

LIVING ARCHITECTURE

Tom Bender • July 2007

Chapter for *Bringing Buildings to Life*

Over the last 30 years, we have demonstrated that we *can* create places with souls—places that are alive, that deeply reconnect us with the rest of Creation. We can again create places that move our hearts, that give us peace and nurture, and that continue to unfold and enrich our lives the more we are part of them. When the pieces are right, everyone entering such places breathes a sigh of relief. Their legs get rubbery and they want to just sit and soak in the energy (Bender 2000b).

These places are filled with a powerful stillness. They act as energized portals to connect us to the rest of Creation. They nurture us – and our institutions – with the breath of life, with the strength of truth. They inform our sciences, and help us transform knowledge to wisdom (Bender 2004a).



Connection, connection, connection. With the rhythms of the earth, the planets, the sun, the stars, the moon, the winged and four-legged. No longer can we stand to be apart. This house started with a love of camping, of being open to life. The living room is half a square. The other half is ocean. Why have a separate bedroom – it's nice to have a soft place to curl up together any time of day.

This architecture comes from a profoundly different place and culture than our currently dominant one. It is based on life-enhancing values, not greed. It is based on a physics that extends into the energetic realms, not just the material ones. It is based in the awe arising from connection with the sacred. It's just natural to build this way when we're not divorced from the rest of Creation.

As opposed to the engineering model central to our present culture, this architecture is an integrative rather than analytic process. Dealing with wholes, rather than fragmenting distinctions, its process is a good model for operation in our new culture.

There has been a wonderful group of architects developing this integrative architecture with little recognition from the profession or academia. Jim Swan's "Spirit of Place" conferences go back to the late '80s (Swan 1991; Swan and Swan 1996). Malcolm Wells' underground buildings and tree-covered bridges (Wells 1981, 1991), Athena Steen's wonderful "Houses That Sing" women-built straw bale house projects (Steen, Steen, and Bainbridge 1994; Steen and Steen 2001), and Kelly Lerner's straw bale projects in China and Mongolia have all developed elements of this "new architecture." Chris Day's Steiner Schools (Day 1990), Sun Ray

Kelley's organic buildings, Ianto Evans' cob building and Natural Building Colloquia are other valuable examples (Evans, Smith, and Smiley 2002)—as are Pliny Fisk's early work with indigenous building materials, the whole Rudolph Steiner architecture movement (Pearson 1994), Baubiologie, and Carol Venolia's "Building with Nature" newsletter, going back to 1989, to name but a few.

This "living architecture" dissolves the demarcation long existing in our culture between architecture and landscaping, between building and "nature," between what we contribute to the design of a place and what is contributed by other life. The sacred, the earth, the sun, the spirit sung in making places are all present and alive.

Living architecture, in a culture aware of the role of life-force energy, fulfills a different role and holds a different focus than one in a materialistic culture. It focuses on place, not space—as our existence extends far beyond a space-time realm. It focuses on relationships rather than structure, as dynamic interconnectedness, not unchangeable rigidity, is paramount. It focuses on meaning instead of aesthetics, as inner rather than surface characteristics are of central value. The "design principles" of materialistic architecture are subsumed by higher priority needs in an energetically-based society.

Take aesthetics. Aesthetics is a visual, surface consideration, comparing to existing standards. It becomes central in a materialistic culture specifically because it is easy to fake. Architecture becomes a "visual art," concerned only with the surfaces of things. How things look, not what they are. Surfaces are what people

are conditioned to pay attention to by advertising. People will buy an apple because it looks beautiful. Pesticide-free, "slightly blemished" apples don't get bought. Aesthetics focuses production of food on looks, not nutritive value. As a result, wheat has dropped from 90 percent protein in 1900 to 9 percent now, and apples now contain 80 percent fewer vitamins and minerals (McTaggart 1992). The nutritional value of architecture has likewise diminished. Beauty and aesthetics are superficial, dangerous, and distracting from far more important things. Even the I Ching warns of that.



Mirrors distort. They focus our attention on outer, rather than inner qualities – often in our groggiest states. A window into a garden can connect us to our surroundings instead of reminding us of a hangover. Hide mirrors until needed – here on the inside of a medicine cabinet door.

As we regain understanding of the interconnection of life-force energy and the sacred, and the role of arts in those realms, we are no longer dependent on artistic concepts of materialistic cultures. In sacred art, many of our familiar concepts are transformed. Beauty, for example, becomes an *offering* to spirit, a *vehicle* for opening our hearts, and *a way of knowing* truth—a special harmony and synchronicity within the oneness of spirit. Within beauty, recognition of truth on a deep level is possible.



Honoring the lives of materials put into the making of our buildings shares the beauty and struggles of their lives, and makes them part of our own. Beach-combing, we often pick up things that jump out and connect with us. Making them part of our places can be good. We don't have to intellectualize why we had an urge to pick them up and drag them home. If they still attract us, use them!

