Seven Principles of Life-Enhancing Design

The Architecture of Erik Asmussen

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The architecture of the Danish-born Swedish architect Erik Asmussen (1913–1998) offers a significant alternative to both the narrow technological functionalism of the Modern Movement and the stylistically eclectic buildings of the postmodern reaction. Rather than rejecting functionalism, Asmussen chose to explore its unfulfilled potential by developing the architectural ideas of Rudolf Steiner (1861–1925), the Austrian-born scholar and artist, who founded anthroposophy, which is a body of spiritually-based knowledge as well as a path for its attainment. (1)

By "living into" the building's functions through extensive involvement with client groups, by attempting to experience inwardly what Steiner calls the "organic structural thoughts" by which living nature is formed, and by designing primarily with models, Asmussen designed his buildings to express the inner spirit of the functions they contain as well as supporting in a practical way all the activities that go on. The result is a functional and organically expressive form language which evokes an experience of aliveness and a sense of participation in the forms and processes of the natural world.

Asmussen built over one hundred buildings in Scandinavia and northern Europe, the most significant of which are located in Järna, Sweden. Comprised of a college, Waldorf school, anthroposophic healing center (Vidar Clinic), performing arts center, farm and market garden, housing estate and mill and bakery, this village-like cluster of buildings is interwoven with ornamental and food-producing gardens, waste-purifying ponds and patches of wild nature to create a Gesamtkunstwerk that is widely regarded as a model of humanly scaled and ecologically sustainable

design. The architecture of this unique community is the focus of the author's award-winning book, Erik Asmussen, architect, which was published in 1997 after nearly ten years of research.

In all his buildings, and particularly in Vidar Clinic, Asmussen sought to create spiritually restorative and healing environments, whose forms, colors, materials and spaces would help bring into balance their users' faculties of thinking, feeling and willing. Illustrated by examples from the hospital and various other buildings in Järna, this paper presents a summary overview of the seven principles that are the basis for Asmussen's healing architecture. These principles are:1) the unity of form and function; 2) polarity metamorphosis; 4) harmony with nature and site; 5) the living wall; 6) color luminosity



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The Culture House in Järna.

and color perspective, and; 7) the dynamic equilibrium of spatial experience.

In conclusion, it is suggested that Asmussen's buildings provide a convincing example of how to create a life-enhancing architecture that speaks to the whole person as a being of body, soul and spirit. It is further argued that the seven principles described in this paper constitute both a necessary and sufficient theoretical basis for any truly holistic approach to healthcare design in the new millennium.

Erik Asmussen

Born in 1913 in Copenhagen, Denmark, Erik Asmussen practiced architecture in Sweden from 1939 until his death in August of 1998. He worked in Stockholm for various architects, including the firm of Nils Tesch and Clifford Giertz, with whom he worked for nearly twenty years. In 1960 he started his own practice, designing more than one hundred buildings in northern Europe and Scandinavia as well as a wide variety of furniture and lamps. Asmussen was the recipient of numerous design awards including: the Kasper Sahlin Prize, the highest

honor given by the Swedish Society of Architects; the Prins Eugen Prize, given by the King of Sweden as the highest award that can be bestowed upon an individual artist in Sweden, and; the Henrik-Steffen Prize, awarded by the F.V.S Foundation in Hamburg, Germany to individuals from the Nordic countries who have accomplished works of special significance in the arts, architecture, landscape design, city planning, anthropology or the humanities (Asmussen was the first architect to be so recognized since the creation of this honor in 1936).

Life-Enhancing Design

Asmussen believed that architecture should be nurturing, responsive and alive. Dynamically shifting spatial balances, organically expressive forms, subtly luminous colors and biologically healthy, natural materials predominate in all his work. By designing out of a thoughtful concern for human needs, and according to the same principles by which the ever changing forms of nature are created, Asmussen sought to make visible through the art of architecture the same healing qualities that we experience in the nature.

In order to understand how Asmussen was able to create buildings that reveal and serve the purposes of life, it is first necessary to understand the principles that account for their distinctive qualities and forms. It must be stated, however, that Asmussen never tried to create buildings merely as illustrations of abstract design principles or concepts. Rather, he always strove to design for people, working organically and artistically out of the circumstances, materials and site conditions particular to each project. He believed that a meaningful and truly original building could only emerge out of a faithful concern for the content of each design situation. The seven principles which are summarized in this paper should be understood, therefore, merely as lenses through which the order and meaning of Asmussen's architecture can be more clearly understood and experienced.

