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Secular spiritualism evolved: The market as communal sanctuary

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SECULAR SPIRITUALISM EVOLVED:
THE MARKET AS COMMUNAL SANCTUARY

by

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ABSTRACT

Secular Spiritualism Evolved:
The Market as Communal Sanctuary

by

Alexandra H. Hussey

Through a comparative analysis of selected modern and contemporary works, both religious and secular, a secular spiritualism is identified. The subversion of representation and suppression of a traditional sacred language, the revelation of the site and its phenomenal qualities, as well as the self-conscious manipulation of tectonics in terms of the relationship between light, material, and construction are the means for challenging the viability of this secular spiritualism at an urban scale. This thesis argues that such a spiritualism can be found in our secular world and proposes that the undefined residual spaces left by privatization become the neutral testing ground for a new urban prototype: the communal sanctuary.
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Preface

Contemporary American urban culture currently accesses the spiritual through the remnants of a more traditional religious framework. Secularization and privatization have eliminated the role of traditional spiritual architecture, but American urban culture has made little attempt to find alternative means of accessing the spiritual. Our efforts have been limited to a rather nostalgic proliferation of nondenominational chapels, the reuse of existing church structures as well as the use of church iconography and symbolism in secular types of building programs. What has become evident is that contemporary American society is searching for a spiritualism in the secular world that is not in any way ruled by religious dogma. In addition to lacking alternative means of accessing the spiritual, contemporary American society also lacks the public spaces which were once set aside for such purposes. This becomes particularly apparent in an urban context.

The argument made by this thesis is that in fact, such spiritual places can and do exist amidst the cacophony of the contemporary city, such as Houston, and that the potential for this secular spiritualism lies in the undefined strips of land left by the various infrastructures serving the city. It is within these vast cuts in the urban fabric where we come in contact with the natural world and experience the isolation and removal typically associated with spiritual places. Through the subversion of representation, the self conscious manipulation of tectonics and the revelation of the site, this thesis attempts to test the viability of a secular spiritual language on an urban scale. The prototype for this communal sanctuary is a 24 hour marketplace, a building typology which, although historically can be linked to the church square, never acquired a specific language based upon sacred or spiritual iconography.

Such a prototype is intended to enhance the existing spiritual qualities of the site, to make visible that which is not readily apparent, to make us more aware of the forces that shaped that space. The intention is not to fill in these cuts in
the fabric, but to enhance their qualities at discrete and specific moments within the monumentally scaled network they have created. Rather than being merely residual spaces, they can become more defined in their character and relationship to their surrounding context by acting as receptacles for this communal spiritualism.
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Introduction

In discussing the notion of a secular spiritualism in architecture, it becomes clear that we are trying to gain an understanding of something that cannot be verbalized or clearly defined. Perhaps the only way to begin to understand the spiritual aspects of a building is by comparing works which strive to achieve these qualities with others that lack these qualities altogether due to the use of specific religious iconography, limiting the more neutral secular reading, or other intentions for the project.

Before we can begin this analysis, however, it is essential to clarify some of the terms which will be used throughout this discussion. Although most are probably familiar with the term “sacred” as that which is dedicated to some deity or religious purpose, and “secular” as that which pertains to worldly things or things that are not regarded as religious, spiritual or sacred, the term “spiritual” has rather ambiguous connotations. The word “spiritual” refers to that which pertains to the spirit or soul as distinguished from the physical nature or to that which is of the mind or intellect. As a result of this rather broad definition, the word “spiritual” has often become associated with those divine beings of the sacred or religious realm. In this paper, however, I am making a distinction between that sacred spiritualism which pertains to a religious belief and a secular spiritualism which pertains to a more metaphysical and intellectually based spirit of the mind. Spiritualism, unless specifically used with the word “sacred” is essentially referring to the spirit of the mind that is touched by our imagination.

The first chapter will begin with a discussion of sacred works and how their language is transformed. The focus of this chapter will be an examination of three works by Swedish architect Sigurd Lewerentz. I have selected Lewerentz,
a former partner of Gunnar Asplund and less well known architect, because, more than other architects with a similar background, Lewerentz’s career shows a clear evolution in his treatment of sacred architecture. In addition, his work clearly seems to possess those qualities which stimulate our imagination and touch our souls. In other words, it is an architecture capable of evoking the spiritual side of us.

Although a contemporary of Lewerentz, the American architect Louis Kahn represents a rather different approach towards a similar goal. The second chapter will attempt to analyze the similarities and the differences apparent in the work produced by these parallel careers. By examining two of their projects, one sacred and the other secular with sacred origins, we can begin to identify those characteristics of the sacred which can lend a spiritual quality to the secular.

Having examined the parallels between Lewerentz and Kahn in their search for a spiritual architecture, the third chapter will then take a closer look at the evolution of the museum as a typology which has bridged the sacred and secular worlds. Here we will examine the recent museums of two Swiss firms, Peter Markli of Zurich and Herzog and de Meuron from Basel, who share a similar approach to the same goal, in comparison to one museum by James Stirling, from England, who is pursuing entirely different goals. Whereas Lewerentz and Kahn represent two architects with similar intentions but vastly different methods and results, the Swiss architects represent a much closer affinity both in their intentions and in their ability to stir our imagination. Stirling, on the other hand represents an architect with a completely different set of intentions, intentions that are focused more on issues of language and the combination of architectural elements with mechanical precision than on the exploitation of the spatial and phenomenal qualities inherent in those elements. These goals are not compatible with a secular spiritualism. It is essential to understand precisely how these intentions differ and how they are articulated, so that we can begin to identify this secular spiritualism by what it is not.
The Spiritual Architecture of Sigurd Lewerentz

