

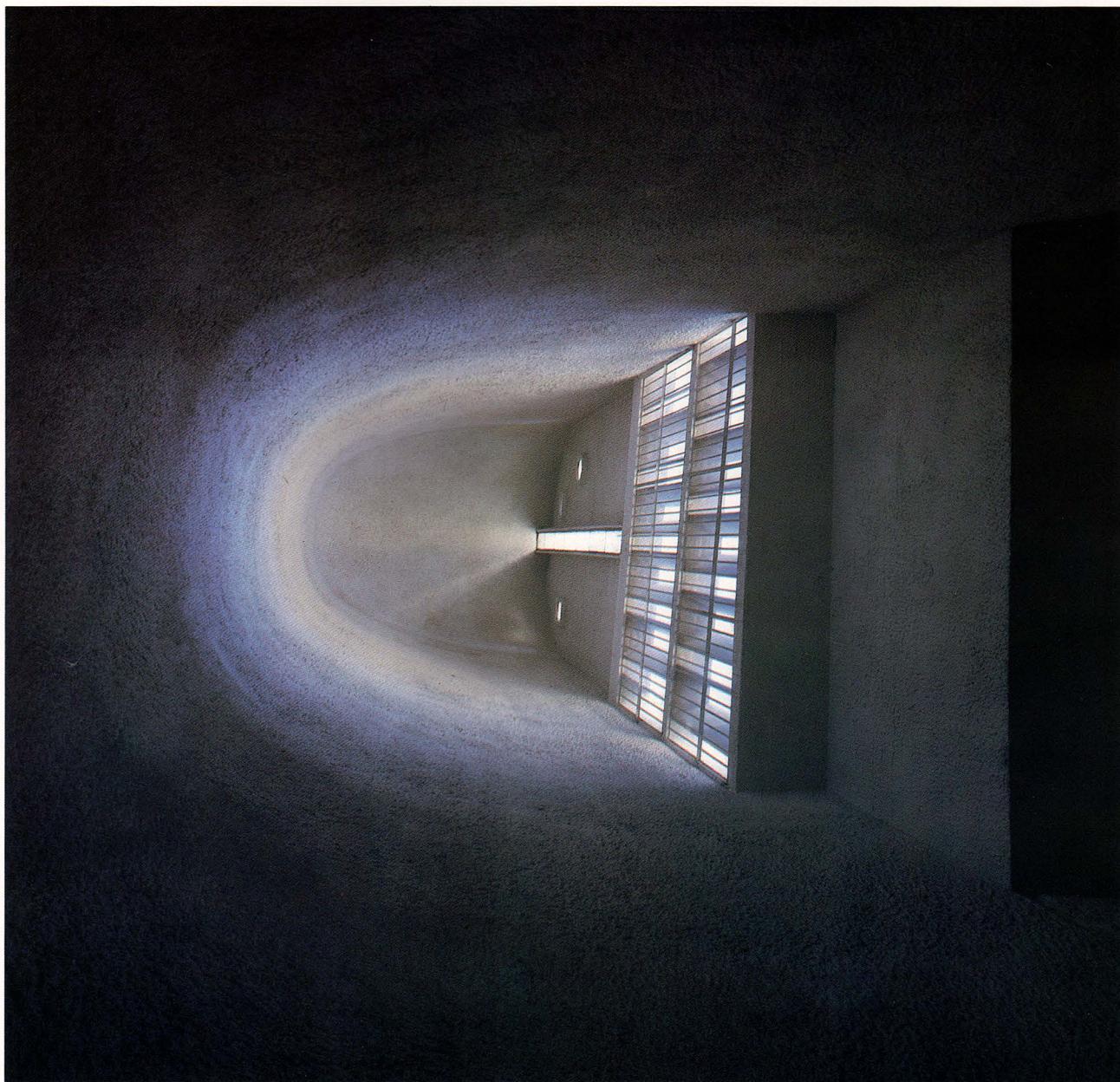
Light and the Soul of Architecture

Henry Plummer

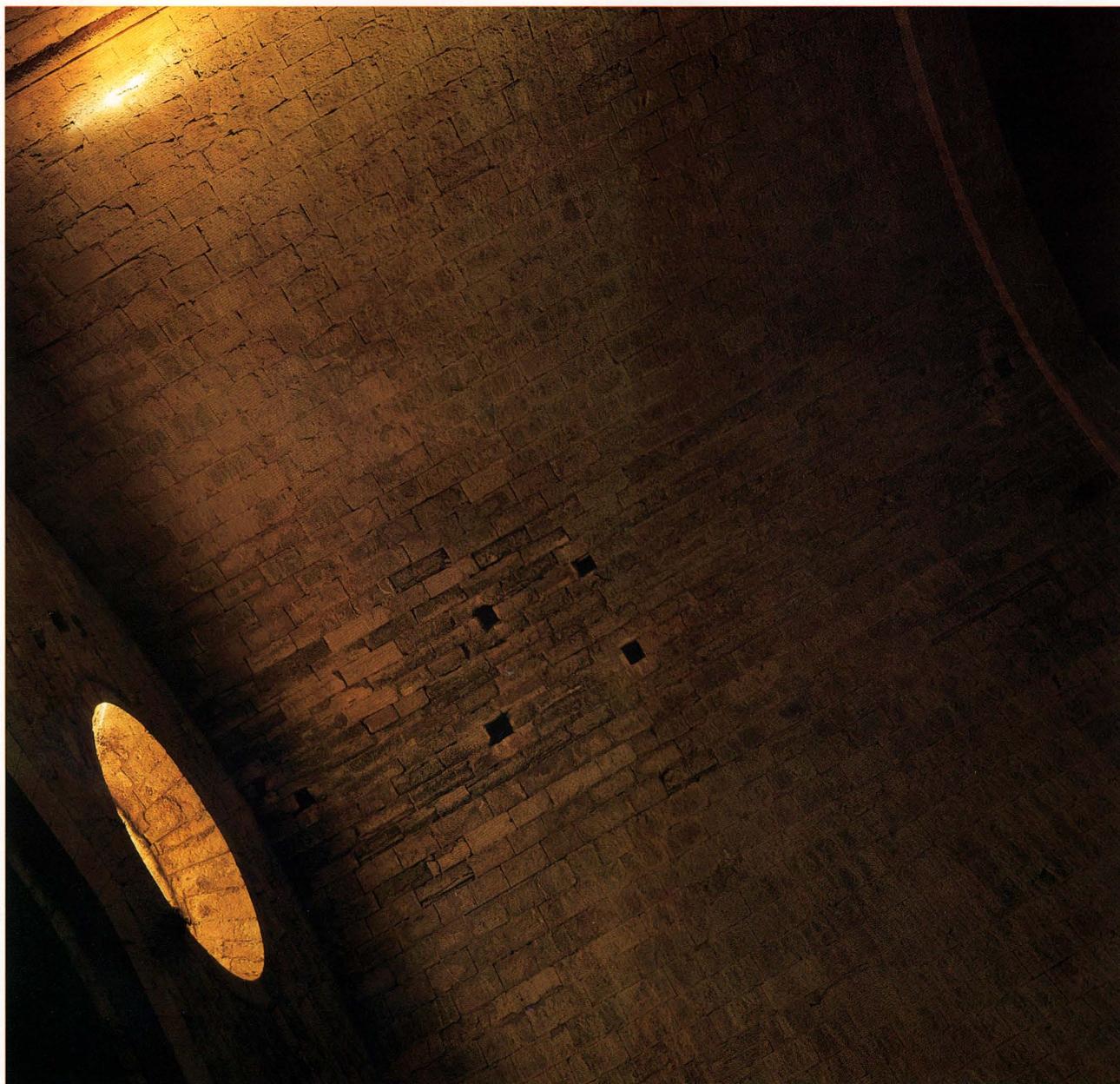
“Man’s dwelling place, who could find you on reasoning, or build your walls with logic? You exist, and you exist not. You are, and are not. True, you are made out of diverse materials, but for your discovery an inventive mind was needed. Thus if a man pulled his house to pieces, with the design of understanding it, all he would have before him would be heaps of bricks and stones tiles. He would not be able to discover therein the silence, the shadows and the privacy they bestowed. Nor would he see what service this mass of bricks, stone and tiles could render him, now that they lacked the heart and soul of the architect, the inventive mind which dominated them. For in mere stone the heart and soul of man have no place.”

—Antoine de Saint-Exupéry

The firm objective data of architecture are essential. They are all we can measure out, manufacture, construct, and then afterwards, scan, examine and inspect. But it is highly dangerous, perhaps suicidal, to