But this beauty is not the predictable harmony tying to past conditions. It cannot and does not relate to artistic conventions, principles, yearly fads, or historical styles. Those are all related to echoing the familiar. The *deeper* essence of beauty is perception of living truth as an ongoing process of unfathomable creation. This is the beauty of inner purpose, coherence, and joyful existence that emerges to our amazement, as we explore and discover new and unfamiliar things. It is a beauty that deepens through unceasing rediscovery, and opens an intimacy among all that it touches.

This beauty is a measure of love. And love is the root force in the manifestation of life. This beauty is not something intentionally creatable. It is a gift of spirit to an open heart.

History gives many examples of these differences. The Temple of Hathor in Dendera, Egypt, is in a 900-ft.-square precinct surrounded by a mud-brick wall 30 to 50 feet thick and up to 80 feet high, containing more than *five million cubic feet* of mud brick. Historians never mention this wall. It isn't stone, it isn't carved, it doesn't call attention to itself. The energy and intention this simple structure embodies, however, gives far greater power to the temple in the enclosure than any of the design elements in the temple itself.

Egyptians often buried mud bricks from older temples under the footings of new ones they were building. It was a device for linking with the energy of the older temple. Other temples, such as Horus at Edfu, carved their genealogy on the temple walls—again, not to prove their parentage, but to connect with the accumulated energy from previous temples that remains accessible in the energy realms. Sanctuary layout, such as at Hathor at Dendera, surrounds the central sanctuary with chapels to other deities in connection with the main one, to connect to their energy. And the yearly ritual calendar up and down the Nile linked the energy of different temples, locations, and deities to each other and to the people (Bender forthcoming 2007).

At the First Cataract of the Nile, archaeologists have revealed superimposed remnants of dozens of mud-brick temples to Khnum, rebuilt again and again and again after destruction by periodic floods over the millennia. With Egypt's skill in masonry construction, all this seems puzzling.

Other cultures have beautiful Origin stories. The Egyptians say simply, "We come from the mud." Mud from yearly Nile floods, and the life-giving fertility it brings, is *truly* the basis of life in that region. Durability, or physical magnificence, or aesthetics of a temple honoring what sustained their life was more than irrelevant. It would have prevented the primary sacred role the temple represented. These temples were *offerings*—in gratitude and celebration—renewed as their fields were, *made from* and *giving thanks to* the mud and its giving of life. This has vital power not possible in cosmetically "pretty" buildings. *Meaning* is important here, not aesthetics.

Inca "architecture" has a similar lesson. Architectural historians may debate the reasons for the geometry of the Intiwatana, the Sacred Rock, or the Slide elements of Machu Picchu. Such aesthetics, however, were never a consideration. It didn't matter what they looked like. The energetic dimension of Machu Picchu and of all its shrines and meditation seats was paramount, not the physical.

What was built was merely retaining walls to give access, and low walls to keep people from falling off of what were the tip-tops of 200-ft-high needles of crystalline white granite. These high points focused the life-force energy of a site already empowered by tectonic pressure against a huge crystalline granite batholith sheared by two fault lines. Those conditions *meant* powerful support for connection with the world of spirit. Aesthetics were irrelevant. The Sacred Rocks were empowered as energetic linkages to the *apu*, or spirits, in the great peaks surrounding the site (Bender 2006, 12).

Similarly, in a Head Start Center I designed some years ago, the kitchen ended up right in the center and open to all the other spaces. This likewise had nothing to do with architectural theory or aesthetics. What it had to do with was the importance of welcoming kids with the smell and promise of good food. It meant giving parents an opportunity to catch their breath with a cup of coffee and peek around the corner to see that their kids are OK without them. It made the cook as central a staff person as teachers—giving hugs, telling teachers what was going on behind their backs. The *right placement* of the kitchen had meaning far more powerful than any aesthetics of how it looked (Bender 2000b, 44).

The truly rampant diseases in our materialistic culture were not of the body, but *diseases of the spirit*. They arose from lack of self-esteem and mutual respect, being of value to our community, or finding meaning in our lives. These diseases manifested in rape, substance abuse, addictions, violence, crime, obesity, isolation, depression, and despair—things possible in any culture, but overpowering in ours. They arose from the root violence of our deepest cultural values—our separation from the love of others caused by denying existence of the spirit world.

Healing those diseases of the spirit requires that we give primacy to the emotional, energetic, and spiritual well-being of all. In our surroundings this requires the honoring of the materials, the elements and forces of nature, the rhythms and cycles of life. It requires limiting our wants to ensure the fulfillment of other forms of life. These are all possibilities inherent in building done with reverence, which comes from love, which comes from intimacy. It involves, in architecture, acknowledgment of the energetic dimensions of people, place, and of all Creation and their inter-nurture. It involves the creation of truly “living architecture” as surroundings that enable, enrich, celebrate, connect, and become part of our truly living in fullness.