Although some would argue that the professional and theoretical contributions of Swedish architect Sigurd Lewerentz are limited, there can be no doubt that his tendency towards abstraction of Classicism and eventual abandonment of that language in his last works was of great significance to the search for a secular spiritualism. As discussed by Colin St. John Wilson in his article “The Dilemma of Classicism”, Lewerentz’s last two churches, St. Mark at Bjorkhagen (1956-60) and St. Peters at Klippan (1963-66) clearly mark this shift within his work (Figs. 1-2). His final building, the flower kiosk for the Malmo Eastern Cemetery (1969) can be viewed as the culmination of that exploration and a manifestation of a new language, a suppressed language rooted in the subtleties of construction and the site (Fig. 3). Despite the fact that these three projects fall within the traditional realm of sacred architecture, they nevertheless represent a clear departure from the traditional language associated with the spiritual and begin to form a bridge between the religious and secular worlds. Industrialism might have widened the gap between these two worlds, but for Lewerentz, it also provided the means for bringing them closer together.
His earlier work, primarily cemeteries, provided the foundation for Lewerentz's experimentation and innovation with a sacred language. With industrialism came social and cultural change, resulting in a new type of program, the mass cemetery and crematorium. There being no precedent for such a program, and because the cemetery embodies a spiritualism not tied to any specific dogma, Lewerentz was forced to find an appropriate language for its expression. Rather than simply using the traditional classical language often associated with funerary and sacred architecture, he sought to reinterpret the language and abstract it. The new industrialized city could no longer accommodate the traditional. "The old language could no longer take the strain."  

The churches of St. Mark at Bjorkhagen (Fig. 4) and St. Peter at Klippan (Fig. 5) clearly reveal the break with Classicism characteristic of Lewerentz' later work. In addition, they also begin to characterize a trend towards the subversive, the reinterpretation of convention and institution. Instead of reinterpreting an existing language, these two buildings begin to reinterpret ritual and symbolic form as well as manners of construction. The evolution of this theoretical development becomes evident when comparing these two churches.

Both churches are expressions of a restrained spiritualism, a spiritualism that is achieved through the reversal of traditional spiritual
architecture. In these churches, it is as much a reversal of the traditional Christian tradition which called for illumination as a return to a more ancient Nordic tradition rooted in the darkened interiors of the stave churches (Figs. 6-7). As opposed to the soaring height of the Gothic cathedrals that reach towards the heavens, these two brick churches remain relatively low, relying only on the gentle curves of their roofs to suggest an upward movement (Figs. 8-9). There is a quiet strength and power behind such restraint. It is as though the building were keeping itself from exploding towards the sky, intent on remaining close to another source of life, the earth. The power of such restraint is of course enhanced by our own associations of the spiritual with the height and illumination of the precise repetitive structures found in the Gothic cathedrals (Fig. 10). In these two churches, however, the light is subdued. Rather than the brilliantly colored and almost blinding light supplied by the Gothic churches, these two buildings rely on a light that obscures rather than illuminates. According to Wilson’s article, Lewerentz believed that...

...subdued light was enriching precisely in the degree to which the nature of the space has to be reached for, emerging only in response to exploration. This slow taking possession of space (the way in which it gradually becomes yours) promotes that fusion of privacy in the sharing
of a common ritual that is the essence of the luminous. And it is only in such darkness that light begins to take on a figu-
rative quality — the living light of the candle flame or, as at Klippan, the row of roof lights which forms a Way of Light be-
tween sacristy and altar.⁶

Although St. Mark’s and St. Peter’s are similar in their questioning of convention and the religious institution, as well as in their use of spe-
cific materials, forms and details, there are distinct differences in their use of light, floor plane and structure which reveal the further development of Lewerentz’ personal spiritual language. Whatever St. Mark’s does, St. Peter’s takes a step further.⁷

At the church of St. Mark, the experience of the building from the outside is as important as experiencing it from within (Figs. 11-12). Much of the spiritual nature of the building derives from the site itself, a small grove of white birch trees which have replaced the small lake that had previously existed there over a century and a half before.⁸ To heighten the spiritual nature of the site, Lewerentz chose materials which would best complement the existing trees:

The facades of the building are proposed to be of warm red brick against which the white trunks of the birch trees would
be beautifully delineated.\textsuperscript{9}

As in most of his projects, Lewerentz sought to reflect “the pre-existing spirit of the place, with the least possible violation of its intrinsic qualities”.\textsuperscript{10} Even the brick coursing adds to the spirit of the place. Since the mortar is almost equal in proportion to the brick (Fig. 13), the wall itself shares the mottled quality of the tree bark. The walls of the church both disappear in the woods as well as highlight them.

On the interior of the church at Bjorkhagen, the walls take on another element of mystery. Inside, the walls slide past one another, concealing their connections while lending a sense of enclosure. The one corner expressed in the church occurs at the base of a stair but is obscured by shadow (Fig. 14). This sense of enclosure without the explicit reading of a clear, geometric volume can be found in Alvar Aalto’s Voukseniska Church in Imatra (Fig. 15) which was constructed at the very same time (1956-59).\textsuperscript{11} The sense of enclosure is further enhanced by the brick ceiling. Here, Lewerentz employs the same brick as used on the walls to create a series of tripartite arches. The concrete beams which support the roof are also clad in this brick (Fig. 16). The result is a ceiling of great weight which seems to defy all forces of gravity as it is supported by widely spaced courses of brick. The bricks of the beams appear to be suspended in the mor-
tar, leaving us with a rather uneasy feeling about the structural soundness of the church.