base human value on these tedious facts, since everything that makes life worth living lies outside the domain of the measurable, including such modes of existence as love and hate, joy and sorrow, wonder and fear, pleasure and pain, happiness, exhilaration, awe, imagination, meaning, desire, zeal, hope, compassion, generosity, camaraderie. The calculated world contains none of these intangible features of the human spirit, nor their emanations of human consciousness, and depends instead for



Rain of Light: Notre Dame du Haut, Ronchamp (Le Corbusier, 1955).



Golden Darkness: Le Thoronet Abbey (12th Century).

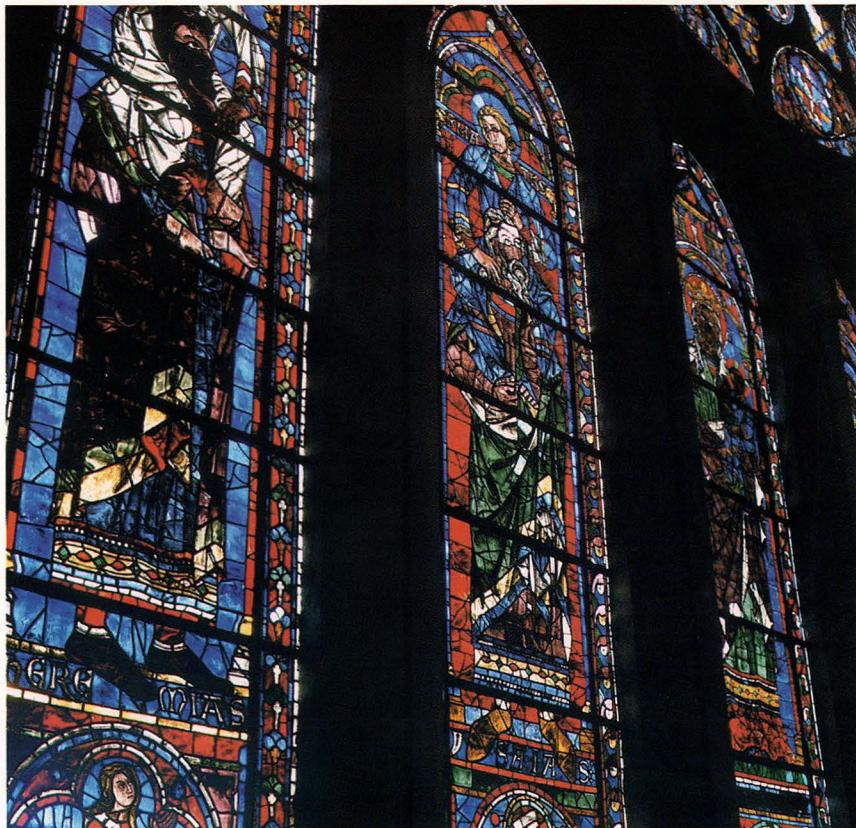
its very integrity on removing all meaningful experience so as to attain the appearance of a permanent objective order. Louis Kahn expressed well this state of affairs in his oft-quoted statement that “wonder has nothing to do with knowledge,” and his observation that after a great building is finished by measurable means, “the spirit of its existence takes over” and it then gives us back a world that is entirely unmeasurable.

