

**Healing Silence:
The Architecture of Peace
by Christopher Day**

Healing is a process that can only take place from within ourselves, but this process can be triggered and supported by things and actions outside us. We can, therefore, talk about healing environments and healing qualities of environment. Of all the healing forces in the God-given world around us, silence is perhaps the greatest. We have seen the health-giving effects of processes, activities and material qualities, but silence is neither process, activity or object. It is... silence.

But what is silence? Is it complete absence of sound? Where can we go in the world and find absence of sound - no wind in grass, no distant link of rock, no lap of water? Sound means life; in quiet places, the ears sharpen to listen for it. We even start to hear the sounds of our own body.

There is a lot of difference between a resting and a dead body. A dead animal looks different in the landscape to one lying down; the wind plays with the hair as a lifeless surface of something immovable. This is the silence of death. To experience literal silence you have to go into a special sound-absorbing chamber - it is a strange feeling. Sensory deprivation experiments have shown that if all the senses are denied stimulus, the life processes are brought into a crisis so acute that within seconds a risk of life develops. Literal silence is not life supporting: it is the opposite.

Or is silence the absence of noise? Even noise is hard to define: is it insects on a quiet summer's day, waves on rocks, wind in trees or over snow? But there is plenty more noise than that around us. The average house is full of noise-producing equipment - refrigerators, deep freezers, central-heating furnaces and pumps, ticking electric clocks and so on, all dead mechanical sounds, not sounds of life like speech, music, crackling fire, wind in the chimney, rain on glass. Out of doors cities have constant background noise you cannot get away from. In the countryside how far do we have to go not to hear a hi-fi, car, chainsaw, milking-machine or aeroplane? When you listen, almost everywhere within easy access of where we live there is mechanical noise most of the time. In this century silence - freedom from mechanical noise - has become a threatened species, extinct in many areas.

We live in a noisy world: whether we notice it or not, noise affects us. Physiological effects, starting at 65 dBA with mental and bodily fatigue, are well established (SV Szockolay, *Man-environment sonic relation*, [Course notes: E 13] Polytechnic of Central London, p. 9.). This is typical city noise level (Typical values, 10% of the time 7am-7pm all use zones in Inner London - *Traffic noise: Urban Design Bulletin 1*, GLC, 1970). Main-road kerbside noise, typically at 75 dBA, is over twice as loud and motorways nearly double again at 83 dBA (Every increase of 10 dBA represents a doubling of apparent loudness). Street noise can reach 90 dBA causing heart stress (Ian McHarg, *Design with Nature*, Doubleday/Natural History Press, New York, 1971, p. 195). Much lower levels, such as background fan noise, interfere with sleep, digestion and thought (David Wyon, *Det Sunda Huset*, p. 196). We easily become conditioned to low-level noise and don't notice it at all. That it causes tension is however demonstrated by the great relief we feel whenever it suddenly stops.

Noise, in other words, is harmful to human health; it is a recognized environmental pollutant. There are well-established techniques for noise-abating design. Distance, obstruction (for instance by walls, banks, buildings), absorption (for instance by vegetation, which can also act as a fume filter), zoning of sensitive and tolerant areas and masking (for instance by rustling leaf, moving water or living sounds) can all mitigate outdoor noise. Where aggressive movement such as fast traffic is the source of noise, it often helps to screen it visually. Intermittent noises such as trains on the other hand are less of a shock if you can see and hear them approaching. Noises from living sources such as school playgrounds can be less irritating if you can see what is going on. Outdoor noise penetrates indoors mainly through openable windows. When noise and air pollution sources coincide, as they often do, windows

facing this way can be sealed (and double-glazed, absorbent lined, etc.). Indoor noise can be reduced with absorbent materials, room shape and control of noise-making at source.

There is of course more to noise control than I have here outlined, but however thorough our measures we cannot hope to achieve silence. With, for instance, triple glazing and absorbent indoor surfaces we can make acoustically dead environments, but that is not the same as silence. Yet silence is something we need to have access to, for while noise is stressful silence is healing.

Where in the world can we go to find this sort of silence? And for those who can afford the expense, how much noise does travelling there cause? Once place to go is within oneself. Many seek inner silence through meditation, but it is not easy to keep inner noise at bay. But if we are to design healing environments we need to create qualities of holy silence that are accessible for all, not just for globetrotters and meditators but especially for those who lack the outer or inner means.