Whereas a sense of mystery and uneasiness is achieved through the structure of St. Mark's, these same qualities are achieved quite differently and more powerfully in the church of St. Peter at Klippan. As Wilson notes in his article, "the language evolved at Bjorkhagen is developed to a much greater level of complexity and with even greater austerity". In this church, the forms become simpler, and the volumes more clear (Fig. 17). Light and structure are no longer purely functional, but rather imbued with symbolism and character. The figural quality of building elements themselves become obvious from the outside. The lamp posts seem to bend their heads towards this spiritual place, acknowledging its presence. At the parish hall which forms an L-shaped niche for the church, walls seem to dive underground at the stair or writhe and buckle behind the main walls, as if in recognition of the presence next door (Fig.18).

This same kind of figural quality comes alive on the interior of the church. The low height of the ceiling adds to the darkness and obscurity within the hall. As a result, the volume of the room can remain simple and clear. Mystery comes from the hiding and revealing of this clarity. "Enveloped in that heart of darkness that calls on all of the senses to measure its limits, we are compelled to pause".13
Here, a few shafts of light cut through the ceiling and walls.

Artificial lighting also plays a key role in this church. When directed in the more private areas of the church, it illuminates the soft curve of arched brick vaults (Fig. 19). When suspended as in the main meeting hall, they are hung without order or direction, creating a series of star-like figures in the darkness. These suspended figures only gain order as they approach the central aisle which leads to the altar. Here the lights gain order as they define the processional path (Fig. 20). Their figural quality in the darkness of this main sanctuary transforms these lights into the guardians of the space. These sentinel figures of light seem to be the lone inhabitants of this space.

The floor also seems to come alive in this darkened place. It undulates under foot, gently guiding you to the altar, but seething with energy (Fig. 21). Had the interior walls of the church been treated as mysteriously as those at Bjorkhagen, the floor would be much less powerful, but in its contrast to the clear geometry of the room, the floor acquires an added power. Even the details of the floor heighten this odd sensation of movement and life. At the base of the gentle slopes lies the altar, but where the floor swells, it “breaks into a fissure to form the baptismal font”. At this point, the brick coursing shifts and the bricks at the
ends of the cut are left dangling over the edge of the spring. The mortar cannot be seen, so they appear to hover over the water as if about to dive in (Fig. 22).

The structural steel supporting the roof appears to take on another layer of meaning, in this case, symbolic. For Wilson, the great T-shaped structure in the middle of the church becomes a symbol for the cross (Figs. 23-24). Its location in the center of the room and on one edge of the path to the altar, combined with its precision in detail, transform it from structural support into more of an icon to be revered. This is a very different approach to religious architecture which traditionally treated the building, however magnificent, as a container for icons. Here, the building itself becomes the icon, the object imbued with supernatural powers. The figural qualities add to its presence, transforming it into a living icon.

In the Malmo flower kiosk, however, such iconographic readings of the structure are limited, perhaps because it is not a truly religious type of program. Although the kiosk is an addition to a cemetery, a traditionally sacred program, it has no ties to any specific dogma, and its own program is one which is common to the secular world. The similarity lies in the treatment of a certain details, light and materials, and the precision of construction and composition.
The beginning of this shift in Lewerentz’ career had begun in the late 1930’s. As stated by Janne Ahlin in his book *Sigurd Lewerentz, architect 1885-1975*, Lewerentz became less dependent upon an exterior belief system... He became more free in relation to aesthetic dogma and gathered together his own ideals. The abstract, holistic, theoretical systems were to yield to a simplicity bounded by place and to practical construction. The visual image became an additive process that took form as the buildings grew. A language and the materials and their handling predominated.16

Although St. Mark’s and St. Peter’s show the evolution towards this theory of abstraction, the culmination of this shift did not occur until his final project in 1969. In the case of the flower kiosk (Figs. 25-26), materials and their handling create the language. The precision of construction, the quality of light, the contrast of the building to its surroundings, the juxtaposition of the rational and the irrational, the play of materials off of one another, and the subtlety of its subversiveness all serve to heighten one’s awareness of the place and of the natural. In its suppression of traditional language, it provides a neutral backdrop for the display of flowers while exuding a sense of power and strength which only could be
conveyed by such restraint.

The exterior of the kiosk is particularly striking for its somewhat subversive quality. Unlike the two churches, this quality has less to do with reinterpreting a specific institution and more to do with the questioning of urban conventions and preconceptions. Rather than discretely taking its place behind the sidewalk, the kiosk envelops the sidewalk with a massive overhanging roof that aggressively captures any passerby (Fig. 27). This is further heightened by the storefront window (Fig. 28). In its complete lack of articulation, the window loses its reading as a window and instead becomes part of an invisible wall. Suddenly there is no difference between the inside and the outside as thriving plants entice you to enter. One cannot help feel that although on the outside looking in, one is actually on the inside looking out to a more pure exterior.

Whereas the public face of the building draws you into this other “exterior”, the rear facade and service entry is completely closed (Fig. 29). Here the same window detail, or rather lack thereof, provides a completely different reading. Without the protection of the roof or even a fascia, the windows become invisible, part of the opaque wall of concrete. As Ahlin notes, the windows become pictures. The sky is “reflected in them and [transforms] them into paintings that [conceal] openings behind them”.

In fact, the whole wall can be viewed as a picture, precise and carefully composed (Fig. 30). The only frame is one suggested by the composition itself. The two windows are pushed towards the top right, as if about to join the sky, but the heavy black wood door at the bottom left keeps them from leaving the picture, anchoring them to the wall. The door, set within this frame, also appears to be hung on the surface of the wall. There are no barriers or elements which might interfere with the composition; not even stairs to access the refrigeration room behind the black door, nor plantings which could interfere with ones physical as well as visual experience of the wall.