The first three principles – the Unity of Form and Function, Polarity, and Metamorphosis – are the most fundamental. They underlie and inform the succeeding four principles, which deal respectively with the building-site relationship (Harmony with Nature and Site), the nature of the building envelope (The Living Wall), architectural color (Color Luminosity and Color Perspective), and the nature and experience of spatial order (The Dynamic Equilibrium of Spatial Experience).

The Unity of Form and Function

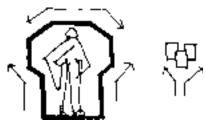
In striving to create an architecture that exhibits the same quality of holistic integration of form and function that is evident in nature, Asmussen followed Steiner's advice that one should first ask about any building, "What goes on there?" Function, as he broadly conceived it in technological, psychological, social, ecological and spiritual terms, was the wellspring of Asmussen's art. By imaginatively "living into" the building's functions through extensive involvement with user client groups, by designing with physical models, and by attempting to experience inwardly the generative principles that give rise to the

natural world, Asmussen tried to shape his buildings so that they would express the inner spirit of the life they contain while supporting in a practical way all the activities that occur within them.

Even in the case of architectural elements such as stairs, columns and furniture, Asmussen entered so deeply into the purpose of the object and its context that he was often able to discover the form that that particular thing wanted to be. A door handle, for example, that is intended to be pulled, for example, is shaped so that the fingers can get a good hold of it, while the handle for pushing offers a broad surface that is the pleasurably sensuous counter-form of the palm of the hand.

The wall-mounted lights in the large practice room of the Seminar's Eurythmy House, which appear like abstractions of a human figure with arms slightly raised, are also similar in gesture to the shape of the room itself, which rises into a volume that is larger at the top than the bottom of the room. Thus, both the space and the elements within it create the counter-form of the movement space of the upright human body. As can be seen in this and many other examples, in Asmussen's buildings one can typically read the whole in the part and the part in the whole.

Whether one is grasping a door handle, using a room or looking at a building from across a field, Asmussen's architecture allows one to sense the function it serves through the evidence of its perceptible form. Although some elements are playful, nothing in his buildings is arbitrary, or conventionally symbolic. Once the total purpose and context are known, Asmussen's designs can



Both the wall-mounted lights and spatial volume of the eurythmy house practice room mirror the form of the upright human body.



House called "Ormen Långe" inspired by a Viking ship.

be seen to have the same satisfying quality of inevitability, fitness, and harmony found in nature. Asmussen believed that a truly organic building must strive to create these qualities of nature, rather than the merely imitating the outward appearance of natural forms, in order for it to be experienced as alive in the same way that nature is felt to be alive.

For persons weakened by illness and in need of support to help strengthen their life forces, Asmussen believed that it was particularly important to design buildings which make tangible and perceptible a non-arbitrary unity of form and function. He felt that such buildings would serve as life affirming signs of human caring and communicate an understanding that illness itself is not a problem to be solved but, rather, is an opportunity to re-balance body, soul and spirit at a higher level of human functioning.

Polarity

Polarity means something more than duality, conflict or opposition. To say that contrasting elements are polar is to suggest that they are at once

different yet inseparably related. Like the ends of a line, the two faces of a coin or the poles of a magnet, polarities are non-dual and non-separate parts of a larger whole.

For Asmussen polarity was a fundamental design principle. Contrasts of color, form and material occur at all scales, creating a richly textured and densely layered fabric of linked opposites. Just as the harmoniously proportioned field of seeds in a sunflower are generated by the crossing of spirals that move outward in opposite directions, Asmussen's form language grows out of and expresses a lively tension between clearly articulated polarities. This is one important reason why his organic architecture achieves qualities that are reminiscent of the natural world.

Often Asmussen juxtaposed polar elements with no mediation between the two, as in the case of spatial sequences in which opposites of up and down, small and large, light and dark are abruptly contrasted. In other instances he linked opposites to create patterns of rhythmically alternating repetition, as in the case of the balustrades of the Ormen Långe dormitory and the gallery arcade of the Vidar Clinic. Sometimes he would

provide a third, mediating element to both link and separate polar elements. As an in-between realm separating yet also joining inside and outside, the domesticated garden courtyard and the wild nature of the tree-covered granite mound, the gallery arcade of Vidar Clinic, for example, serves as both a circulation path and a special place for patients and staff to sit outdoors surrounded by nature while being sheltered from sun, wind and rain.