Even if we can't *define* silence, we can recognize it. Gentle, unobstructive, calming, life-supporting, holy sounds allow us to be quiet within: eternal sounds, sounds of the breath of air, the quiet endlessness of water - definitely not sounds of the ephemeral moment however calming. Cows chewing the cud and bumble-bees droning are calming, almost soporific, but they are not eternal. Silence, tranquillity and the eternal have a lot to do with each other.

It's even harder to define silent architecture but likewise easy to recognize it. There is dead silent or living silent architecture. To create living silent architecture we need to understand and work with the essential qualities of living silence: the gentle, the unobtrusive, the tranquil, the eternal, the life-supporting, the holy.

As a foundation of tranquillity we need balance. This often means focus and axis. Symmetry is rigid, rigidity excludes life. Balance is life filled and breathes from one side to the other. Balance is also a matter of scale and proportion. Rooms can be quite small - monks' cells were often little more than the space to lie and stand in. The smaller a room is, the more modest, plain, ascetic and quiet it can be - furniture is an intrusion. Such a room is for a specific purpose, but not a silent place *within* the stream of daily life. If the proportions, textures, light and other qualities are not just right, a small room is a trap, a larger one can often get away with it although you can start to rattle around, and its silence can begin to feel empty. Too large a space can be too awe inspiring. The human being is too insignificant beside the power of architectural scale. Those cathedrals that are places of silence (and there are not so many, for more are places of awe) are not the largest ones, their scale reduced by the way they are built of tiers of elements. The gestures of the Romanesque ones tie them down firmly to the earth. Imagine such a cathedral plastered and painted uniformly - in simplicity its size would be too strong - certainly it would not be silent!

Proportion determines whether places can be at rest or whether they have a directional dynamic and the feeling that goes with it. Awe, expectation or soothing can be produced with upward, forward or all-round horizontal emphasis. Proportions at balance reflect balance in the human body and induce a mood of balance in the soul.

Proportions that are too high, too wide, too long - like lines that are too dynamic or spaces that are too strongly focal - risk being too compelling. I want to leave the occupant free. I try to be careful, therefore, not to have too strong an emphasis. Indeed for a place of silence I try to underplay the architecture generally so that it is not intrusive. This means a certain simplicity. Simplicity, enshrined in the modern movement, is often experienced by non-architects as boring. Some buildings need to be less simple, some more so. Places of silence need to be simple - but how can reverent simplicity be achieved without boredom?

I approach simplicity like this: the space can generally be entered and focused axially but slight variation from one side to another, slight ambiguities in form and, most particularly, living lines (flare at the base of the walls, curved qualities in the almost straight and straight in

the curved and so on) give the space a quality of life - so too with straighter, but not colliding, lines does the texture of wood, even if its colour variation is muted by stains or lazure veils. This life is further enhanced by the light. Where the windows are placed, how they are shaped, how the light is quieted - for instance divided by glazing bars reflected off splayed windows or filtered through vegetation - can enhance the interplay between daylight, sunlight and reflected light which is so crucial to the mood of a room.

Light needs texture to play on. Again I am looking for a life-filled, but unobtrusive, gentle texture. I commonly use hand-finished render (9 coarse sand: 2 lime: 1 cement, applied not by float but with a round-nosed trowel so as to obtain gentle undulations without tool score marks, finished with a [gloved] hand when it has started to firm upon the wall [about an hour later but depends on conditions]). This can bring gentleness, life, conversational softening of changes in plane and - because of the absolute necessity that the plasterer is aesthetically involved - soul is impregnated into the room. This certainly is not the only material, nor is it everywhere appropriate, but where it is it is one of my favourites. Being applied to block-work and requiring more sensitivity than skill, it has the additional advantage of being cheap and well-suited to gift work or self-build.

I've been in spatially simple rooms which lack any life in their texture. Smooth-plastered, smooth painted rooms, even the woodwork gloss painted. To be alone, quiet, in such a room is to be in a prison. You *need* a radio, hi-fi or television for company to fill the empty space, to bring a kind of life. I aim to make rooms in which you do not need these supports, rooms that will be alive with sunlight or candlelight, birdsong outside or with grey dawn, twilight and silence.