Among the various means of endowing material form with the wholly immaterial force of the human spirit, with the operations and experiences of a psychic life, one of the most powerful if least understood is the medium of light. The powers of light and luminosity are almost magical, imparting a wholly mysterious energy and vitality to the darkened mass and density of matter, causing immobile forms to awaken with inexplicable forces and intensity. Dead things become endowed for a while with uncertain moods and feelings—those deeply hidden realms of the soul which make us human and are what is so essentially human about us. Thus light not only symbolically but visually has always been associated with signs of conscious life and spiritual force. And being itself immaterial, light could impregnate form with an uncanny optical reality lying entirely outside or at least at the outermost threshold of that which is solid.

In eras or mentalities where the I—the thinking and reasoning part of man predominates, light tends to be taken for



Celestial Womb: Chartres Cathedral.



20 *Jewel-like Glass: Chartres Cathedral.*

granted, the humble servant of form, its visual energy harnessed to increase formal precision, divide up space, and give measurement to proportion. While enhancing the intellectual pleasure and purity of geometrical objects in space, rewarding the mind's search for clarity, quantity and measurement, giving order to the chaos of appearance, this kind of logical light is stripped of its deeper reach of sensibility. It is limited merely to modeling volumes, and thus at best imparts to things a frozen and petrified kind of beauty. For the rational mind, light is thereby relegated to playing an indispensable if minor role of illumination, an anonymous medium that is even and discreet, at bottom indistinguishable from air. In such a neutral light, an architecture could be erected that would be as impersonal as a blueprint.

Whole different possibilities in the use of light arise in attempts to breathe free of an overwrought formal stability, rebelling against rigid objectivity as against a prison. By loosening luminous values from the forms they might otherwise serve only to model and heighten in accuracy, light could become a subversive medium able to dance on its own apart from form, and thereby massage and prod awake material things, overcoming the morbid authority of their lines and planes and contours. By invading the firmness of mass with some uncertainty and mystery, hard and dry form could be converted into a new and different reality than that known only by the intellect, a more fluid and tremulous reality, a reality felt rather than understood.

Even though sharply delineated, for instance, the shining expanse of a thirteenth-century stained glass window demolishes all sense of a static wall. The magnificent glass at Chartres Cathedral stretches space upward in ways entirely independent of actual volumes, and each cluster glows within like delirious jewels. As in precious gems and thick blocks of crystal, light is sifted and trapped inside

the glass by internal irregularities such as pittings, bumps, flaws, strata and air bubbles, by externally painted layers and hatchworks, and by patinas of dirt and weathering. Planes of glass rise above their physical limits, their reddish-violet colors composed to strain and tremble with luminous energy, as if struggling to free themselves from a strictly physical existence. Hot and cold colors, primarily rich blues and reds, pull inward and outward to forge a thick color perspective. Regions of blue are pieced together out of a hundred subtle gradations, causing their cobalt light to quiver and vibrate. Here and there pale emerald fragments throw active sparks out of deeper colors. What are objectively thin and flat planes of glass appear to the eye as deep and unfathomable layers, full of interflowing mists and colored atmospheres. Our vision passes into a mysterious and indecisive world created entirely by light, past floating wisps and more opaque debris swimming in fluid color, barely penetrating darker clouds, and dazzled by the most ethereal regions. We feel we can sink into, even step into, these crystal depths, a world of experience poised at the outermost limits of solid fact.

A similar transcendence of solid reality occurs in the indigenous white buildings of Mediterranean villages. Simple, snow-white forms display strong masses and lucid geometries, completely legible things that are without any secrets. But under a deep blue sky with sun pouring down, the array of crisp, hand-patted facets on these gleaming white-washed shapes create ambiguous patches and endless tones of transparent shadow, adding a gem-like sparkle and flutter to the opaque forms, so that even the flattest surface vibrates to life with a heart-lifting whiteness. Objects seem penetrated by a swelling light that clings to the surface, apart from matter, and seems to melt into air. The sun lingers and dwells in the solid contours, clothing them in pure light. This volatile world seems then to be carved out of light-stuff rather than material, present-

ing to the eye a space-filled luminous substance rather than modeled shapes.

In opposition to rational formal harmony, the creative handler of light tends to invent a reverberating poetry. Form is not conceived in frozen intellectual terms but is a scaffold for liquid light to converge upon. Optical movement, energy, and forces are set into play, shifting attention from permanent data to the restless awareness of life itself. The energy of luminous things causes the world to flicker and bustle like things alive, like things beating and rising up, becoming a mirror of life's own unpredictability, its transitory and passing events, its hide-and-seek and perpetual discoveries, its ever-changing spectacle.