Living architecture invites, energizes, relaxes, and connects. It uses and honors native materials and human skills. It draws nurture from, rather than fighting, the climate, the site, the surroundings, the spirit of the culture and place. It starts with the question, “What are the most important opportunities to nurture and enrich our lives?”

People often ask, “Well, what can I do to design this way?” Usually they’re asking, “Where’s a checklist of what to put in a building to make it ‘right’?” There isn’t one, fortunately. Because all that rational stuff can be copied and faked. Architecture, like everything we do, is merely a mirror, reflecting what is inside us. Every time I’ve tried to design something that isn’t part of me, I’ve failed. That is why I talk more about changing how we *are*, not how we design. That’s the root that grows new trees. I’ve written several books giving visual examples of how those “differentnesses” have been manifested in the past, and how design interweaves with life-force energy and the sacred (e.g., Bender 2000b). But *you* have to do it differently than I did. And *I* have to do it differently every time, because it is the living creation of things that is involved, not copying what worked before.

Biology used to be the realm focused on “living matter.” But now, even our physics has to acknowledge that “living” includes buildings, rocks, invisible dimensions of the universe, and realms of pure consciousness shared by all that exists—physical or not. *Wholeness* is perhaps a better way now to think about how to approach design.

Without embracing these realms, “reconnecting architecture with nature” deals only with symptoms, not causes. We, and our architecture, are already part of nature. That’s the first and most important thing to shift in our viewpoint. We just don’t like what that reveals of *our* nature! Rationalistic design and sciences, and their limited concept of “natural processes” *are the problem*. It is our consciousness of *mind*—of rational processes, of logic, of separation, not of unity—that is reflected in “dead” architecture. It is the primal consciousness operating through the realms of qi energy that brings life to architecture.

Institutions based on greed cannot create either a living architecture or a sustainable society (Bender 1993c). An economics that discounts the future cannot create a livable future.² The cities and urban culture we know are creations of a culture whose basic premise is unworkable in the conditions of our future. The possibility, or desirability, of their continuance is uncertain. It seems wise to at least be aware of and explore alternatives, and not assume that the city is the best, the only, or even a possible, sustainable solution.

Our education system trains us to perpetuate and serve this falseness. *It* is fundamentally flawed (Bender 2001d). Our professions also serve this falseness. As we move beyond that world, a living architecture, a living culture, and a truly joyful and creative existence reveal themselves as a natural part of life. It is time, perhaps, to paraphrase the Balinese, and say, “We have no architecture. We only do the best we can.”

It doesn’t take an advanced degree in shamanism to move our architecture into this realm. It begins simply with opening our hearts, letting go of the intellectual, verbal and physical noise of our culture, and listening to what is really needed in every thing we design. It takes form as we honor and celebrate the particular lives of materials, of ecological and human communities, and cycles of the seasons and the stars. It comes to life as we empower the intention to connect deeply and humbly with all that surrounds us and join with it to create an ever newer and ever more wonderful universe (see Bender 2000b, 2000a, 2001a, 2003b, 1986b).

It manifests almost unconsciously, in my own rainy climate, in wanting to celebrate water running off a roof, in collecting and enjoying it in a pond, and then using the pond overflow to recharge the aquifer, avoiding imposing our storm water on others. It manifests in covered walkways where people frequent, and windows positioned to welcome and celebrate the sun on its occasional visits. It is *wanting* to be surrounded by trees and birds, not making a landscape plan, that gets the right things to happen.

The “reconnecting architecture with nature” issues central to biophilic architecture are architectural expressions of a deeper out-of-trueness of a culture. That culture has today entered into a phase of intense change. Indeed, the time of that culture may well be at its end. It is important to biophilic architecture to examine and learn from the forces actively transforming its base culture. It is likely more productive to engage and assist the changes inherent in those forces than to overlay cosmetic changes. Regardless, these forces and the world they lead to can provide a depth of understanding of basic biophilia issues and how to effectively address them which can substantively improve its effectiveness.

Some of those forces include the following:

1. The end of oil
2. Vulnerability of current cultural patterns revealed by 9-11
3. Fundamental changes in the physical sciences
4. Qi energy
5. Sustainable economics
6. Rationality versus wholeness
7. Culture change, deep connection, and the sacred

The End of Oil

Depletion of oil, and consequent change from growth to enduring patterns of culture, power, and architecture is forcing transition to a surprisingly wonderful world of sustainability.³ The falseness that was the economic heart of our culture has exposed itself, and we are beginning to restructure our lives based on deeper and more rewarding goals. Those “new” patterns are profoundly and desirably different from our current ones. (Bender 1986b, 2000a, 2000b, 2001a, 2001b, 2002b, 2002c, 2002d.)

Vulnerability of Current Cultural Patterns Revealed by 9-11

9-11 was not an aberration, but an epoch-changing event. The changes engendered from its revealing the extreme vulnerability of a complex, centralized economy, and the subsequent self-revelation of the abusive, inhumane, fossil-fuel-dependent, and exploitive nature implicit in a global culture based on corporate profiting are only beginning.⁴ Consequent events have also shown fundamental “out-of-trueness,” or “diseases of the spirit” of our culture which have generated the social sickness underlying such events.