Texture-less rooms need wallpaper or colour schemes to give interest, to paint a superficial individuality upon their surface. I use colour for a different function, so different that when a client says, 'I have these curtains, I want a colour scheme to go with them', I am at a loss to know what to do: I use colour to create a mood. Yet often, for silence, the indoor colour I use is white. White, justifiably, has a bad reputation; it's the colour people use when they can't think of anything else. But it is the colour I use when I don't *want* anything else, when I want silence. Some people think white is not a colour, but the right white (there are many - think of the difference between lime wash, emulsion and gloss paint, not to mention all the different colours of white) can sing! White is the mother of all the colours - it has in it all the moods that each individual can develop as an individuality - white can be calm, life-filled, joyous, timeless, whereas blue can only be calm and risks being cold or melancholic; orange can be full of life, welcoming, but risks being too forceful, even discordant; yellow can be joyous but risks being too active; I have never seen more eternal qualities than in Vermeer's paintings, yet brown risks being too heavy, dark, oppressively entrapping.

However, where the room or window shape is rectilinear with smooth surfaces and sharp arises, I would certainly not use white—it would be altogether too hard. In such a room white would emphasize any noise. Research on colour and perceived noise does indeed show white rooms to sound loudest (Kenneth Bayes, *The Therapeutic Effect of Environment on Emotionally Disturbed and Mentally Subnormal Children*, Gresham Press, 1970, p.33). When we use it we therefore need to be particularly attentive to qualities of shape, texture and light or indeed it will seem noisy. The quietest colour for a room has been found to be purple. In ancient times purple was not a colour anyone could use, its use on clothing restricted to a certain spiritual rank. Even today, less sensitive to the 'beings of colour' as we are, it doesn't seem quite appropriate for everyday use; a purple kitchen doesn't feel quite right.

I use particular colours when I wish to emphasize a particular mood. Red can bring warmth, stimulation, passion and aggressiveness (*Ibid.*, p. 32). With all colours, associative qualities such as coolness with blue are bound up with physiological effects upon the organs and metabolism. Yellow for instance can bring light to a sunless room; it can also bring vitality and cheerfulness. Green is calming and refreshing; it is the colour of surgical gowns and actor's 'greenrooms'. The meditation room (shown earlier) is to be lazured in bluish purple.

In therapy, coloured light has been shown to be more effective than pigments (*Ibid.*, p. 32). Coloured windows only feel at home in specific sorts of place (such as churches) but coloured light can be achieved by reflection. Opaque colours are forceful and dominating, translucent lazure is therefore both more acceptable and more effective than opaque pigment. Brick tile and timber with dark rich weavings bring warmth. We even designed a theatre to be painted inside in grey (not a flat grey but one made up of thin veils of red, blue, green); this was also to be a focal, unobtrusive space, but not a place of silence!

Similarly I try to make silent, sacred rooms plain. These rooms need to be somehow above any more specific mood. When the circular meditation chapel (see page 73) was nearing completion it looked so attractive inside with its exposed radial rafters that many people wanted them left like that. I felt that they created a warm cosy atmosphere with noticeable architecture, appropriate for a living room perhaps, but not for a chapel, especially not for the silent, spirit--renewing focus of a retreat centre. I offered to pull the ceiling off if people didn't like it: fortunately I didn't have to.

In the same way that colours can be too individual so can material. The difference is that certain materials are the right materials for the place and it doesn't feel right - or may not be practical -to use other ones. In some countries brick, stone or timber is the only suitable choice and I have experienced wonderfully sacred places in diverse materials. Generally there needs to be very few different materials. Often I use only three: walls and ceiling of the same finish, running without break into each other and unified by a single uninterrupted colour; wooden doors and windows, unpainted but possibly stained or translucently lazured, and a texturally inviting floor of a colour to warm reflected light - usually wood, brick, tile or carpet. Unity of materials and colours has a quietening influence and for that reason they need to have sufficient life in them or the whole place will slide into lifelessness.

The shapes, forms and spaces need therefore to have gentle movement. The static resolution of the right angle lacks life. Dramatic or dynamic forms and gestures have an excess of force. To have both movement and stability, gesture needs to answer gesture in a life-filled, harmonic conversation - not repetition but resolution, transforming what the other says so that it is just right for its particular location, neighbours, material and function. Quiet harmony is the product of a quietly singing conversation.

