, love, understanding, and enriched lives remain and grow long after we part.

This is a different world to walk in - a different world we can make and become one with.

SITTING DARSHAN

Whether traveling to visit special places, hiking in a wilderness area, or merely finding a place along the ocean to sit peacefully, a particular pattern has developed to how I spend time with a place. It has become obvious to me that the normal tourist pattern of coming to a place, taking a quick look around, and then leaving, is unsatisfying. It might give an initial introduction to a place, but little more. I have found that merely staying there longer, sitting quietly and not even paying particular attention to the place, becomes unexpectedly productive.

After a while things suddenly come to notice that escaped initial impressions. The light changes. Birds and other creatures venture out again. Patterns of how people use a place reveal themselves over time. Details become visible - not merely small decorative things, but subtle, basic patterns of how things are

connected, how their qualities are created. The flavor of a place becomes almost a taste in your mouth. A sense of what had been orchestrated together to achieve such powerful results begins to coalesce.

There is a taste to greatness, and a smell, and a sense of timelessness, and a vibration that goes deep inside and lodges in a harmonic resonance between us and the breathtaking specialness of a place. These are feelings that can later guide creation of new places, our participation in events in any place, and how we conduct our lives.

I remember visiting the Brihadeshvara Temple at Tanjore, India - a fairly typical east Indian temple with a highly sculpted pyramidal stone tower. This particular temple tower was very tall, and surmounted by a globe-shape termination. Sitting in the shade resting, and merely soaking up the presence of the temple, I gazed again at the shape on the top of the tower. A shiver went down my spine. There, perched quietly almost 200' above the ground, this shape was *a single rock*. It was perhaps 15' in diameter, and *weighed well over 80 tons!* Yet there was *nothing* calling this tour de force to my attention.

The builders, over 900 years ago, had wanted to do it. They figured out a way to do it, and made it so totally a part of the overall design of the temple that it appeared inevitable and inseparable from the overall spirit of the building. Whether it was their idea of making an unheralded gift of effort, of creating a monolithic quality needed in the building, of demonstrating an insight into an ingenious way to build with less effort, - the interesting thing is that they made no attempt to draw attention to their amazing feat.

Again and again, important aspects of a building or garden or landscape suddenly become apparent almost on their own, after a period of time of just sitting. I have developed a habit of getting myself to do just that - stopping and sitting for a while for no reason other than I knew that in time something interesting would probably make itself known.

A beautiful curved open stairway connecting a back portion of the Zenrinji Temple in Kyoto with an adjacent structure suddenly revealed itself to be one of the most sophisticated examples of timber carpentry I've ever seen. All the beams supporting the steps, the rafters and the ridge of the roof were

curved in both plan and elevation, and the curved ridge beam of the roof was totally unsupported except by the rafters notched into it!

The garden terraces at the Taj Mahal similarly revealed a masterful attention to mathematical organization, where the shape of every paving stone, drain, and coping fit together and into the overall design of the complex without the need to trim, adjust, or join crudely together.

Recently I read a description somewhere of what I had been doing - applied in the religious sense of sitting in the presence of a Master. It was called "sitting darshan", and was described as the process of becoming attuned to the overall gestalt of what or who you were sitting with - inhaling the situation in its wholeness without ripping it apart analyzing or focussing on one particular thing or another. Sitting darshan is a basic technique for experiencing and being affected by a place, for the subject and purpose of that experience is nothing but wholeness.

MAKE WHERE YOU ARE PARADISE!

Changing our attitudes towards places also involves looking at why we feel a need to travel, and the failure of our regular surroundings to sustain us. About 20 years ago, we published a poster which said, "*STOP TOURISM! Make Where You ARE Paradise!*". It talked about the negative economic and social impacts of tourism on both the visitor and the place, how to create alternative ways to travel more in touch with people and places, and more particularly, how to change our own places so they give us more sustenance.

Almost every place had once a powerful beauty of its own. It is our actions that have destroyed much of the unique beauty of places where we live. If the places where we live are held sacred, and we nurture them from that spirit, they can gain a new beauty, and can in turn sustain us far more powerfully. That same spirit helps us perceive the unique beauty in places that are new to us, become comfortable with those places, and allow their power to move our hearts. With that kind of sustenance, we have much less reason and urge to travel. Why not stay home and enjoy the wonderful places which we have made?

TRANSFORMING TOURISM

Recently I had an opportunity to visit a number of the gardens and precincts of the Daitokuji Zen Temple in Kyoto. It had been 17 years since I had last visited them, and 25 years have passed since my first wonderful exposure to them.