Fundamental Changes in the Physical Sciences

Quantum nonlocality is forcing us to acknowledge instantaneous faster-than-light communication throughout *all levels* of Creation. This demands acknowledgment of faster-than-light realms integrally tied to our everyday world; energies totally outside of our conventional physics; an integral consciousness shared by all that exists; and our individual cores existing eternally outside of space and time. Needless to say, this represents a enormous shift for our culture.

Qi Energy

Of particular interest to architecture is the validation this is bringing to *qi*, or life-force energy. It has been the central basis of sciences, world view, and healing arts in virtually every culture on earth except our own. Working with *qi* has been the central basis of the architecture of most cultures.⁵ *Qi* is now viewed as a faster-than-light magnetic standing-wave diffraction energy existing congruent with our space-time physical realm. (See, for example, Tiller 1997; Tiller, Dibble, and Kohane 2001; for introductory overview, see Bender [forthcoming 2007].) It appears to be a central mechanism for the observed nonlocality phenomena.

Research on biochemistry and consciousness has shown that our brains are only one element in consciousness. Schempp, Marcer, Gariaev, and Tertishny’s recent work pushes this to the level of DNA and diffraction patterns associated with *qi* energy and the totally different integral consciousness it manifests. (See McTaggart 2007.)

Qi energy is a central part of the soul of place and art. (See “Sacred Art, Sacred Space” and other articles at www.tombender.org.) The Maya say that there is life-force in everything, but that *we* have to imbue the things *we* create with that energy. This becomes important in building partly because nobody wants a “dead body” sitting around in an otherwise living world. It is important also because of the energetic role of buildings in connecting with the sacred, in nurturing our health, and in enabling our connectedness with other life.

Combined with intention,⁶ life-force energy forms the template upon which our material world takes shape in its wonderful complexity. It is vital to supporting our physical as well as our emotional and spiritual health. It is blocked by artificial building materials, intensive use of electromagnetic devices, and cultural practices based on taking from others (Bender 1998b).

We can locate our buildings on good natural concentrations of *qi*, as the Japanese did with powerful temples such as Kiyomizu. *Qi* energy can also be called directly into a place, enhanced, and worked with by individual intention and group ritual as well as by design. It forms the glue that keeps a community healthy. We are discovering the connections with the spirit world inherent in a *qi*-energy-based world, and how places can be made specifically to work with individual and community *qi* and to act as access points to the spirit realm.



A font formed from a single 4000 pound crystal of columnar basalt was used here to energetically create a gateway into sacred space leading both into the sanctuary and to a sacred garden. It also honors the native rock of the area and the geological processes by which the area was formed.

Qi energy does, and doesn't, show in physical form. Two identical-looking objects may have embodied within them vastly different energy. Qi becomes "visible" more through the choices of what is attempted, the values embodied, the placement of things, the underlying intention immanent in a design. A building that is windowless because the designer didn't care about connection with the rest of nature, versus a kiva or a windowless meditation space focusing on deep connection with spirit, have powerfully different effects on people within them.

Sustainable Economics

A new economics has emerged in recent years. By taking a more wholistic and comprehensive perspective, it has been able to achieve *order of magnitude* (10 times) the effectiveness of conventional economics. Implicit in it is a reordering of our priorities to better achieve our individual and social goals, including the energy, material, social, and psychological dimensions of our architecture. (For overview, see Lovins, Lovins, and Hawkins 1999 and Bender 2002d. See also Bender 2002a, 2003a, 1996e, 1998b, 1996c, 1996a.)

Rationality versus Wholeness

We have been brought up in rational consciousness, and to value rational process as a tool. Many of us have also learned, with some difficulty, its limitations and the value of nonrational processes. Both generally, and specific to biophilia, there are limits to what can be achieved by a collection of largely *rational* beings *rationally* discussing a process based on *love* of life. Love is of the *heart*, not the mind. A rational approach to "life-loving architecture" can't get there. It can show you the gate, but it can't let you inside.

Talking about love is as far from experiencing it as talking about sex is from experiencing it. Love is *becoming One*. Rationality is an analytic making-of-distinctions, or *becoming separate*. There is a vital and core dimension of biophilic architecture that cannot be attained by rational means.

Our space-time-focused rational consciousness blocks the *deep knowing* of the primal *unitary* consciousness that connects every atom of our being to all the dimensions of existence. (See Somé 1994; Bender 2006b, 15.) Reopening this, obviously, opens new vistas.

Learning to set aside our rational compulsions and tap into our shared unitary consciousness gives us important new tools. They help discriminate which material possessions help to attain our goals and which distract from and inhibit our highest goals. They help us design with respect for the needs and aspirations of *all* Creation. And they help us deal with the silences and absences in the places we create—death, illness, age, equity, fairness, the sacred, sustainability—the things our culture hasn't wanted to acknowledge or deal with, but which contribute vital elements to the (w)holiness of the places we make (Bender 1998a).