The pervasive presence of polarized forms, spaces, colors and materials in Asmussen's architecture creates a tension of opposites that energizes and enlivens his buildings. Just as nature lives in the polarized space between darkness and light, contraction and expansion, Asmussen's organic architecture embodies the endless play of differences out of which life itself arises. According to Asmussen, any truly healing architecture must strive to make tangible this rhythmical, never-ending dance of life.

Metamorphosis

Inspired by Rudolf Steiner's pioneering designs, Asmussen sought to embody in his architecture the formative process of metamorphosis first discovered by Goethe in his studies of the morphology of the flowering plant. (2) Both Goethe and Steiner saw nature in the process of constantly forming and transforming itself through the interplay of archetypal polarities of darkness and light, contraction and expansion. Goethe showed how the leaf embodies the qualities of both expansion (the blade) and contraction (the stem). He further demonstrated that the entire plant is the metamorphosis of the polarized form of the archetypal leaf, which is progressively transformed through a rhythmical process of expansion and contraction.

While nature exhibits many kinds of metamorphosis, Asmussen made primary use of two types which can be readily seen in the case of the flowering plant. (3) The sequence of leaves as one follows them up the stem of the plant illustrates developmental metamorphosis, which is a grad-

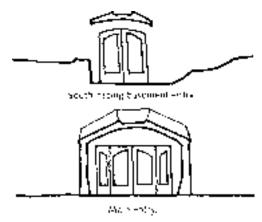


The gallery arcade forms the western boundary of the courtyard.

ual, stepwise progression of changing forms. The dramatic contrast between root and blossom, seed and fruit, illustrates polar reciprocal metamorphosis, which involves a radical change between an original form and its transformed state. In developmental metamorphosis forms are different in shape but similar in kind, whereas in polar metamorphosis forms and qualities are fundamentally different.



The natural sequence of leaves as the poppy plant grows.



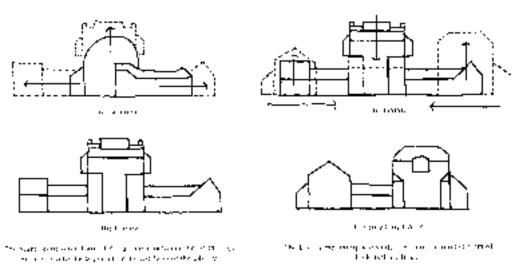
Developmental metamorphosis is illustrated by the relationship between the overhang over the south-facing basement entry and the main entry pavilion of the Vidar clinic.

Asmussen used metamorphoses of forms, surfaces, colors and spaces to create invisible patterns of relationship that give unity to buildings and building elements that at first glance appear to be separate and unrelated. The entry overhang over the south-facing basement doors at Vidar Clinic, for example, is readily seen as a smaller, less fully developed form of the main entry pavilion. The relationship between the two entries is similar to that between the seed-leaves and the larger

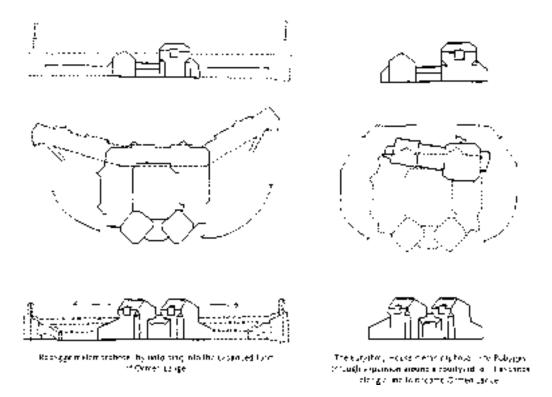
and more incised and fully developed stem-leaves of the flowering plant. The relationship between these entries, therefore, is an example of developmental metamorphosis.

The most dramatic and consequential example of both developmental and polar metamorphosis in Asmussen's architecture can be found in the pattern of relationships among the buildings located around the orchard meadow of the Rudolf Steiner Seminar. It is in this cluster as a whole that the analogy with the flowering plant is most directly revealed.