This attention to the character of the wall is also evident in the deliberate separation of the facades at each corner (Fig. 31). The walls seem to form an almost perfect volume, but upon closer inspection, a shadow line separates the two planes and one realizes that there is no connection, at least no visual connection. We are allowed to sense the enclosure but then are not allowed to see how the walls connect. It is as though the walls were connected by some other forces. A sense of uneasiness has been instilled by these walls, only to be further heightened by the steeply sloping roof (Fig. 32). Not only does the roof not seem to connect to the back wall, but the shear forcefulness of its slope and the over-
hang are enough to suggest a power capable of pulling the whole building apart.

If the exterior of the kiosk can be characterized by its ability to provoke uneasiness, then the interior can be considered its antithesis. Once inside, the structure becomes clear. Walls which seemed to slip past one another on the exterior, are clearly joined at the corners of this monumental volume (Fig. 33). To call attention to this difference, Lewerentz varied the form work as the walls approached the corners. This break in the regular grid-like patterning caused by the joints of the form work draws your eye to the corner. It is as though the force of the two walls, struggling to come together caused this distortion, but its execution is so subtle that it does not overpower the quiet, protective quality of the space. Here precision in construction can achieve the effect of mystery.

The use of various materials on the interior also adds to this heightened sense of sanctuary and presence of unknown forces. The plywood form-work has left an indelible mark on the walls. In these cold concrete walls we can imagine the warmth of the material as if the wood itself had been used, or as if it had become petrified over a period of time beyond our human imagination. This notion of timelessness is what transforms this flower kiosk into a true sanctuary. Here we feel as though we have entered another world; a place where
we cannot be touched by time or by death. We are surrounded by flourishing plants and the ethereal light which gives them life.

The quality of this light is further enhanced by the reflective ceiling of aluminum sheeting. It is simply nailed to the ceiling. As the light crashes through the two giant windows, it is fragmented by the reflective ceiling, bringing the whole space to life (Fig. 34). In fact, it seems to literally bring the light fixtures to life. The strange white wall fixture slithers across the wall, sprouting new cables as it makes its way towards the light (Fig. 35). Phototropism is no longer limited to the plants as this light fixture doggedly heads towards its source. Lewerentz wants us to believe that this light is truly life-giving.

Lewerentz' ability to transform existing convention through minimal means is what makes his work so powerful. Precision of construction combined with his use of light and manipulation of the floor plane help convey an agnostic spiritualism in these last three works, but it is his final project for the flower kiosk at Malmo Eastern Cemetery which is most successful in bridging the gap between the religious and the secular. Through abstraction, he has made the spiritual accessible to the secular, industrialized world.
Notes

5. Although stave churches were a phenomenon of Norway, Sweden gained most of its knowledge of timber construction from its western neighbor. The fact that a Norwegian loft building is displayed as the symbol of Sweden's Folk Museum in Stockholm is indicative of this strong influence.
11. The birch trees surrounding Aalto's church in Imatra play an equally powerful role in the experience of the building. Aalto's church, however, almost disappears in their midst. The white of the exterior walls and the brown of the wood trim blend perfectly with the bark of the trees. If one approaches the building from the residential dirt road, one has no idea of the church's presence until it is only feet away.
13. ibid., p. 22.
In Search of a Spiritual Architecture: Sigurd Lewerentz and Louis I. Kahn

Having begun with the discussion of sacred works and how their language is transformed, we can then identify those building programs which seem to straddle the line between the sacred and the secular. In order to then isolate secular projects which seem to possess a spiritual quality, it is important to distinguish them from more traditional works which possess a sacred spiritualism as well as to distinguish them from works of a truly secular nature. By examining both sacred and secular building programs, such as the church (Fig. 36) and the museum (Fig. 37), in relation to the similar intentions of Sigurd Lewerentz and Louis Kahn, we can begin to understand the evolution of a more secular spiritualism and begin to differentiate between the sacred spiritual and the secular spiritual.

When discussing the spiritual in architecture, one cannot help but think of Louis I. Kahn. His architecture is clearly meant to evoke the spiritual. In this sense, he shares the intentions of his Swedish contemporary, Sigurd Lewerentz. Although Lewerentz was not the theoretician that Kahn was, his works clearly express his ideas about evoking an emotional
if not spiritual response. As discussed in the previous chapter, such intentions become clear in his later work for the church of St. Peter (Figs. 38-39) at Klippan (1963), but also, and perhaps more powerfully, in the Flower Kiosk for Malmo Eastern Cemetery (1969) which programmatically begins to combine the sacred and the spiritual. In studying the works of Kahn, it is important to find works that are programmatically or theoretically similar to Lewerentz's so as to make the comparison more precise. For this reason, we will examine Kahn's projects for the Unitarian Church in Rochester (1959-67) and the Yale University Art Gallery in New Haven (1952-53). What becomes evident in a comparison of these works is that despite the similar intention to evoke the spiritual, their methods and in some cases their results are entirely different. We can best begin to understand those differences by comparing their buildings with respect to their use of religious symbolism, relationship to the site, treatment of the institution, and phenomenal and tectonic properties.

Perhaps one of the first aspects we notice about Lewerentz and Kahn's sacred projects is the difference in the representation of religious symbolism. While St. Peter is a Lutheran church and the church in Rochester is Unitarian (Fig. 40), both sects represent a similar rejection of traditional dogma which came about during the various phases of the
Protestant Reformation. In their rejection of the papal authority and many of the Catholic rituals, these reformed churches sought to distinguish themselves through a more ascetic approach to worship. As a result, these churches were stripped of most of the icons and rituals which typically dominated the Catholic church. This is an important point to remember since both architects must represent churches that are free from the constraints imposed by the more traditional Catholic doctrines, which typically rely on specific icons in their representation. Because these constraints have, for the most part been removed, both Lewerentz and Kahn have had the opportunity to depart from traditional sacred language (Figs. 41-42).