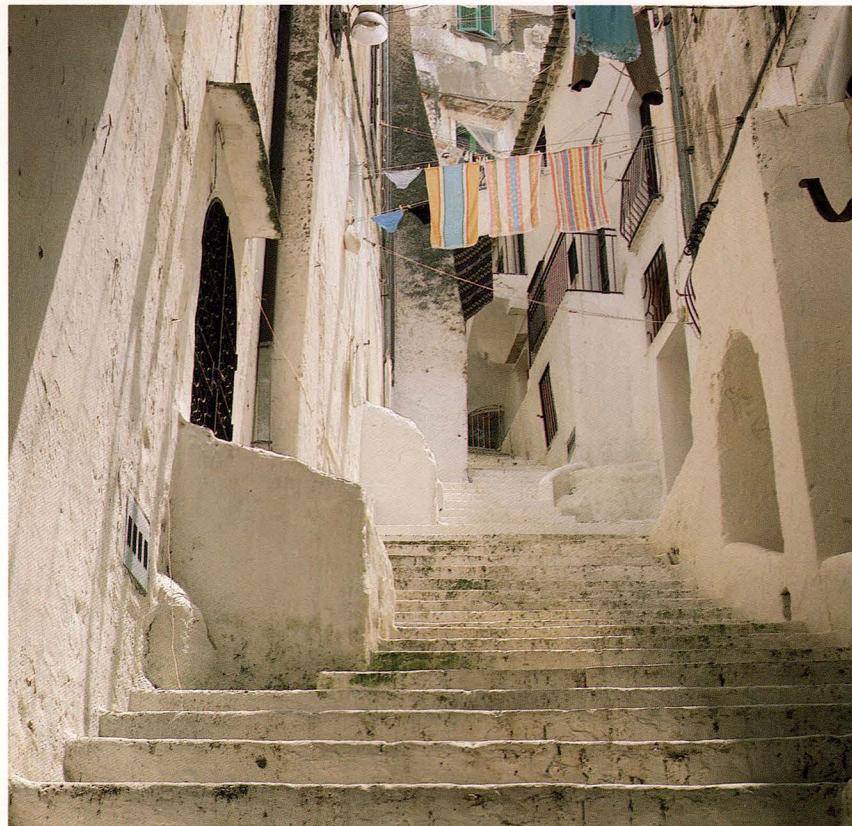
Where light has acquired a substantial presence of its own, becoming a real ingredient in architecture, its fluid intensity wears away the outlines of solid things. Things come to "live outside their frame," to use the words of Gertrude Stein. And so vision also becomes a little separated and free of the intellect, assuming its own powers to roam and flicker at will over more open possibilities. The optical world is loosened from binding facts, allowing the eye to become free of the tyranny of the literal without any alienation from concrete experience. In the process, form is returned some of those untidy realities that rationalism excludes, restoring to impersonal solids some of the fluid netherworld of a personal consciousness such as wishes, fears, spontaneous feelings, and figments of imagination. Through this merger between solid and fluid, some of the gulf between inward self and outward world begins to be healed. Again one can dream awake and feel the great emotional resonance of being conscious.

As the beauty of light comes to the surface, no longer just serving to make things visible but now something visible in its own right, there is more than optical vitality at work. We find that light with its degrees of brilliance, its subtle nuances,

and its range of colored tonalities, has brought into the world the emanations of deep moving feelings that exist beyond any visible reality, a realm of "quality" that lies above thought. It can only be directly apprehended by the sensibility, by contagious and unmediated feelings of association, conveyed like some bolt of lightning that nothing can stop. It goes straight to our innermost depths. Indeed we cannot grasp these moods of light at all by the intellect, seizing them in the heart rather than mind, feeling them as echoes awakened in the depths of the soul.

In the world of painting, we sense these luminous temperaments as an overall atmosphere pervading the canvas. In the spring-like paintings of Botticelli and Fra Angelico, celebrating untroubled youth and a dawning vitality, there is a crystalline sort of morning light, a gentle silvery brightness washing over airy blues and pinks. A more ripened and lavish kind of light pervades the pictures of Rubens and Renoir, a heavier light colored by the heat of day and the rising sap of things, falling onto warm and sensuous flesh, while Rembrandt holds up for us a feebler and more aged light of winter and night, an icy blackness held back by comforting lamp-lit pools of golden hue. Or Caravaggio who creates the thickest kind of mysterious darkness, but then cuts violently through it like a knife with lancing beams of light, skimming over edges of form to jaggedly break them up and falling onto stunned figures like a finger of God. Then there is Vermeer who gives us an image of the serene moments of life, his light being entirely free of drama, calm and clear, a sweet and tender luminosity without fire or brilliance yet sparkling here and there with the felicitous glow of pearls. More recently we find the mythical light of Gyorgy Kepes, with its visions of primeval stars and molten fire, of a smoldering planet, that speaks to the elemental recesses of our own inner landscape.

Light can evidently make visible and give form to realities of feeling that elude



Snow-white Light: Sperlonga.



Ostuni.

the physical eye, which like the soul exist apart from matter, bringing into being an image of our own inner existence. This emotional power has always been sought out by our more sublime artists and builders. For them light has accomplished still more. Not only does it provide echoes of our own innermost happenings, but it brings an exalting splendor to the face of the world. More than just enhancing drab things, as an ornament or extra, and going beyond the domain of sensations and aesthetic pleasures, the universe of light in its more gripping and eloquent states, brings to form a passing moment of ineffable beauty. When light rises to such spiritual heights, touching the heart and setting off waves of reverie, architecture gives plastic form to what is by its very nature inexpressible and unintelligible, stirring some passion within the human soul, reminding us that the true purpose of architecture is to deeply move us by saying something beyond words, by saying the impossible.

Works of medieval architecture, where the church was to be an image of heaven on earth, are incomprehensible to the literal-minded, for they express something entirely apart from material form. Great use was made of gold and mosaic in Byzantine interiors not only to rid the volume of weight, but to produce scintillating images more suggestive of airborne light than earth-bound matter. Partly absorbing the faint colored light that filters through small alabaster windows, inducing the shadowy surface to glow from within, the glass tesserie were also set at varying angles to introduce an endless vibration, seeming to detach their luminous images from the wall behind and causing them to float mysteriously before our eyes. In the tiny mausoleum of Galla Placidia, a space entirely prosaic in shape, one finds oneself in a heavy darkness strangely filled with mild blue light. The vaults above are covered with the most sublime of mosaics, a bright powdering of