Each of these buildings is comprised of a low part (contraction), which is always used for living accommodations and/or offices and service spaces, and a higher part (expansion), which contains rooms for communal use. By analogy with Goethe's description of metamorphosis in plants, this recurring pattern of low volume/private, high volume/public represents the basic "leaf" archetype of this circle of buildings, which is continually transformed to respond to environmental circumstances and to serve and express varied building functions and patterns of use. The exterior forms of these buildings appear at first glance to be very different, but, when seen imaginatively in Goethe's way, each building can



All buildings located around the meadow are related to each other through the metamorphosis of the pattern low volume/private, high volume/public.



be recognized as a metamorphosis of the archetypal pattern, just as the parts of a plant are the metamorphosis of the similar pattern of relationships we describe by the word "leaf."

Not only do the forms of the buildings around the meadow alternate between the polarities of expansion and contraction, but, read in a certain way, these changes, like those in the flowering plant, show direction and form. The movement from Almandinen (seed/root/contraction) to the Library (stem/leaf/expansion) to the Eurythmy House (calyx/contraction) to Robygge/Ormen Långe (flower/expansion) culminates in the largest structure, the Culture House, which like the fruit in a flowering plant, represents the final expansion into material form.

If polarity accounts in part for the feeling of enlivened space between and among these buildings, it is metamorphosis that provides a "time body" within which each structure finds its lawfully ordered place. Within this invisible, yet tangibly perceptible pattern, each building expresses its own unique individuality yet also contributes to the creation of a larger temporal and spatial whole. By expressing and revealing the generative principle of metamorphosis, Asmussen provides for the possibility of experiencing in his architecture the very nature of nature itself.

Harmony with Nature and Site

There are two primary ways in which Asmussen's buildings are related to nature and site.

The first and most obvious way is that each building is placed and shaped so that it creates a positive and useable outdoor space in relationship to naturally occurring rocks and trees. In the Vidar Clinic, for example, the south patient wing of the hospital itself bends and turns around

large granite rocks and is cupped so that it creates a clearly contained outdoor room immediately adjacent to the day room. The large sliding barn door opens wide to join inside and outside, making it easy for patients to enjoy the sun and open air. By responding to existing site features in this way Asmussen's buildings are both differentiated from their surroundings and yet also intimately formed by and connected to them.

The second way that Asmussen responds to site and nature is that his buildings often formally reflect the specific qualities of the environments in which they are placed. The buildings of the Rudolf Steiner Seminar, for example, are comprised of one-story horizontal masses out of which sculptural volumes arise. Thus, these buildings are homologous to the structure of the surrounding landscape of this part of central Sweden, which is characterized by gently swelling horizontal fields punctuated by sculptural, tree-covered granite islands.

While all the buildings for the Seminar share this common morphology, each structure also exhibits differences that grow out of the meeting of building function and the precise character of its particular site. The music building Almandinen, for example, with its play of rounded and angular volumes, closely resembles the glacially sculpted circle of rocks of which it is a part. The Library, which is surrounded by mature deciduous trees, is itself tall, vertical and open to light and air through large windows on all sides; it is a treehouse set within an environment of trees. Similarly, the dormitory Ormen Långe, with its rhythmic columns and walkway railings, looks like an architectural abstraction of the tree-covered granite hill against which it is sited and in relation with which it creates a variety of well formed outdoor private rooms for its residents. The geometrically regular east-facing facade of the dormitory Tallevana reflects the qualities of the carefully ordered rows of vegetables over which it presides, while the west-facing elevation resembles the character of the rocky, wooded hill it faces.

As these examples illustrate, Asmussen's architecture has the same relationship to landscape, climate and place that the living plant does to its environment. The morphology of flora and fauna closely corresponds to the climatic, geological and biological characteristics of the specific places in which they live. Goethe noted that "the same species of plant develops smoother and less intricately formed leaves when growing in low damp places, while if transported to a higher region, it will produce leaves which are rough and hairy and more delicately finished." (4) As phenomenological ecologist Mark Riegner observes, "Every plant bears the signature of the place where it is found. Conversely, the individuality of a place comes to expression in every plant present." (5) Seen in this light each of Asmussen's buildings makes visible the unique qualities of the particular landscape in which it is sited. Like native plants, his architecture also provides tangible focal points through which the landscape as a whole - what used to be called the "genius loci" - comes into presence.