Perhaps the most essential quality is timelessness. A painting can be timeless, so can a building. Obviously the painting has to avoid anything that finds its resolution in time outside the moment - like someone kicking a ball. The same with a building. This doesn't only mean qualities which are both traditional and modern at the same time; it also means resolution of the sculptural forces - of gesture, of gravity, of structural and visual tension. Dead things are stable, immovable, but they are left behind by time. The eternal lives in every moment.

It can help if one practises timelessness exercises. I like to paint uneventful balanced landscapes (of the soul imagination - not real ones) bathed with peaceful light, trying always to find that which is eternal, not momentary. I have mentioned the principle of balance, giving stability and permanence without rigidity. Buildings which belong in a place, which are rooted in the earth, can be developed to be timeless, eternal. Buildings which don't never can be. In addition to the shaping of walls and ground, as discussed earlier, planting at the building-ground junction and climbing plants on walls can help.

As far back as I can remember I have looked closely at how rocks rise out of the earth. Some are half buried boulders, some are the protruding bones of the earth. Some mountains are the earth itself pushed through or draped with covering but now at repose. It is where they are at the firmest rooted and least dramatic that they are the most eternal. This as much as anything - the landscape I have grown up with - has sharpened my feeling for timelessness.

Other people in other surroundings may not be so lucky. For occupants therefore this means creating these qualities in the buildings we design. For designers it means developing sensitivities through exercise, observation and focused concentration. To be timeless

something needs to feel inevitable, right - so much so that we can no longer imagine something other than the way it is.

The building for instance needs to be in the inevitable place on the site. That is not always easy! Sometimes a site asks for something somewhere, sometimes it doesn't. The hardest site I have ever had was flat, featureless, with only short-lived caravans on it; nothing to grow from, nothing to create a place between, nothing to relate to. Usually, however, listening to the place will give one a progressively strengthening conviction that this building should be *here*.

Buildings are not just in isolation. As we design them, we are also concerned with the whole entry experience. Externally we can develop this experience progression to enhance the inevitability of the building we eventually reach. Indoors we can carry this preparatory experience further until we reach the place to stop - a sanctuary of rest. We can enhance the experience by making physical thresholds wherever there is a change of mood by using darker, lower, narrower passages, cloisters, tree-overhung paths, leading to a portal - a substantial door with a heavy latch, which one is *conscious* of opening. Then, with a conscious step, one passes into another place, a place to stop - the place of calm, protected, enclosing. A glass box is not a place to find inner calm in silence. Its function is to wash one inwardly clean with the forces of the landscape. In more densely settled surroundings one can feel a bit as though in a display cage, certainly not at peace!

This progression of experience is made up of the same vocabulary that is available in most homes or places of work: thresholds, emphasized by portals, doors and latches, places to move in and places to stop. It can be enhanced by making these more conscious. I like hand-made wooden latches that you really feel and with a movement that gives you a conscious bodily experience of opening or closing a door. I like low (or broad so as to have a lower proportion) doorways with arched or shaped heads, low, dark, arched or shaped ceiling passageways, slightly twisting, leading to quiet light-enlivened (not necessarily bright, and certainly not dramatic) rooms of a stable proportion.

These daily rituals, repeated thousands of times, can have healing effect. Even in places of work, and especially in homes, architecture has the function of providing rest for the soul.

When we come home from a stressful day, the home and the night are for renewal. If they don't provide it, stress builds up on stress and physical or psychological collapse follows. When we go to bed at night we pass into another world and are reborn each morning. How much care and worry can be washed away by sleep! We enter each new day with hope - how otherwise can we survive?

But what haven of calm do we come home to when its inmost sanctum is full of mechanical noise - TV perhaps? How do we bring the nightly renewal of rebirth each morning when we are wakened by an alarm-radio? It's not just people's habits I am talking about, but rooms that *need noise to keep you company*. Many houses, many rooms *need* noise. If we are going to try to provide places where people can live in health, places where people gain rather than lose strength, grow rather than wither, we need to make places where silence can be a welcome guest, where silence can fill the space with its renewing, healing power. This doesn't just mean good sound insulation; it means places of silent quality - to sight, touch, smell and so on - not just noiseless places, but places of healing silence.

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He lives, works and gardens in the land of his boyhood -- Wales, UK -- with his wife and

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To learn more about Christopher Day and his community building projects, please visit www.webcom.com/penina/spirit-and-place