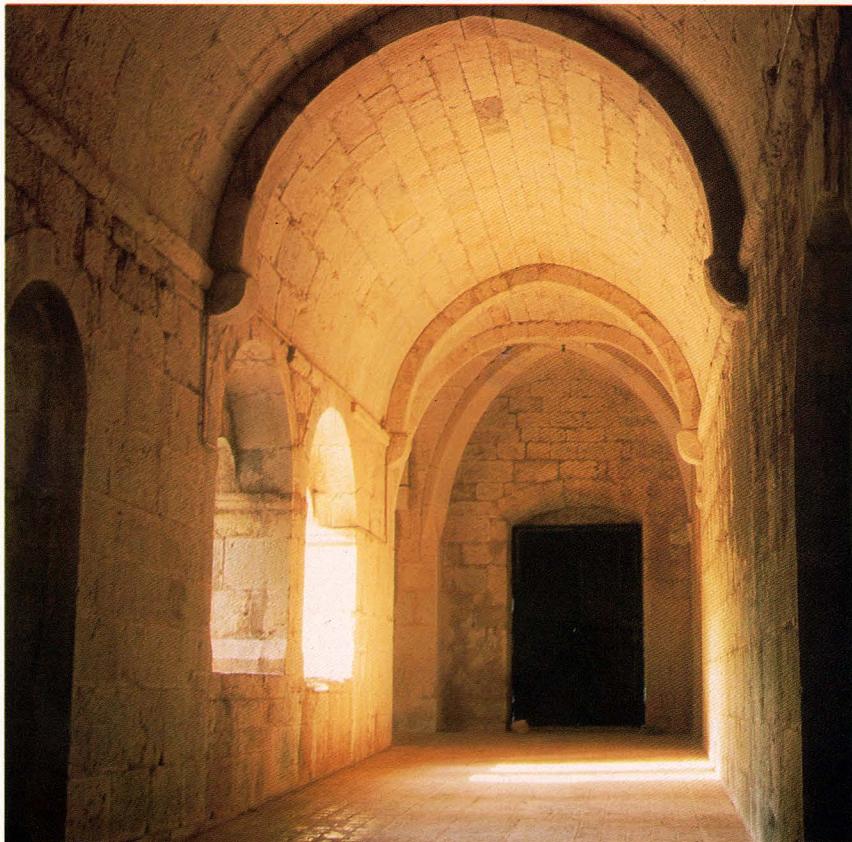
stars aglow in a midnight blue ether. As we move, the shimmering waves of gold on blue set off a dizzying vista of nocturnal brilliance.

Representing nothing yet expressing everything is the Cistercian Abbey of Le Thoronet. The few deep openings left in the heavy stone walls hold onto their light like some precious substance burning like solitary lanterns in the dark. The muted light passed within is rendered soft and golden, suspended there in the moist air, gently warming everything while grazing over the barren yet exquisitely textured chambers. Swept clean of the external world, the elemental volumes are wrapped in a mystical silence and void, an empty darkness pervaded everywhere by a faint atmosphere that is lighting up and glowing.

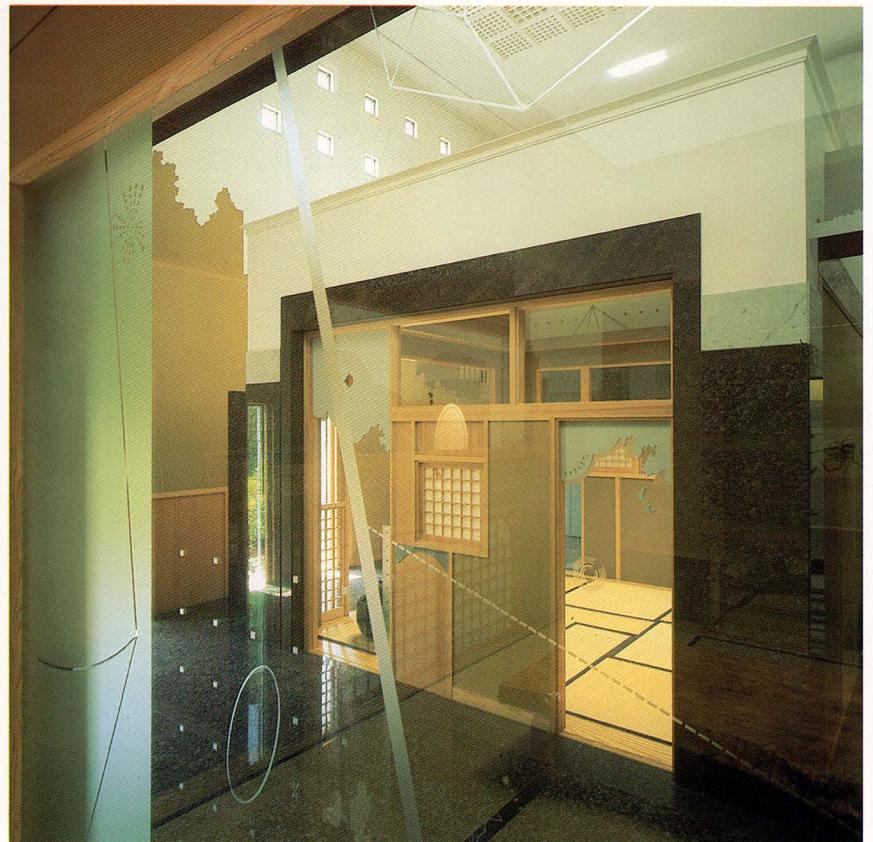
The Gothic cathedral, so intellectually formal and logical where missing its colored glass, is converted into a dusky

twilit atmosphere at sites such as Chartres, into a region where dreams are born—a field of remoteness and expectancy, of mysterious intimations in a blackened void. Form is nothing but blurred shapes melting into a colored darkness. After stepping inside and entirely losing our sight, groping through that *regressius ad uterum* and cosmic night described by Mircea Eliade, we find ourselves in a realm of unspoken secrets, a strange and icy black air in which thousands of glimmering lights are appearing like stars in mist.

A less contemplative splendor was captured in Rococo interiors, especially in Germany. Here all is outwardly joyous energy. The small Amalienburg pavilion is aglitter inside as if drenched by an icestorm, its festive silver stucco reflected on and on by faceted mirror walls. Solid form is entirely canceled out by the facing mirrors, dispelling any sense of mass, and joints



22 | Le Thoronet Abbey (12th Century).



Winged images: Teahouse, Ikaho (Hiroschi Hara, 1988).

are blurred at which volumes might read. Yet it is the overlaid mirrors and the exquisitely sculpted silver that make the rooms glow and shimmer, turning what might have been surface decoration into a wonderland of icy light.