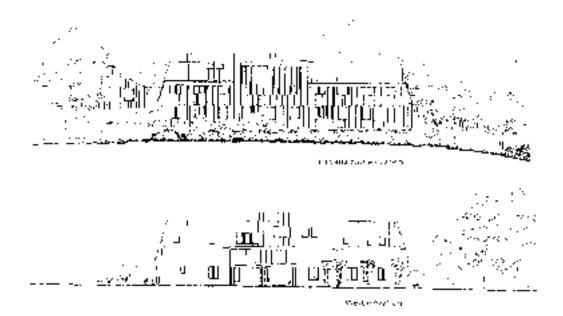
What might this characteristic of Asmussen's work have to do with the creation of environments that support healing? Drawing once again upon the ideas of Steiner and Goethe, Asmussen understood that, beyond merely providing for human needs in a practical way, the larger task of architecture is to make us feel a sense of belonging and at-homeness in the natural world within which we dwell and upon which we ultimately depend for life itself. He believed that the world is not comprised of meaningless and indifferent matter but, rather, that we exist within an ensouled and intrinsically spiritual/material reality where we are connected to the smallest microbe and the farthest star. By making conscious our place in this larger fabric of life, Asmussen felt that architecture could help people to connect with the healing power of nature to nourish and sustain their everyday lives. Buildings that create a harmony with nature and place and that reveal the generative principles by which nature forms and transforms itself create the possibility of sensing that the unity and wholeness of nature is not an



Hospital, ground floor.



The south wing at the edge of the forest.



abstract idea of mystics and philosophers but, rather, is a lived reality everyone can intuit and, perhaps, someday directly experience. Only when the spirit of place is concretized and made real in the form of an actual building, therefore, does a truly healing place for human dwelling come into being.

The Living Wall

In much modern architecture the wall is a kind of insubstantial filler between repeating members of a structural grid. When a connection to the outside world is desired in such buildings, walls are typically dissolved into large expanses of glass, often in the form of repetitious curtain walls. The boundary between inside and outside has become reduced to a simple binary opposition of open or closed, solid or transparent. Walls and windows have thus largely ceased to express the nature of the forces they mediate. Such building membranes might limit space and provide views but they do not enhance a sense of dwelling and place, which requires a much more richly nuanced continuum between enclosure and exposure.(6)

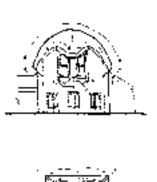
Asmussen attempted to create plastically continuous walls as living membranes that reveal the play between up and down, inside and outside. In Almandinen, Vidar Clinic, and the Eurythmy House, for example, walls and windows make visible the forces of downward-bearing load and upward-striving support. (See diagrams) In plan the walls of the clinic appear to be engaged in a dialogue between expansion and contraction, concavity and convexity, as if the building were breathing in and out. Asmussen's handling of the building envelope is a major reason why his buildings feel like living creatures that nurture and protect the life they contain.

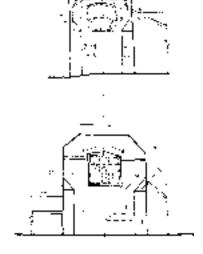
The assembly hall in Vidar Clinic offers a most instructive example of how the principle of the living wall is applied to create living spaces in his buildings. In plan the room swells outward to form an embracing space, as if it is filled with an inner energy. Small square windows that are cut deeply into the thick containing walls frame views of the agricultural fields and the placid waters of the Baltic Sea to the east. The ceiling along the longitudinal axis springs directly out of the walls and is concave in section, giving the room a

strong sense of enclosure. A section cut at right angles to this axis, however, shows a ceiling that is convex and rises above horizontal strips of clerestories that reach up to capture views of passing clouds and blue sky. Within this deceptively simple yet dynamically polarized space, the visitor is thus able to experience the simultaneously opposing tendencies of the ceiling surfaces that shape it. One thus senses both the security of protected enclosure, which is associated with the element of earth, and the feeling of imaginative freedom and psychological release associated with the sun, wind and light of the overarching sky.

The performance hall of the Culture House in Järna is Asmussen's most complete and successful effort to create walls and ceilings that are, in Steiner's words, "artistically transparent" so that "when one is inside the building one does not feel oneself closed in" but rather that one is connected to "the whole wide world." (7) By means of carved wooden walls following the designs of sculptor A. John Wilkes, a ceiling mural painted by Arne Klingborg in veils of bold yet softly glowing colors, and engraved colored glass windows, Asmussen sought to isolate this great room from the distractions of the outside world, while at the same time opening up the space to imaginative perception and inner vision. More than any other space designed by Asmussen, this room has a strong sense of physical protecion and spiritual freedom.