We created a memorial garden in a church project recently, whose theme is that death is the compost out of which richer life emerges. Its image is a rotting nurse-log—a stump out of which a new sapling has taken root. Honoring death, in its deeper meanings.

Culture Change, Deep Connection, And The Sacred

In the last generation, direct experience of the spirit realms has broken through religious traditions that have outlawed it since the days of the Roman Empire. Reconnecting with the oneness of Creation is bringing new purpose, new meaning, and new richness in our lives. From it, we are beginning to transform our culture to sustain and support the well-being of all life. This is enabling us to reopen our hearts—long closed off from the pain an exploitive society caused us, others, and all life.⁷

As we begin to connect in humility rather than arrogance with the deeper traditions of other cultures, we are finding with joy that art and architecture can fill a profoundly different role than in a culture of material growth and greed. What occurs as we shape our surroundings is vastly different in a sacred culture. (See Bender 2006a, 2006b, 2001b, 1991, 1996d.)

In an energy-based culture, co-creation with other consciousness becomes a powerful process of design, bringing energy and rightness into a place beyond what we can consciously conceive. In this church, the design was shifted by spirit guides into an inner focus rather than looking out into a garden – more powerful for meditation.



For example, in discussing pottery-making in the Dagara tribe, Malidoma Somé (1994) talks about more rewarding alternatives than working to get money to satisfy our wants. Most work in the Dagara village is done collectively. The purpose is not so much the desire to get the job done but *to raise enough energy* for people to *feel nourished by what they do*. The nourishment does not come *after* the job. It comes *before* the job and *during* the job. “We are nourished first,” he says, “and then the work flows out of our fullness.”

The indigenous notion of abundance that underlies such work practices is profoundly different from that in the West. Villagers are interested not in accumulation but in a sense of *fullness*. Abundance, achieved through that sense of fullness, has a power that takes us away from the worry characteristic of our culture. So even the process associated with the making of art is profoundly different.

Sacred Space, Sacred Place⁸

All art changes dramatically as we move into this deeper realm. The sacred, we are rediscovering, is a vital part of everyday life. It underlies, but is distinct from, religious expressions of the sacred – which often tend to separate us from others with different traditions and from personal experience of the sacred.

The sacred emerges simply in our lives. Whenever we allow ourselves to know someplace, someone, or something intimately, we come to love them. We see among their inevitable warts and wrinkles the special and wonderful things that they are, and their existence becomes as precious to us as our own. Loving them, we come to hold their existence inviolate —or sacred—and any action that would harm them becomes inconceivable. Loving them, we open our hearts. And in that open heart we discover the oneness of all creation. Openness, intimacy, knowledge, and love are the essential foundations upon which any healthy existence and any true sustainability must be built.

A church can be sacred space. But so can a bank, a bathroom, a place of eating or of community. It depends on our intentions, and how we design the place to reveal the sacred interconnectedness of our lives.

Even institutional structures such as banks can be transformed when we touch into the original heart of the institution. In the case of a community bank, as a means for a community to prioritize the manifesting of dreams. It also honors the great forests that cover the region, and the skills of the community woodworking industry. The design of this project started with the unique Pacific NW “nurselog”, which became the theme of the visible structural elements.



The purpose of sacred art is to bridge between our finite world and the infinite—to activate and carry us into that realm, and to help us understand the dance of creation in the realms of spirit. It is an avenue through which to connect with wondrous unknown things, and to transform our own souls. Its goal is revelation.

The outer product, as in Navajo sand painting, Tibetan sand mandalas, or Inuit scrimshaw, is often only by-product—forgotten, discarded, or carefully erased after the process of creation in communion with the sacred. The true goal is the *inner* product—the transformative re-experiencing of the oneness of all creation, and the specific accessing of healing, understanding, and personal growth that occurs in the process. The outer product is a record of, and sometimes a vehicle for, that experience, and at times a means that can assist others with the same process.

This is true architecturally as well. Temples in certain Indian traditions were left untouched once built, to return to dust in their own time, allowing new opportunity for the creative process. The Ise Shrines in Japan are built with relatively impermanent techniques. For more than 1,000 years, they have been built, consecrated, left untouched for 20 years, then rebuilt and reconsecrated on an alternate site. The importance, in this case, lies in the cyclic ritual process of continual reinvigoration of the skills, patronage, and rituals of honoring the forests, trees, tools, and expertise through which the building arts continue to give to the sacred (Itoh 1965).