A sense of floating silvery light, a spaceless kingdom where light has become detached from solid walls and inhabits the air like some weightless phenomenon, appears in much recent Japanese architecture. In the work of Toyo Ito, for example, metallic roofs and walls not only seem to loft in the breeze as pneumatic fragments, as airy bodies taking flight, but are hung with the wispiest of veils made from perforated metal and striped glass. The monochrome light is suspended there apart from any solid meaning, a kind of cloud-woven fabric that is reminiscent of transparent summer brocades and gauzy curtains.

Light is set afloat differently in the works of Hiroshi Hara, where transparent walls of glass are inhabited by a multitude of translucent figures etched in the surface by acid. The angular foldings and re-foldings of glass superimpose the floating bits of light one upon another, and so overlay them against darkened backgrounds that the eye loses all sense of material boundary, creating a dreamy sea of marvelous apparitions.

There is no such mysterious obscurity or formal dissolution in the architecture of Alvar Aalto. Yet a building such as his parish church in the mountain village of Riola is filled with the most incredibly serene white light admitted through northern clerestories high in the roof. Nothing is hidden, form is clear-cut, all is cleansed in brightness. Yet rational form is not at all what we experience as we step through a dark, crinkly exterior into this exquisite shell, emptied and purified while collecting the light as in

a bowl, gently overflowing as if it can hold no more, and in this fullness is transfigured into something like grace. The wafting whiteness and its sprays of shadow, spread onto softly flowing cavities, are like whispers in an empty sea shell, a quiet and lonesome presence gathered in a realm of stillness. Here there is the sense of an innocent world re-born.

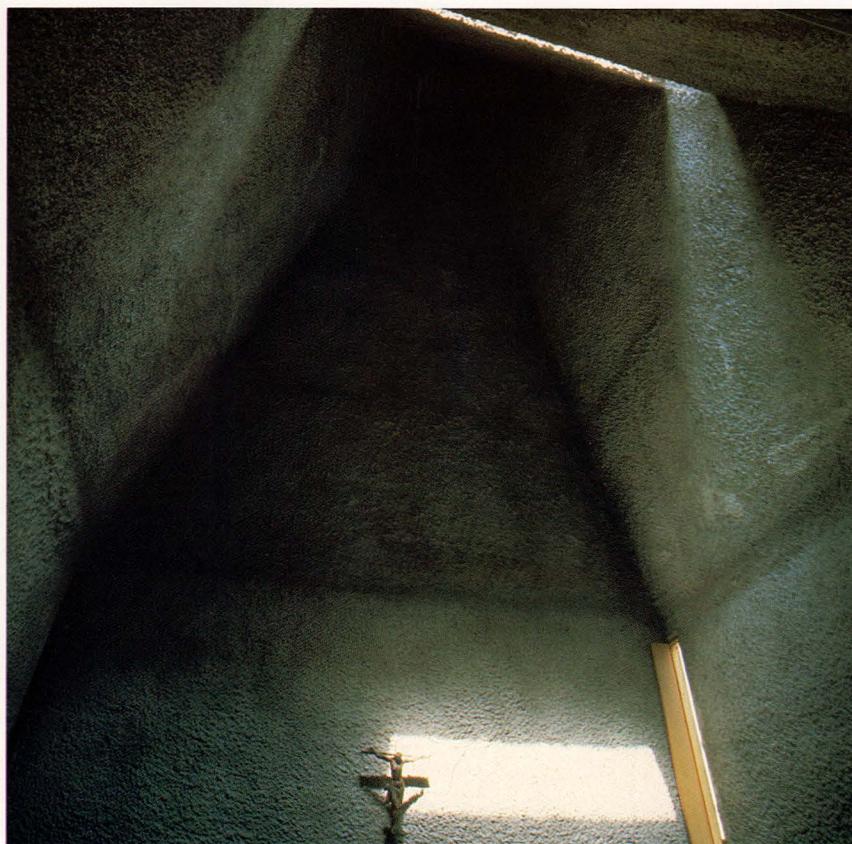
The full resonance of light comes into being when able to visibly transform itself, as an evanescent imprint of shifting sun and weather. Things are seen to change, age and mature as the luminous shapes come and go on their own, shooting in and sliding across walls and floors, inhabiting empty space, passing through successive metamorphoses with the hours and seasons. This mobile substance seems no longer to belong at all to the domain of permanent form or space, both of which it can enter and excite, but instead brings into being a

further attribute of the unbuildable—the domain of time. By giving shape to the passing time we feel coursing in our veins and breath, light is able to relieve some of our solitude in an impersonal universe by making buildings more related to ourselves, not only electrifying them with the piercing actuality of the present, but equipping them with past and future as well, almost a breathing and evolving life similar to our own.

The tradition of shaping solid things as vessels for a light in motion has its origins at the very threshold of architectural history. Archaic megalithic structures such as Stonehenge and the great Egyptian Temple at Karnak were built to house the cyclic arrival of sun as an arrival of God. These were not so much buildings in a formal sense as stages for cosmic events, theaters in which to reenact mankind's rising out of primal darkness and to communicate directly with the heavens. Several thousand years later,



Angelic Whiteness: Parish Church, Riola di Vergato (Alvar Aalto, 1974).



Monastery of Saint Marie de la Tourette, Eveax (Le Corbusier, 1959).

the Roman Pantheon provided a similar cosmic horizon and heavenly dome, but directed upward rather than sideways, its great monolithic abstraction brought to life through passing hours by a revolving shaft of sunshine, as it would swing inside to spotlight various gods of the Roman Empire. Even the later Gothic interior constituted a modulation of time, especially in large-windowed churches such as Saint Ouen where enormous beams of colored light sweep all day through the nave and

aisles, casting a sliding rain of brilliantly dappled color.