For persons weakened by illness and confined to bed such a combination of security and freedom is particularly important. In the patient rooms of the Vidar Clinic, windows with deep sills have been carefully sized, shaped and positioned to allow views of both earth and sky from a number of bed positions. Thick brick and plaster walls and concave, sculpturally shaped ceiling planes provide a sense of protection from the typically cold and inclement weather of central Sweden. Multiple layers of soft transparent colors painted on the walls dissolve the firm boundaries of the room and allow the imagination to revel in the constantly changing patterns of light-filled color as the sun traces the passage of light from



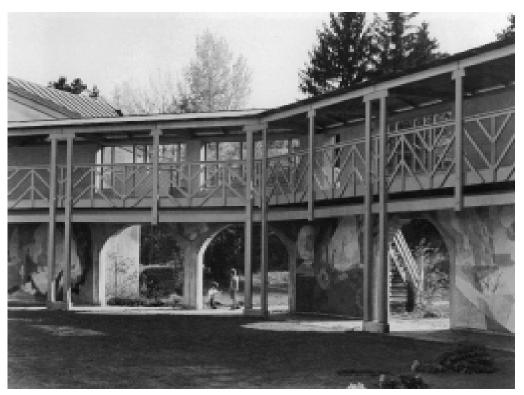


Walls and windows make visible the forces of downwardbearing load and upward-striving support.

dawn to dusk. In such rooms patients are free to relax into the healing power of silence without feeling limited by illness or disconnected from the larger world. This paradoxical unity of opposites is characteristic of all of Asmussen's spaces and is one of the primary reasons why his buildings have such a healing quality.

Color Luminosity and Color Perspective

Upon entering any building by Asmussen one is immediately immersed in a world of light-filled, transparent color. The interior paints are made from vegetable and mineral pigments in a casein and beeswax medium. They are applied by the lazure method, which is a technique first used by



The gallery arcade with murals by Arne Klingborg.

Rudolf Steiner for paintings on the interior of his first Goetheanum building in Dornach, Switzerland. Beginning with a transparent white, multiple layers of translucent paint of various and sometimes even complementary colors, are then applied to create variable densities and hues. The layer of white allows light that penetrates the outer layers of color to reflect outward, illuminating the colored tones as if from the inside. The effect is to create a gently luminous veil of color that has a depth and quality of aliveness similar to that found in nature. Opaque color, by comparison, which is like make-up too thickly applied, hides the materials it covers and can seem dispirited and lifeless, limiting perception to an impenetrable surface rather than opening imagination to constantly changing patterns of light-filled form and color. The lazured colors in Asmussen's building enliven and reveal the nature of the materials he uses, which always remain visible beneath their glow.

Asmussen believed that such architectural color could help to awaken and educate the user's capacity to experience what Steiner and Goethe describe as the objective reality and moral force of color.(8) If one slows down and enters quietly into the gently colored spaces of Asmussen's buildings, for example, one has the feeling that the colors move and flow, advance and recede and, altogether, enter into a relationship with each other that is like a dance.

These characteristics of color are most fully demonstrated in Arne Klingborg's ceiling tableaux for the auditorium of the Culture House and in his murals of healing scenes from the Gospel of Luke painted on the lower level of the gallery arcade of the Vidar Clinic. In both these examples several different kinds of color circles



The main stair to the upper level of the auditorium in culture house.

interweave in complex patterns to create various local color climates of differing depths, densities and hues. Figures that emerge out of warm colors, like red and orange, come forward while those arising within fields of cool green and blue move away, creating layers of space that dissolve the solidity of the surfaces. Color perspective, rather than linear perspective, gives a sense of depth to the floating scenes. The same effect is achieved by the simultaneous presence of warm and cool layers of color which transform every surface in Asmussen's buildings into gently glowing membranes of living color.