In the case of Lewerentz, as discussed in the previous chapter, the departure is one of reversal and abandonment of a traditional Christian language in favor of a more regional tradition. St. Peter's at Klippan is not a place of light but of darkness and mystery (Fig. 43). As for his treatment of traditional symbols, Lewerentz transforms them as well. The baptismal font is no longer a sacred vessel which elevates the water above the ground; rather, it is a cut into the floor of the church which reveals a natural spring. The spirit of this church is rooted in the earth not the heavens. Equally as powerful for its subtle suggestion of religious symbolism is the gigantic roof support in the center of the hall. As men-
tioned previously, the massive T-shaped steel structure is located in the room in such a way that it begins to take on the iconographic symbolism of the cross (Fig. 44). Through scale and prominent placement in the center of the room, the support is transformed into an emblem, a totem which we immediately associate with a more traditional icon without it actually being the same form. It need not even be placed in the traditional location near the altar to receive this interpretation. The fact that it rivets our attention is enough to suggest the symbolism.

Kahn’s Unitarian Church, however, does not attempt to deny such overt symbolism. High above the sanctuary, lit by hidden clerestories and carefully formed in concrete hovers a cruciform ceiling (Fig. 46). This image of the cross has been abstracted by its perfect symmetry and its location, but its impact is just as powerful, if not more so, than a typical cross. There can be no doubt that this is a religious institution and somehow for a church which embraces all religions, it seems appropriate. What becomes clear is that Kahn has no intention of suppressing, altering or even subverting the traditional language the way Lewerentz does. Rather, his intention is to abstract that language in order to allow a new reading of it. It is the overall purity of his geometric forms which seems to dominate this building as well as his other sacred and secular works. In the Rochester church, the main
volume is based on a square plan and is surrounded by a thick wall of classrooms separated by an ambulatory. His initial concepts for the church, however, were much more overt about their platonic symbolism. In fact, one scheme became almost a direct extrusion of his form diagram which outlined his concept for the church by inscribing a square inside two circles (Fig. 47).

Such iconographic symbolism, as expressed in the Unitarian church ceiling, is only one aspect of Kahn’s work, which is rooted more in Platonic symbolism than that of a specific religious faith. Both Alexander Gorlin and Joseph Burton address this issue of overt representation of religious symbolism in their articles. According to Gorlin’s article, “Biblical Imagery in the Work of Louis I. Kahn”, most of this symbolism is directly linked to the Bible and in fact is not limited to his religious work, but rather is prevalent throughout his secular commissions as well. Some of the comparisons he makes are between Kahn’s Jewish Martyr’s Memorial and the Temple of Solomon, his British Art Center and 18th century reconstructions of Noah’s Ark, and his Hurva Synagogue and a 1721 Temple in Jerusalem. Perhaps the most memorable of these visual comparisons is the association of the Exeter Library ceiling plan with the nine-square grid of the Temple of Solomon, and the inverted image of the central volume with the Masonic skull and cross-
bones and Blake’s “Ancient of Day’s” (Figs. 48-49). Although the visual similarities are quite striking, some of these connections seem a bit contrived. The Biblical imagery seems much less convincing than the comparisons which suggest a link to symbolism of an earlier Platonic nature. In fact, one of Kahn’s objectives was to find the forms which were common to all forms of worship; thus his obsession with Platonic form. If this is the case, then it becomes clear that the Biblical and mystical imagery are all rooted in the same source, geometry. The use of specific iconography is used merely as a means of identifying with a specific faith.

This concern with returning to primary form is also a direct reflection of Kahn’s attitude towards the institution. Whereas Lewerentz’s departure from traditional language is indicative of his somewhat critical view that the religious institution was, to some degree, in need of redefining, Kahn’s distortion of that language suggests that he is not interested in altering the religious institution. Rather, Kahn is trying to find more appropriate ways of expressing that institution. Lewerentz is, in a subtle way, subverting the religious institution. Kahn is abstracting it and making it more legible, rather than challenging its premise (Figs. 50-52). In fact, Kahn himself believed that “What will be has always been”, stating, “I am trying to find new expressions of old institutions”. For Kahn, there was no
need to create new forms or institutions; they already existed. In his mind, all institutions were constant since they were expressions of man's communal spirit, and this spirit was timeless. As a result, his buildings were conceived as very singular entities based on primary geometry. The Unitarian church, like most of his buildings was conceived of as a complete composition, an autonomous form. Although there are a few distortions, due to functional requirements of the classrooms, for instance, the Unitarian church is symmetrical about the square sanctuary. Even the facades are treated in the same manner; although, this is perhaps as much a factor of the rural site as it is Kahn's desire for wholeness.

In plan, Lewerentz' church of St. Peter is similar in its initial concept of a sanctuary protected by a wall of functional, service spaces, but in this case, the wall of classrooms and administrative facilities has been pulled away from the sanctuary (Figs. 53-54). Although the presence of that "wall" and sense of enclosure and protection is still felt, the sanctuary has broken free. In a sense, this makes the sanctuary seem even more sacred and powerful, but more importantly, it marks the beginning of Lewerentz's treatment of the institution. For Lewerentz, the building must rise above the institution it is representing. The relationship of the building to the site takes precedence over its legibility as an individual institution. Similarly, the interior also tends to obscure
this reading. Both the lack of overt religious symbolism as well as the reversal of convention in terms of lighting and building height reveal a clear attempt to deny the institution. Whether this denial of the institution was due to a Swedish tradition of Lutheranism, a regional building tradition or his own politics, Lewerentz’s building is clearly challenging our notion of institution.