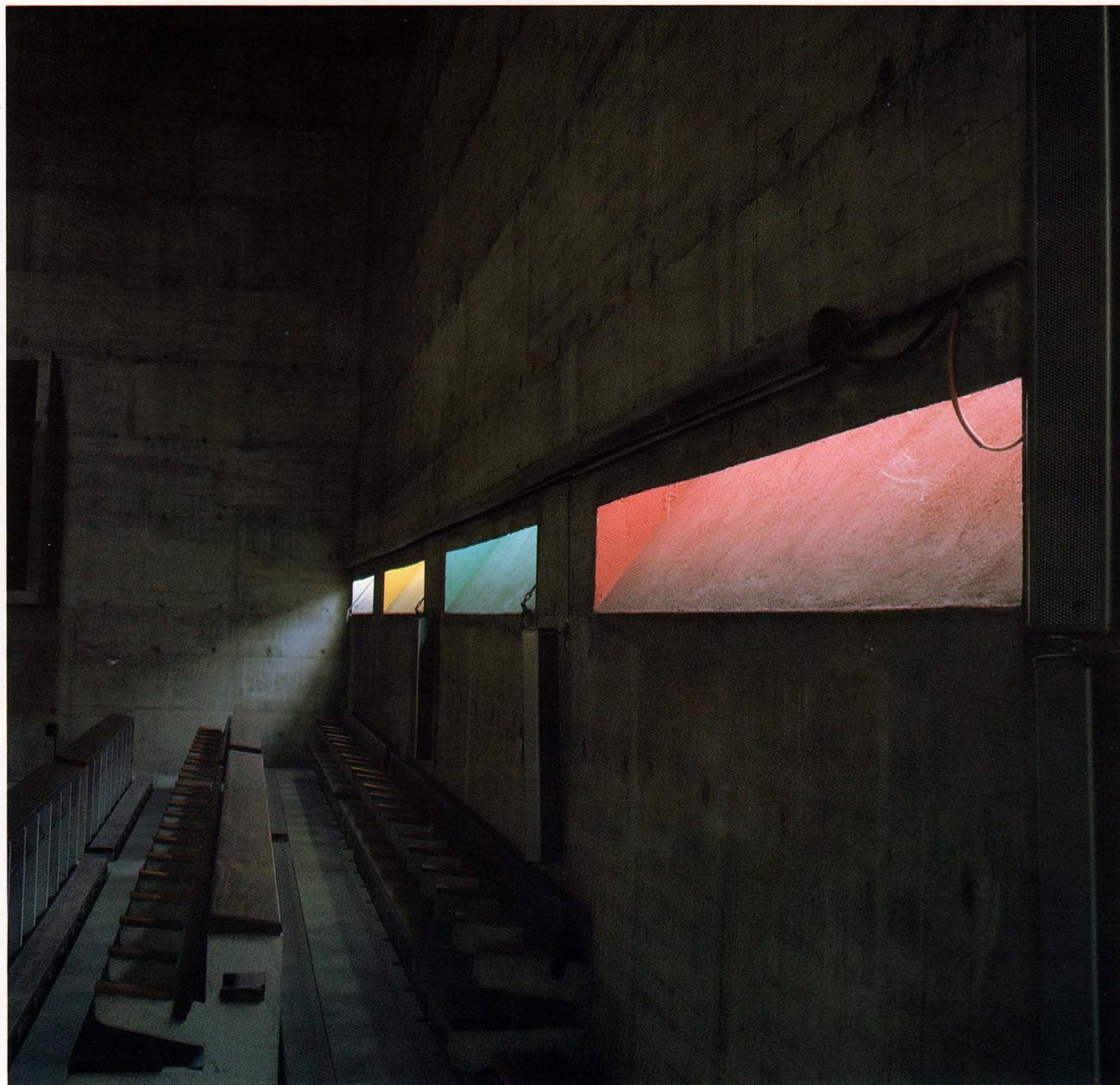
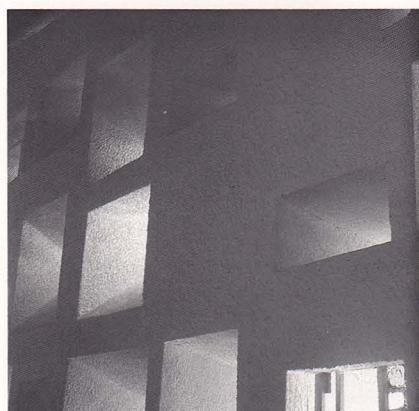
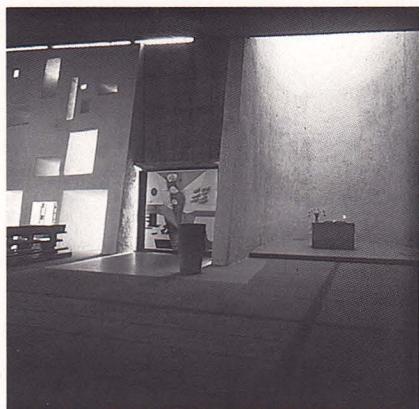
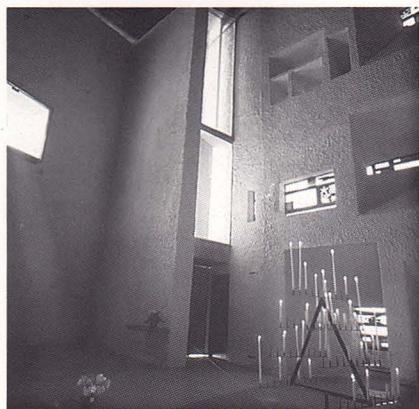
The pinnacle in handling transient powers of light is found in the great ecclesiastic works of Le Corbusier. His Chapel at Ronchamp is a circle of fleeting optical events. The eastern wall awakens at dawn with tiny openings that twinkle like morning stars, later giving way to larger doses of sun filtered through a tall rupture between walls. As the afternoon unfolds, deep embrasures in the south-

ern wall flare up and dim according to their angle, washed within by delicate tints from colored glass. And the hooded chapels, each aimed to a different segment of sky, awaken and brighten with the turning sun

The voluminous church of La Tourette is also forever coming into being and passing on. Angled tubes and funnels as well as slits in the wall catch moments of sun that are keyed to certain hours or seasons. Yet every day at sundown the

most majestic event unfolds, as a long amber streak of dying sun shoots into deepening shadows, slowly rises up the blackened wall, and just before extinguishing, bathes the ceiling in gold.