Sacred art (or architecture) cannot be meaningfully evaluated from outside. It requires participatory experience to even be aware of the realms within which it is operating. Brad Keeney, an anthropologist who has trance-danced with the Bushmen for many years, is emphatic that an inexperienced outside observer has *no* means of comprehending what is occurring in the process. Not knowing that American Indian “shuffle-dancing” or Sufi dancing can be trance-dancing with the ancestors, or that the Maya and Bushman community trance rituals actually *do* bring the ancestors from the spirit world into their village ceremonies leaves us tragically blind to the functions of their art, dance, architecture, and music (Keeney 2003). We need to experience such ways of connecting with the spirit realms in order to have any concept what it is like to live *in spirit*. This does not preclude objective evaluation of what is experienced, but gives an essential experiential basis from which to understand.⁹



Sacred space is an energetic, not material, phenomenon. It is a place of linkage between our material world and the world of spirit. It may have material attributes that we see as sacred places, or it may exist almost entirely on an energetic level. In cultures such as the Huna in Hawaii, or in the Amazonian rain forests, climate does not require fancy enclosures, and direct connection with spirits in plants, or rocks, or natural places is the norm. (See Amaringo and Luna 1990; Gebhart-Sayer 1985; Wesselman 1995, 1998, 2001.) Not much “architecture,” but the energetics of sacred space are scrupulously adhered to.

Sculptures in the Cave Temples of Ellora, India, give powerful connection to the sacred. Special geometries, coherence of the rock, tantric trance-work, ritual empowerment with life-force energy and other techniques work together to give this capability.

Conditions of physical space, and energetic dimensions attached to physical space or symbols, may influence and call into being sacred space, but the material is not the primary operational level. The *energetic* or spirit realm is the operational level of our universe, where things manifest into material existence, where our eternal energy selves exist, and where we connect directly with other life and other existence.¹⁰

Indeed, the primary operational dimension of our visible universe is turning out to be magnetic/electrical plasma, directly linked to the qi energy standing-wave diffraction energy realm.¹¹

In culture after culture, rocks, places, statues, and buildings are *empowered*, or energetically linked to deities, spirits, ancestors, healing powers, or specific energetic realms. That role is the primary function of most of the “great architecture” of the world, and its design occurs in the energetic realm rather than the physical (Bender 2000a, 2006b). In denying the existence of life-force energy (*qi, prana, mana, baraka*, etc.), we have kept ourselves totally blind to this dimension of architecture.



Biophilia

Interestingly, my dictionary defines *bio-* as “relation to or connection with life, vital phenomena, or living organisms.” Biology is a distant third there. *Life* has far more involved than planting trees around a building. *Vital phenomena*, amazingly, is the qi-energy realm rearing its wild head. And then, of course, *philo* is defined as “loving.” Loving the livingness of reality. And that doesn’t operate in the “rational” world. This means it’s important to focus on the vital *qualitative* changes involved in biophilia, rather than merely quantitative micro-tuning.

More research and documentation in regards to the importance of deeper connection with the rest of nature in our buildings and communities is both needed and welcome. Its true value is low, however, if not also based on experience in nonrational process. It is also important that *real, meaningful, and deep* connectivity be included in the research, rather than just “pictures of nature” pinned to the end of a patient’s bed, or fake skylights giving “illusions of nature.” A real skylight costs no more than a fake one, can reduce rather than increase energy use, and connects a patient with reality, not illusion. It is mind-boggling to see illusions promoted as solutions. There is a profound difference between the two, in spite of what today’s culture would wish us to believe. It is important to test and compare environments where “nature” is truly doing the healing, not just pin-up illusions.

* * *

Living Architecture is part of a living culture—a transformation to a nourishing and integrally connected universe with profound new potentials. This is indeed a new realm we are entering, and a wonderful time to be alive!

Notes

1. This material diverges significantly from that presented in presymposium papers, in my symposium presentation, and in the chapter originally prepared for this book. Postsymposium discussions indicated issues and perceptual gaps that were more urgent to present. PDFs of the presymposium papers (“Sacred Art, Sacred Space”; “Living Architecture”; and “Places Touching Spirit”), with images, are available at <www.tombender.org>, along with many other papers referenced below.

2. “Foreclosing Our Future” (Bender 2002c) shows the falsifying role of PNV accounting in economics that discounts the future. “Fixing Failed Forests,” (Bender 2002b) shows the implications in forestry of using holistic economic analysis. “Learning to Count What Really Counts” (Bender 2002d) gives the comprehensive picture of that economics.

3. See, for example, Bender 1973, 1975; Bender et al., 1974. Current “peak oil” discussions largely repeat what was assembled in this seminal period. Global warming is merely the flip side of the same issues.

4. See “True Security (Bender 1982). “The End of Nuclear War” (Bender 1986a) anticipated events such as 9-11 as well as the profound need for and implications of positive change implicit in such events and their causes. “Ten Easy Pieces - of a Better World” (Bender 2001c) lays out ways of dealing with some of the root issues. See also Bender 2004b, “We Have Found the Terrorist—The Terrorist Is U.S.”

For an overview of the implications of current corporate guidance of our culture, see the following:

Race for the World (Bryan et al. 1999). A gleeful layout of the strategies of consolidating the world’s wealth in the fewest possible hands.