Color in Asmussen's architecture is never merely decorative or allegorical but grows out of the nature of color and color experience. Following indications derived from Goethe's color theory and Steiner's clairvoyant perceptions of the spiritual effects of color on the body, soul and spirit of the human being, Asmussen and his long-time collaborator, colorist Fritz Fuchs, used color as both a practical and moral force. As Steiner says, "...in coloring form we should feel: Now we are endowing form with soul." We breathe soul into dead form when, through color, we make it living."(9)

In Asmussen's buildings one realizes that color can be used to support and express the moods and activities of a particular building or space. As Fuchs says, he begins by "asking what goes on in the building and how this life the building contains can be protected by color." (10) He treats each building like a living being and believes that each room or space is like an organ that should have its own appropriate atmosphere and "color temperature". Active spaces, such as eurythmy practice rooms, are painted in warm rose tones to both image and support vigorous bodily

movement, while rooms for painting are rendered in neutral shades of blue-violet to support the more passive and contemplative nature of the activity that goes on there. Social spaces, such as the dining room in Vidar Clinic, are often painted in subtle shades of yellow to express and encourage conviviality and lively conversation. In the Clinic, rooms for patients suffering from "warm" illness characterized by fever and inflammation are painted in cool shades of green or blue and blue-violet, while rooms for those with "cool" illnesses such as cancer are given rooms painted in layers of a warm rose and rose-violet.

Similarly, the exterior colors of Asmussen's buildings always image and express the nature of the activities that go on within them, communicating their functional as well as spiritual qualities to passersby. The healing purposes of the Vidar Clinic, for example, are announced to the visitor by the soft pink glow of its humanly scaled and functionally articulated forms. The compact volumes of the Library and Eurythmy House of the Rudolf Steiner Seminar are painted in shades of blue and blue-green to suggest that the nature of the activities that go on within these structures are inward-oriented, retiring and self-contained.

As is the case with all his buildings' forms and spaces, Asmussen's use of color is also characterized by the principle of polarity. Warm colors in one place will always be balanced by cool colors elsewhere so that a person moving through a building, especially in a structure such as Vidar Clinic which is intended to support the process of healing, will experience a kind of color massage provided by all the hues of the rainbow. Color polarities are used not only to define the character and mood of rooms and building clusters but are also used to create enlivening contrasts between building interiors and exteriors. The cobalt blue exterior of the Eurythmy House, for example, is countered by the warm rose-tones of the large practice room inside.

For Asmussen, color was seen as a powerful means to reinforce and support building activities while also communicating a meaningful architectural order. In Fritz Fuchs' words, Asmussen sought above all to "create a free space in which everyone in the building can say, here I can live." (11) While there remains much research to be done into the effects of color on the mitigation of illness (the field of chromotherapy), Asmussen's color-filled buildings are commonly experienced by both regular users and one-time visitors as healing presences. (12)

The Dynamic Equilibrium of Spatial Experience

Asmussen used contrast between up and down, in and out, front and back, and near and far to create spaces that are dynamically polarized and alive. In the corridor surrounding the courtyard of the Vidar Clinic, for example, there is a rhythmic alternation between the polarities of path and place as one moves within the continuity of differentiated and functionally expressive spaces. In an uninterrupted flow the corridor swells and contracts, reaches up to the sky for light, and then cups itself into alcoves to provide more intimate places for sitting or standing alone or with others. Constancy and change, symmetry and asymmetry, sheltered intimacy and expansive openness are held in a delicate and shifting balance through the alternating experiences of movement and rest. Yet, whether one is in motion or at rest there is always sense of dynamic equilibrium in which the seed of the opposite possibility of spatial experience is already contained within the present moment and place.

As we have seen in the example of the assembly room of Vidar Clinic, such paradoxical both/ and qualities of spatial experience can also be found within self-enclosed, single purpose rooms as well as spaces designed specifically for movement and informal gatherings. All the formal rooms Asmussen designed embody a play of symmetry and asymmetry, sameness and difference. He once said, "If there is only symmetry there is no freedom. And, if there is only symmetry there is no freedom." (13) Symmetry creates order and expectation, and asymmetry gives direction, movement and surprise. The sclerotic

tendency of symmetrical order is warmed and enlivened by the asymmetrical gesture.

For a sense of freedom to emerge in a building, according to Asmussen, there must be both symmetry and asymmetry, predictability and surprise, order and mystery, all held in a dynamically polarized and constantly changing balance created by human movement and perception.