A more recent artist of time, Tadao Ando, has created in his Koshino house a compact sequence and trajectory of light in motion, throwing sun onto a concrete wall as if a screen. Every afternoon the concrete volume is visited by a blaze of sunlight through a narrow slit



in the roof, a light-chronology that washes over and casts an enormous single shadow, like a gnomon, onto the wall below. The entire sequence, lasting only minutes, entirely transcends the space with its cinematic powers, creating one of the supreme images of our own transient existence, as it suddenly emerges out of darkness, struggles to assert itself and come into being, gradually stretching down the wall into full maturity, grazing the surface to bring every facet of concrete to life, blazing

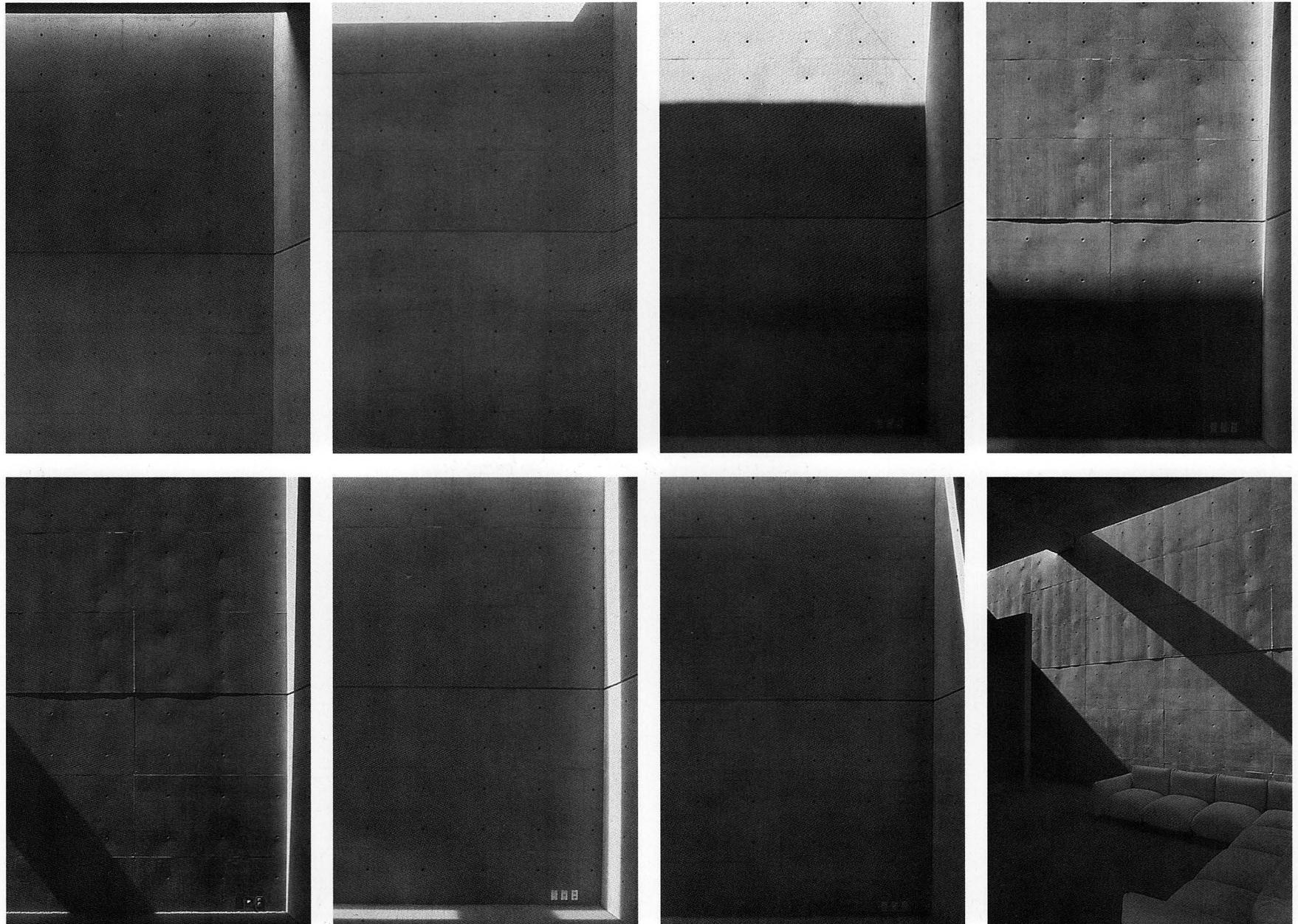
there in one culminating moment of incandescent glory, then just as poignantly, fading away in a kind of sleep or death. When the light is gone it is as if nothing were.

So we come back to the point from which these brief reflections started: that more than any other phenomenon it is light which allows architecture to rise above its physical limitations. And in doing so, something important happens, for we find that certain immaterial qual-

ities are restored to physical form which we cannot rightly live without. The true human value of light, the one we cannot afford to lose sight of if we wish to retain any real powers of identification with the physical world, is its capacity to bring right up to our eyes an image of our deeply hidden aspirations for vital existence. For buildings to attain the sensitivity and pathos of our own flesh and blood, to mirror the emotional resonance of our innermost life, they need as well to transcend their own physical

boundaries, rising beyond the realm of fact to embody what we most desire as human beings—an exhilarating consciousness. Louis Kahn reminded us what it is all about:

“A work is made in the urging sounds of industry, and, when the dust settles, the pyramid, echoing Silence, gives the sun its shadow.”



Choreography of Light: Koshino House, Ashiya (Tadao Ando, 1981). Photos courtesy of Tadao Ando.