Confessions of an Economic Hitman (Perkins 2004). Most people, including myself until recently, have been unwilling to believe the intentionality of exploitation of people and planet because the system is so beautifully invisible. False economic projections (by Perkins and others), then unrepayable “development” loans (which also pay for a military in each country to “protect investments” and control the people), then the IMF and World Bank’s murderously exploitive “Structural Adjustment Programs”—all of which lead to:

Planet of Slums (Davis 2006). Slums now constitute almost 80% of urban populations in developing countries—equal to a third of the global urban population. They represent unimaginable poverty, and result from conscious exploitation. That exploitation pays for the urban amenities you enjoy. The details here will probably make you sick.

Learning to Count What Really Counts (Bender 2002). I’ll add this in here, as it’s hopeful, short, easy to read, and lays out the amazing 10-fold economic benefits of economics based on ecology, systems, qi energy, and the sacred. Unlikely? There is plenty of data supporting it. Can a forestry economics of 40-year tree harvesting rotations to be honest when it takes 20 years to even fully capture the sunlight falling on the ground?

5. For comprehensive references to the underlying aspects of qi energy, see *Building with the Breath of Life* (Bender 2000a), which also provides details of working with chi energy in design. For historical examples, see Bender (2000a), Chapter 3. *Silence, Song and Shadows* (Bender 2000b) provides a right-brain introduction to working with qi energy in design, and our need for the sacred in our places.

The DVD/video *Cave Temples of India* (Bender 2004a) provides a historical case study of sacred sciences based on qi or prana, and their use architecturally in creating powerfully interactive places. *Building Architecture of Sthapata Veda* (Sthapati 2001) gives an outline of the South Indian sacred sciences. *Principles of Composition in Hindu Sculpture* (Boner 1962) covers the mandalic geometries used; *Tantra: The Cult of the Feminine* (Van Lysebeth 1995) and *Yantra* (Khanna 2003) cover the practices involved.

6. For a sensitive discussion of the role of intention, see Chopra (2003). For its role in working with qi, and in architectural applications, see Bender (2000a).

7. For some of the unexpected dimensions of these changes, see Bender 1999, 1993b, 1993a, 1992, 1987. For a personal account of such changes, see “Shedding a Skin That No Longer Fits” (Bender 1996b).
8. See “Sacred Art, Sacred Space” at www.tombender.org for images and more detail.
9. And with quantum nonlocality, there is no such thing as an objective, noninvolved observer.
10. See Tiller, Dibble, and Kohane 2001; Wesselman 1995, 1998, 2001. “Silence, Song and Shadows” (Bender 2000b) gives succinct examples of how to address these spiritual connections with the rest of nature in the design of our surroundings.
11. Space research is bringing back emphatic evidence that the primary order of our universe is electric/magnetic-based plasma, not neutral-charged material. See Talbott and Thornhill, 2007; and Thornhill and Talbott, 2007.

References

- Amaringo, Pablo, and Luis Eduardo Luna. 1990. *Ayahwasca Visions*. Berkley, CA: North Atlantic Books.
- Bender, Tom. 1973. “*Living Lightly*.” Monograph.
- . 1975. “*Sharing Smaller Pies*.” Monograph.
- . 1982. “True Security.” *Rain*, October–November.
- . 1986a. “The End of Nuclear War.” December.
- . 1986b. “Putting Heart into Our Homes.” *Yoga Journal*, September.
- . 1987. “Sacred Building.” Spirit of Place Conference.
- . 1991. “Making Places Sacred.” In *The Power of Place*, edited by James Swan. Wheaton, IL: Quest Books.
- . 1992. “In Beauty We Walk.”
- . 1993a. “Cities of Passion, Cities of Life.”
- . 1993b. “Towards a Sacred Society.” *Urban Ecologist*, Spring.
- . 1993c. “Transforming Tourism.” *Earth Ethics*, Summer.
- . 1996a. “Big Changes Are Easier Than Small Ones.” *North Coast Citizen*, September.
- . 1996b. “Shedding a Skin That No Longer Fits.” *In Context*, no. 44, July.
- . 1996c. “Some Questions We Haven’t Asked.” *In Context*, no. 44, July.
- . 1996d. “The Spiritual Heart of Sustainable Communities,” *In Context*, no. 44, July.
- . 1996e. “Unexpected Gifts of Sustainable Community.” Solar Energy Association of Oregon.
- . 1998a. “Ending the Silences: Changing Community Chi.” September.
- . 1998b. “It Gets Even Stranger from Here On.” *Building with Nature*, no. 19.
- . 1999. “Our Need for the Sacred in Our Surroundings.”
- . 2000a. *Building with the Breath of Life*. Manzanita, OR: Fire River Press.
- . 2000b. *Silence, Song and Shadows*. Manzanita, OR: Fire River Press.
- . 2001a. “Hospice: Gateways of Life and Death.” *Healing Ministry*, November–December.
- . 2001b. “Portals to the Spirit World.” *Shaman’s Drum*, September.
- . 2001c. “Ten Easy Pieces—of a Better World.” *Daily Astorian*, October 31.
- . 2001d. “Terminal Ed: Our Schools Are Dead.”
- . 2002a. “The Economics of Wholeness.” *Magical Blend*, November.
- . 2002b. “Fixing Failed Forests.”
- . 2002c. “Foreclosing Our Future.”
- . 2002d. *Learning to Count What Really Counts*. Manzanita, OR: Fire River Press.
- . 2003a. “Economics, Architecture, and Banking.” *Green Money Journal*, April; *Sustainable Business Insider*, June; GREEN MONEY JOURNAL “Greatest Hits” issue, Winter 2004.
- . 2003b. “Putting Heart Back into Our Homes.” In *Another Kind of Space*, edited by Alan Dearling with Graham Meltzer. Enabler Press.
- . 2004a. *Cave Temples of India*. DVD/VHS. Manzanita, OR: Fire River Press.
- . 2004b. “We Have Found the Terrorist—The Terrorist Is U.S.” October.