Conclusion

Health can be described as a living process of adaptation to constantly shifting inner and outer conditions, rather than as a stable and fixed state of a separate and autonomous "self." To create environments that support and enhance the process of healing, therefore, architecture must be concerned with creating a total environment that both supports and images this dynamic process. Asmussen believed that it is the special task of a living organic architecture to stimulate all the senses, while simultaneously engaging the will and understanding of the user in a conscious process of re-balancing body, soul and spirit.

By making function visible through non-arbitrary and intrinsically meaningful forms, by expressing the play between polarized architectural elements, by revealing how building forms, spaces and elements can be transformed through the same metamorphic processes by which living beings are formed and transformed, and by intensifying and revealing the unity between architecture, place and environment, Asmussen's sought in his architecture to communicate the sense that nature and culture, person and environment, do, in fact, comprise a non-dual whole in which harmony rather than conflict is the truth of reality.

Since healing literally means "to make whole", such a livingly organic and expressively functional architecture can serve as a powerful antidote to the presumption and experience of separation and alienation that dominate modern technological societies. As Asmussen understood his task, people seeking health and wholeness must be supported by a designed environment that itself is as an object-lesson in wholeness and organic order. Embraced by such a living architecture every user, not just those specifically in need of the healing touch of human care, can sense that, while everything always and only changes and eventually passes away, life itself is eternal and never ending. Asmussen believed that an architecture that offers such a vision of life can have a healing effect on the human heart even in those cases where a cure for illness cannot be found. In this sense his architecture demonstrates the principles and reveals at least some of the possibilities of a truly life-enhancing design.

ENDNOTES

Portions of this paper are excerpted from Gary J. Coates, Erik Asmussen, architect, Stockholm: Bygg-förlaget, 1997. Drawings by Susanne Siepl-Coates and diagrams by Gary Coates are used with permission from that book. Photographs are by Max Plunger and are also used by permission.

- (1) For an introduction to and overview of anthroposophy see Stewart C. Easton, Man and World in the Light of Anthroposophy, Hudson, New York: Anthroposophic Press, 1989.
- (2) Johann Wolgang von Goethe, The Metamorphosis of Plants, Wyoming, Rhode Island: Bio-Dynamic Literature, 1978.
- (3) For an excellent presentation of the idea of metamorphosis in Goetheis thought see, Henri Bortoft, The Wholeness of Nature: Goetheis Way Toward a Science of Conscious Participation in Nature, Hudson, N.Y.: Lindisfarne Books, 1996. For a comprehensive presentation of current practice and theory of Goethean science consult, David Seamon and Arthur Zajonc (eds), Goetheis Way of Science L A Phenomenology of Nature, Albany, N.Y.: State University of New York Press, 1998.
- (4) As quoted in Mark Riegner, Toward a Holistic Understanding of Place: Reading a landscape Through its Flora and Faunaî, in David Seamon (ed.), Dwelling, Seeing and Designing: Toward a Phenomenological Ecology, Albany, New York: State University Press of New York, 1993, p. 184.
- (5) Ibid., p. 184

- (6) See Colin St. John Wilson, The Other Tradition of Modern Architecture: The Uncompleted Project, Academy Editions, 1995.
- (7) See Charles Lock Eastlake (tr.), Theory of Colours: Johann Wolfgang von Goethe, Cambridge, Massachusetts: The M.I.T. Press, 1976. Also, Rudolf Steiner, Colour, Sussex, England: Rudolf Steiner Press, 1992.
- (8) Rudolf Steiner, Ways to a New Style of Architecture, London: Rudolf Steiner Pess, 1927, p. 55. See alo, Michael Howard (ed.), Art as a Spiritual Activity: Rudolf Steiner's Contribution to the Visual Arts, Hudson, N.Y.: Anthroposophic Press, 1998 as well as, Architecture as a
- Synthesis of the Arts: Lectures by Rudolf Steiner, London: Rudolf Steiner Press, 1999. Finally, for an excellent overview of Steiner's architectural impulse see, Kenneth Bayes, Living Architecture, Hudson, N.Y.: Anthroposophic Press, 1994.
- As quoted in Gary J. Coates, Erik Asmussen, architect, Stockholm: Byyggforlaget Publsihers, 1997, p.199.
- (10) Ibid., p. 199.
- (11) Ibid., p. 201.
- (12) See Mary Guzowski, Daylighting for Sustainable Design, McGraw-Hill, 2000.