The relationship of these two buildings to their sites is indicative of Lewerentz and Kahn’s view of the institution, but reveals a difference in the way the two architects try to elicit emotional responses. For Kahn, the site is merely serving the building. It provides a contrast, a backdrop for the coherent form. The Unitarian church is clearly autonomous in its rural setting. In fact, most of Kahn’s buildings seem to have this isolated quality. In Kahn’s mind they are such universal representations of man’s institutions, that they could be anywhere. The only way the specific site becomes a factor for Kahn is in the building’s orientation upon the site. Located on the top of a hill in suburban Rochester, Kahn’s church sits confidently across the street and diagonally from a massive synogogue (Figs. 55-56). Rather than competing with the large building, it balances it, in effect creating a large gate. Furthermore, the Unitarian church is located on the traditional cardinal axis. Light is then fed into the building through the clerestories (Fig. 57) at the corners of the sanc-
tuary and side lights in the classrooms. In the Rochester church, the light becomes the only connection to the outside world. Formally, the building does not engage the immediate site in any way. With the exception of the light monitors on the roof which appear and fade in the changing light (Fig. 57), there is a clear distinction between the inside and outside. At the same time, however, the building appears to be emerging from the earth (Fig. 58). While in every other sense, the building is set in contrast to its surroundings, in its connection to the ground plane, its relationship becomes somewhat ambiguous and unexpected. To a certain extent, the juxtaposition of the brick walls against the natural ground plane heightens the contrast between the built and unbuilt. The overall effect, however, suggests that this pure form is being produced by the site itself. The treatment of the roof has a similar effect on how this building is perceived. While its projections are minimal and restrained, the play of light off of the glass monitors and the brick volumes suggests a constantly changing relationship with the sky (Fig. 60).

Kahn’s ability to draw power from the site through these subtle contradictions is also shared by his Swedish contemporary, but Lewerentz’s primary goal is to enhance the individual site with the least possible alteration of the existing condition. Rather than simply using the site as a foil, his building
becomes an integral part of the site. The site becomes an integral part of the whole composition. In this sense, the intentions of these two architects could not be more different, but the result: the eliciting a number of conflicting emotions due to subtle contradictions in the building's relationship to the site, is quite similar. Whereas Kahn’s Unitarian church could apparently be placed anywhere, Lewerentz’s church in Klippan is extremely site specific (Fig. 60). The site is not serving the building; rather, the building is serving the site, bringing out the most salient characteristics of the site. This is perhaps more obvious in Lewerentz’s earlier church for St. Mark in Bjorkhagen, discussed earlier, which both disappears in the forest of birch trees as well as highlights them depending on the quality of light (Fig. 62). Here, too, the ambiguity of the building’s relationship to the site elicits conflicting responses which heighten our experience of the building.

The relationship between inside and outside also becomes ambiguous in Lewerentz’s churches. This is primarily due to subtle detailing, however, since the materials and sense of mass is somewhat similar to the Unitarian church. There are few projections extending out into the site. At both Klippan and Bjorkhagen, the boundary is blurred by the window (Figs. 63-64). From the exterior, the window is mirror-like and flush with the wall. The volume seems pure and impenetra-
ble as the glass reflects the surroundings. From the inside, however, these lights are set away from the interior wall. It is possible to read the depth of the wall and the glass become transparent, allowing one’s eye to extend through the depth of the building and out into the site.

It is this kind of relationship between phenomenal and tectonic properties which further lend a spiritual quality to the Unitarian Church and St. Peter’s. In and of themselves, the phenomenal qualities of light and atmosphere and the tectonic properties of the structure and material are nothing extraordinary. It is the way in which they are played off one another and how they relate to the site and the architect’s intentions that gives them their power. There is a precision in the way each of these qualities serve the larger intention of the building, yet it does not overwhelm the qualities themselves. Precision, in this sense, allows for a simultaneous experience of a variety of sensations. This heightens our experience of the place and touches our imagination.

While both Lewerentz and Kahn place a great deal of importance on light as a means of evoking the spiritual in their buildings, their treatment of that light, natural and artificial, is for the most part quite different. For Lewerentz, it is the figural quality of light (Fig. 65) as it emerges from the darkness of the space which adds a sense of mystery and
therefore lends a somewhat mystical quality to the space. In the Klippan church, the primary role of light is to obscure rather than illuminate the structure, unlike the Rochester church which is primarily about revealing the nature of the structure (Fig. 66). This, however, is only one function of the light in Kahn’s church which uses “natural light both as the creator of form and as the source of the mystical experience in architecture”. In comparison to St. Peter’s, the Rochester church employs light in a multiplicity of ways. Not only does light become figural in the darker spaces surrounding the main sanctuary and the rooms at the basement level, but throughout the building, there is a regularity in the use of natural light that begins to read as structural. Just as structure gives light, by determining the pattern and quality of the light as it enters a room, so does light actually begin to structure the space. In the sanctuary of the Rochester church, light comes from hidden clerestories which line the corners of the cruciform roof (Fig. 67).

Their light washes the blank brick walls at each corner, bringing into the meeting hall a soft mysterious natural light from the points of the room which are normally least well lit. This contradiction of the expected gives the whole space an expansive yet serene buoyancy which obviates the weight of the structure.
According to Kahn, a space cannot be defined as a space without natural light. Here, the light illuminates the structure. At the corners of the building, where the classrooms should join, he splits them apart, letting natural light spill in at the corners (Fig. 69). Light is now acting as the structure of these corners much in the same way as it is in the sanctuary itself. If we were to diagram the light alone, we would arrive at a relatively coherent structure (Fig. 70). In Kahn's work, light becomes structural through its figural quality, but it also becomes structural as it begins to join different materials. Both the Salk Institute and the Kimball Museum are perfect examples of this use of detailing with light. When a building appears to be held together by something as phenomenal as light, it immediately takes on a spiritual, other-worldly quality.