The transformation in spirit which intensive tourism had brought within the temple precincts was portentous. Walls that gave shelter and enclosure to the gardens had been ripped out to give tourists faster access. Loudspeakers under the verandas gave an intrusive speech to each tour group. Visitors were being strongly pressured to buy a tea ceremony. Monks were selling autographs and joking boisterously with the visitors. Ash trays were lined up along the verandas inviting people to smoke. In spite of "no smoking" signs cigarette smoke filled the air. Lounges to accommodate chattering tourists had been installed next to "National Treasure" gardens. Gift shops cluttered the precincts. Tour groups were rushed through in huge numbers.

Many of the planted gardens were literally dying from years of Zen perfection in their cleaning and maintenance. For generations, even the most minute speck of "dying" organic matter had been raked, swept, and taken away instead of being allowed to compost and turn into new soil. Topsoil literally doesn't exist any more in many gardens (great for moss perhaps, but not for trees or a healthy natural community). I saw elaborate drainage systems being installed around the roots of trees in many gardens to try to save them. The problem was not drainage, but that we had allowed all the life and tilth of the soil be removed and carted away.

These problems are not unique to Daitokuji. Similar situations exist at many other temples and shrines. I watched more than 350 students pouring, pushing, and leaping in and out of the famous Ryoanji Temple's rock garden in less than 15 minutes. That temple recently destroyed its most beautiful garden - the moss garden around the corner from the "famous" rock garden - to build an unneeded bridge to a new temple building next door.

I did also discover one small garden at the Ryogen-in whose raking pattern had been subtly changed, making the garden much more powerful. This was the only place of living energy I

felt in the parts of the precincts I visited. That living tradition is essential, but seems rare today.

I was saddened by all this for several reasons. Several of the gardens and their precincts are, or should be, National Treasures. Their damage, the risk of their destruction by fire, and the deterioration of people's experience of them does not speak well of the stewardship given to that precious heritage. The impression that visitors receive is that the only god worshiped in temple precincts today is the god of money and tourist dollars. There is no sense of a living spiritual tradition. Being able to take ourselves lightly is good, but what I felt was something quite different.

The situation at Daitokuji is not unlike that of the cathedrals of Europe. Both show the vital difference between tourism and pilgrimage. Both show the cumulative impacts which tourism imparts to both the people and the places involved.

Sitting in the gardens at Daitokuji, and wondering about their fate, I realized that there are ways that we *can* respond to tourism from a spiritual base, both as visitors and stewards of the places. We *can* require that where tourism impacts our own lives, our actions, and the places for which we have responsibility, it be transformed into something conforming with and transmitting spiritual values. If we fail to do that, we acknowledge that those beliefs are hollow and dead - something to be "believed in" rather than to be "*KNOWN!!!*".

What can we do? In this particular case, I started by writing a letter to the Temple, sharing my concerns and the possibilities I saw for changing that particular situation. I'm sure the list can be expanded and improved upon, but here are things that came to my mind as I left Kyoto:

** Smoking should be prohibited in temple compounds, and this prohibition should be enforced.* There are proven health hazards in smoking for smokers and non-smokers alike. Add to this the potential fire hazard, and smoking's impact in diverting and diffusing our attention, there is no reason it should be allowed.

** Silence should be required of both visitors and temple personnel in the gardens and adjacent areas.* It is extremely difficult to experience the gardens amidst the chit-chat of visitors and the spiels of tour guides. The restraint of silence focuses us

into a different mindset, much as the long entrance walkway to the Saihoji garden gives visitors an opportunity to leave the outside world behind and prepare for their experience of the garden.

** No commercial group visits should be permitted. Individual visitors should be permitted only by reservation, and in limited numbers.* I have rarely found people on a group tour really connecting with the places they visit. Time is usually limited; there is too much interaction between the people on the tour; and many of them are not really interested in the places they are visiting. There are reasons to make exceptions, but they should be carefully worked out.

** Visitors should be admitted for a minimum visit of an hour and a half. (Hold their shoes hostage!)* It takes time to soak up the spirit of a place. A person trying to cram ten tourist spots into a day doesn't focus on any of them. An hour and a half at one garden is a far more precious experience than ten minutes each at several gardens. If a person can't figure out how to do nothing for an hour and a half, they're not ready to visit a Zen garden.

** Offer visitors tea and steaming towels - make them guests.* When we give and welcome with a different attitude, people respond in kind, and a different relationship develops.

** Offer tea ceremonies, zazen, or whatever talks or introductions you wish, - but don't charge for them.* A 90 minute visit can include several things - the basic issue is the willingness to commit a significant amount of time to one thing, to one place. Use the opportunity to connect with people, learn from them and share with them instead of picking their pockets. Selling salvation doesn't fly.

** Let people know fully what their entrance fees are being used for.* The image one gets after standing for an hour by the ticket booth for a temple or garden is of temple staff inside at their computers playing the stock market with the revenues from entrance fees. People feel different about fees if they know how much goes to maintenance, training, good works, or sake parties. Open finances open minds.