- . 2006a. “Sacred Art, Sacred Space.”
- . 2006b. “Places Touching Spirit.”
- . Forthcoming 2007. *The Physics of Qi*. DVD/VHS. Manzanita, OR: Fire River Press.
- Bender, Tom, and Joel Schatz, with Office of Energy Research and Planning, Governor’s Office, State of Oregon. 1974. “Cosmic Economics.”
- Boner, Alice. 1962. *Principles of Composition in Hindu Sculpture*. Leiden: Brill.
- Bryan, Lowell, et al. 1999. *Race for the World*. Boston MA: Harvard Business School Press.
- Chopra, Deepak. 2003. *The Spontaneous Fulfillment of Desire*. New York: Three Rivers Press.
- Davis, Mike. 2006. *Planet of Slums*. London/NYC: Verso.
- Day, Chris. 1990. *Places of the Soul*. London/S.F.: Aquarian Press.
- Evans, Ianto, Michael Smith, and Linda Smiley. *The Hand-Sculpted House*. White River Junction, VT: Chelsea Green.
- Gebhart-Sayer, Angelika. 1985. “The Geometric Designs of the Shipibo-Conibo in Ritual Context.” *Journal of Latin American Lore*.
- Itoh, Teiji. 1965. *Japanese Environmental Design*. Mss.
- Keeney, Brad. 2003. *Ropes to God*. _Philadelphia PA_: Ringing Rocks Foundation.
- Khanna, Madhu. 2003. *Yantra*. Rochester VT: Inner Traditions.
- Lovins, Amory, L. Hunter Lovins, and Paul Hawkins. 1999. *Natural Capitalism*. Boston: Little, Brown.
- McTaggart, Lynne. 1992. *What Doctors Don’t Tell You*. New York: Avon.
- . 2007. “DNA Double Helix: Our Body’s Recording Studio and Radio Station.” *Global Intelligence*, February.
- Office of Energy Research and Planning, Governor’s Office, State of Oregon. 1974. *Transition*.
- Pearson, David. 1994. *Earth to Spirit*. San Francisco CA: Chronicle Books.
- Perkins, John. 2004. *Confessions of an Economic Hitman*. San Francisco CA: Berrett-Koehler.
- Somé, Malidoma. 1994. *Of Water and Spirit*. New York NY: Tarcher/Putnam.
- Steen, Athena, and Bill Steen. 2001. *The Beauty of Straw Bale Homes*. White River Junction, VT: Chelsea Green.
- Steen, Athena, Bill Steen, and David Bainbridge. 1994. *The Straw Bale House*. White River Junction, VT: Chelsea Green.
- Sthapati, V. Ganapati. 2001. *Building Architecture of Sthapata Veda*. Chennai, India: Dakshinaa.
- Swan, James, ed. 1991. *The Power of Place*. Wheaton, IL: Quest Books.
- Swan, James, and Roberta Swan. 1996. *Dialogs with the Living Earth*. Wheaton, IL: Quest Books.
- Talbott, David, and Thornhill, Wallace, 2007. *Thunderbolts of the Gods*. DVD. Portland OR: Mikamar Publishing.
- Thornhill, Wallace, and Talbott, David. 2007. *The Electric Universe*. Portland OR: Mikamar Publishing.
- Tiller, William. 1997. *Science and Human Transformation*. Walnut Creek, CA: Pavior.
- Tiller, William A., Walter E. Dibble Jr., and Michael J. Kohane. 2001. *Conscious Acts of Creation*. Walnut Creek, CA: Pavior.
- Van Lysebeth, Andre. 1995. *Tantra: The Cult of the Feminine*. Newburyport MA: Weiser.
- Wells, Malcolm. 1981. *Underground Designs*. Amherst, NH: Brick House Pub.
- . 1991. *Gentle Architecture*. New York: McGraw-Hill.
- Wesselman, Hank. 1995. *Spiritwalker*. New York: Bantam.
- . 1998. *Medicinemaker*. New York: Bantam.
- . 2001. *Visionseeker*. New York: Bantam.