In terms of the physical structure of the building, Kahn also uses the mass and shadows they create as a means of evoking a spiritual quality. Just as Lewerentz seems to support the Bjorkhagen church with beams of brick "floating" in mortar, so does Kahn emphasize the massiveness and weight of the cruciform ceiling of the sanctuar (Fig. 71). As discussed by Vallhonrat in his article, "Tectonics Considered: Between the Presence and Absence of Artifice", the power of concrete lies in the fact that the structure, the reinforcing, is completely hidden. We only see the
form.26 This is the power behind Leverentz’s brick beams and the vast span of Kahn’s cruciform. Kahn heightens the power of this mass by thickening the edges of the cross as well as making the supporting piers appear to be delicate, intricate constructions (Fig. 72). The vertical reveals in the block walls which separate the sanctuary from the classrooms seem to fragment the walls, not only suggesting the fragility of the room, but also enhancing the sense of freedom one has to leave. In comparison to the vast ceiling structure above, these walls appear somewhat unstable (Fig. 73).

The juxtaposition of the heavy cruciform supported by the rather delicate piers and fragmented walls is a contradiction, commonly used by Kahn to keep the visitor slightly off balance and uneasy. This same effect is achieved by the clerestories which light the corners. Not only is the light source hidden from view, but they are also making it appear as though the corners, normally the darkest part of the room are actually giving light (Fig. 74).27 In the case of the outer classroom walls, the corners are giving light.

In a sense, it becomes difficult to isolate these phenomenal and tectonic properties because they are so intertwined. This is one of the aspects of precision which also adds to the spiritual quality of the spaces by both Kahn and Leverentz. Certainly there is a precision of tectonics, the manner in which materials are
joined and the quality of the materials themselves, but it is the overall engineering of these qualities into a coherent experience that lends a spiritual quality rather than a literally mechanistic quality.

It is precisely these qualities which have the potential to inform a more secular spiritual language of architecture, a language free from religious connotation. Having examined these two examples of sacred architecture which begin to redefine the institution and convention, we can now begin to examine Lewerentz's Flower Kiosk at Malmo Eastern Cemetery and Kahn's Yale Art Gallery (Fig. 75) as examples of programs that begin to straddle the line between the sacred and the secular. A similar comparison of these two works on the basis of their use of religious symbolism, treatment of the institution, relationship to the site and phenomenal and tectonic properties will help clarify the distinction between these works and the purely sacred works at Klippan and Rochester. Perhaps more than their church projects, these more secular projects reveal more clearly the intentions of Lewerentz and Kahn with respect to this search for the spiritual in architecture.

As mentioned previously, most of Lewerentz's early work had been on cemeteries. During that time of his career, he attempted to reinterpret the traditional classical language associated to sacred architecture (Figs. 76-77) until he
eventually abandoned classicism altogether. The Woodland Cemetery which he completed with Gunnar Asplund is one example. His church of St. Peter is a clear representation of that break with classicism and traditional interpretations of the sacred. The Flower Kiosk at Malmo is equally precise in its departure from convention, but is perhaps more powerful. Here, there is not a trace of religious symbolism, yet it conveys a power and strength greater than many churches. This is perhaps in part due to the unexpectedness of such a spiritual experience in the context of a flower kiosk. While at Klippan, the T-shaped support, by its location, became a symbol for the cross, at Malmo, all associations with religious symbolism have been suppressed. This is an entirely mute building. There is nothing in its plan or its shape which can be tied to traditional notions of the spiritual. Stripped of all representation of the sacred, it is still able to exude the strength and precision of sacred architecture through a carefully designed relationship between the site, light, and materials.

Of all of Kahn's buildings, the Yale Art Gallery is perhaps one of the most neutral in terms of overt religious symbolism. Like the Flower Kiosk, the museum also represents a program that begins to make the transition between the sacred and the secular. Although the museum is typically considered a secular project, its origins were nonetheless tied to the sacred. The Altes Museum (Figs. 78-79) is one early exam-
ple of the museum as a place for the worship of art, but it did not rely solely on the sacred typologies for architectural forms. Instead, it synthesized the stoa, a symbol of the secular world and the rotunda, a symbol of the religious world. This unique history of the museum typology is important to remember when considering Kahn's work. In many ways Kahn's other museums perpetuate this notion of art worship. The Yale Art Gallery, however, seems to be an exception to this both in its siting, one of the few with a restricted urban site condition, as well as in its overall treatment. Not even the sequence of spaces suggests religious symbolism (Fig. 80). The symbolism that does persist, however, is that of a pre-religious Platonism. While such symbolism is not related to any one faith, Kahn viewed Platonism as the origin of all religious symbolism. Although Kahn's cruciform ceiling of the Rochester Unitarian church was a more traditional iconographic symbol, much of the symbolic power of the church was derived from the pure geometry of the sanctuary. As a means of representation, the Platonic form still connotes the sacred.

In the Yale Art Gallery, the triangle inscribed in the circle becomes the dominant form in the plan (Fig. 81). Experientially, these forms correspond to a stair which is darkly lit and in general evokes a feeling of uneasiness and entrapment. While Kahn may not intend any specific reference to biblical or mystical
imagery, it is significant that he was to use almost the exact same plan for a later project (Fig. 82), the Adath Jerusalem Synagogue (1958). For Kahn, these platonic forms hold a religious significance for all manner of worship. Such symbolism becomes undeniable in the Yale Art Gallery, and is further enhanced by the geometry of the long span concrete floor construction. While the sheer repetition of the pure geometry abstracts the Platonic reading of the ceiling and floor structure, the minimalism of the plan and the monumentality of the space (Figs. 83-85) focus our attention on the clearly symbolic stairwell.