As I traveled in Japan on that visit, the issue of how we relate to places we visit was constantly on my mind. On part of the visit I was traveling with a Lummi Indian friend, who had brought

his flute and spirit drum. He would stop at each waterfall, temple, or shrine and offer a prayer in song or music. It was his offering, and it felt right. For me to do the same would not have felt right - it would have been giving his offering, not my own.

A Japanese friend explained one interesting aspect of money offerings made at temples. The name of the 5-yen coin is "go-en", which has a double meaning of "connection" as well as a monetary unit. "Go-en" were given to the temples - more as a sign of offering and relationship than as a monetary contribution.

As I traveled, I did find many ways to turn my visits to places into something other than tourism. Giving prayers, leaving offerings - of a go-en and a couple of red maple leaves, if nothing else; sitting darshan, giving a bit of time in upkeep of neglected places - each left the place, myself, and other visitors, changed.

At the Ryogen-in, my son and I sat for over an hour at the wonderful but forgotten interior garden, relishing its beauty and energy and honoring its gift. People came by, looked at us, looked at what we were looking at. Their eyes widened, and they sat down, one by one. By the time we left, more than a dozen people had stopped and joined us in a special experience at a place they would otherwise have overlooked. At another neglected but lovely place that we returned to several times, we saw our lonely maple leaves and go-en joined by more and more offerings. It felt like we were replanting seeds - in both people and places, which left all of us a bit transformed.

There are many ways, beyond our individual actions as visitors, to enhance the sacredness of places. We start, of course, with becoming more conscious of our attitudes and practices as travellers and visitors. We can change the management and control of visitor practices at sacred places. We can find ways to control view impacts, noise, electromagnetic fields, and other disturbances which affect sacred places. We can find ways to express the special spirit of a place in facilities for visitors instead of building generic hotels and restaurants. The special spirit of places, such as winter cities, rain forests, etc. can be enhanced and expressed in activities, how we build, and what we refrain from doing. We can restore the spiritual core of our individual and institutional actions. And we can modify attitudes and practices concerning tourism, and eliminate many of its externalized costs.

Walking through a town and hearing the sounds of bells and drums ringing from the visits of pilgrims instead of the sounds of tour busses and cash registers, speaks to everyone that the spirit is rising. It says to all that we and our world are sacred, and that we live and love the fullness that is life. It is our individual actions that create the path that our future will follow. Throughout that trip, I gave prayers for a healing of the the wounds in our spirits and our places, wounds from a world that is forgetting what sustains life. And I saw those prayers begin to form their own answer.



AN OPEN DOOR

AN OPEN DOOR

The architecture we generate from this deeper sense of our world, the people it houses, and the universe and surroundings they together dream into being are far different from what we have today. Such an architecture must create as nature creates - putting infinite love, beauty, and perfection into even the most insignificant thing, and acknowledging and addressing the needs of all.

It must build as a Zen Master - making the enduring to last while allowing the transient to appear and fade away. It must build slowly and with patience and humility, nourishing the growth of the workers and the soil of society as well as the structure; building only what can be afforded now, but building that as well as possible. It must build knowing that comfort and convenience must sometimes give way in order to achieving greater things. It must build with passion as well as reason, with both joy and restraint. It must create for the heart, not for the art; and make a home for our spirits and our dreams as well as our bodies. It must open us to become as the Japanese of old - wrapped in quilts on the veranda, listening to the snow falling silently around us.

To build for eternity is to build with faith in the rightness of a way of life. To build without that faith is to have no tomorrow.

* * *

I've lived where I sit now for more than seventeen years. The mountainside by my open window is a meadow ablaze with wild hollyhock, cat's eyes, foxglove and a haze of lavender grasses. Last month it bloomed with cow parsnips, fringe cups, blue star grass and wild iris. I know what grows where, and to a degree why, and what is edible. I know the winds in their wild and gentle moods. I know the birds and bugs, the fogs, the rains and the ocean. I know the stars and the strengths of the spruce that reach out towards them.

The house I live in has a soul, and is filled with peace. Its demands are small and it holds us indivisibly in touch with the life of this place. Hummingbirds fly in. The fog blows through, and deer nibble the wild roses by the window.

The stone with which I build here is the frozen fire of our earth's core, squeezed out in the passionate embracings of its float-

ing skin to become the mountain under our feet. The gnarled root I grasp to open my door holds within its shape the history of its life's struggles, as the wrinkles and stoops of an old person stand witness to the loves and struggles of their adventures. Raindrops on the trees outside send quivering rainbows across the silence of my room. This place holds close my heart, and I drink deep of it.

Together, we are learning.

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* For more detailed reading suggestions, see reference section of ENVIRONMENTAL DESIGN PRIMER.