As representations of institutions, the flower kiosk and art gallery are very different. In fact, it seems almost as though Lewerentz and Kahn have reversed their roles as challenger and proponent of the institution. Although scale is an important factor in determining the form or shape of a building, it is significant to note the monumentality of the flower kiosk considering its small scale. Whereas in his churches for St. Mark and St. Peter, Lewerentz is in a sense trying to diffuse the institution and transform it, he seems to be trying to create an institution in his Flower Kiosk. Its form is pure and simple. Its roof is a monumental gesture, reaching from the sidewalk towards the sky. Its rear facade is carefully composed and formal. The Flower Kiosk is truly autonomous. Perhaps Lewerentz is using the kiosk as an emblem for the Eastern Malmo
Cemetery, but it is also possible that he is recognizing the potential of a secular ritual to become an institution.

If a Kahnian autonomy of form lends the Flower Kiosk an institutional reading, then the Yale Art Gallery could be viewed as one of Kahn's most unconventional interpretations of the institution. In fact, it is the closest to Lewerentz's approach to the institution. One explanation for this is that this was one of Kahn's earliest solo projects. As a result, he was somewhat free of his own theory as well as any preconceived notion of what the gallery should be. The fact that the program required a great deal of flexibility was no doubt a significant factor as well. Perhaps the most significant factor, however, was the site condition. This is one of his few projects to be constrained by existing urban fabric (Fig. 86). The result is a building that is more concerned with knitting itself into the fabric of New Haven than it is with declaring itself an autonomous institution. The Yale Art Gallery was intended as an addition and as part of the school. Kahn's primary concern was to provide a relatively neutral backdrop for the exhibition of the school's modern art collection and the housing of design studios, not to announce the building as an institution of man.

While the Yale Art Gallery is not an isolated object within a field, it is nevertheless fairly
introverted. From the street, the building, which occupies a corner, seems entirely closed (Fig. 87). On the north side at the rear of the building, however, the building is sheathed in a wall of glass and looks out onto a stepped courtyard (Figs. 88-89). This is one of the few buildings by Kahn which fully engages an exterior space, but it is not a public space. By closing off views to the street and bringing in northern light from the back of the site, Kahn has created a sanctuary for art.

Lewerentz's Flower Kiosk, as discussed in the previous chapter is also a sanctuary: a sanctuary for plants and flowers, but despite its overall appearance, its relationship to the site is not as clear cut as one might think. In this building, the windows and the roof become the sole means of connecting the building to the site. Unlike his church projects which were set in a more rural context, this site is more urban. As a result, Lewerentz had to find alternative and more subtle means for connecting his building to its surroundings. Rather than relying on form to achieve this connection, he plays with the reflectivity of the windows, using details similar to that of his churches at Klippan and Bjorkhagen (Figs. 90-91). On the rear facade of the kiosk, the vast windows are mirror like, but on the public side, where the roof casts a shadow, they become transparent. The roof not only extends out into the exterior, but the exterior can now extend inward.
Once again, the phenomenal properties of light become intertwined with the tectonics of these more secular buildings. This is true for both Lewerentz’s flower kiosk as well as Kahn’s art gallery. In the flower kiosk, as discussed in the previous chapter, northern light enters the clerestories, the angle low due to the northern latitude. Although there are fixtures, the space is primarily lit by natural light as it enters the high windows and reflects off of the metal sheeting on the ceiling. In a sense, the concrete walls provide a neutral backdrop for this play of natural light and the display of plants.

The importance of natural light is essential to the atmosphere of Kahn’s gallery, although artificial lights nestled in the ceiling structure are essential for lighting the artworks. The lights make the tetrahedral spaces glow, revealing the depth of the structure (Figs. 92-93). The most memorable and perhaps spiritual moment of this building, however, is not the gallery space itself, but rather the stairwell and the juxtaposition and multiplicity of sensations experienced in the stair with the somewhat neutral and constant experience of the gallery space. While we admire the gallery space for its technical precision, it is the stairwell which elicits the conflicting sensations which begin to touch our imagination (Fig. 94). The stair combines the awkwardness of a triangular shaped stair with the softness of a
curved wall, polished black slate treads with a chain link rail, and eerie shadows with a warm light from above. In general the relationship between the stair and the structure of the cylinder which is apparently supporting it seems tenuous at best, as gaps between the two give views to the concrete floor stories below. Upon reaching each floor level, one breathes a sigh of relief, but soon cannot help but want to return (Fig. 95).

Having examined these two secular projects which are indirectly linked to sacred programs, it becomes clear that the Flower Kiosk by Lewerentz and the Yale Art Gallery by Kahn share some of the same qualities of the architects’ sacred projects for the Church of St. Peter at Klippan and the Unitarian Church in Rochester. While some aspects of these buildings seem to evoke a spiritual response, others do not. In some cases, as in the Flower Kiosk, the whole building seems to be part of this experience, whereas in the Yale Gallery, it is a matter of discrete moments within the building. Perhaps the most noticeable difference between Lewerentz and Kahn is their approach to the concept of the institution and their use of overt representation of religious symbolism. The New Haven gallery (1952-53) is to a certain extent an exception in Kahn’s work in terms of his treatment of the institution. Most of his later works are clearly intended to represent the institution as an autonomous entity, as something unchanging
and constant. The limitation of that interpretation is that it does not allow for the possibility that an institution may, over time, lose its original meaning or validity in a given society. The Yale Art Gallery, however, is not limited by such a clear definition of the institution.

When considering these last two buildings as possible models for a secular spiritual language in architecture, the only limitation that could be identified is perhaps Kahn’s persistent use of Platonic symbolism. While these pure forms certainly give his buildings power, it is impossible to disassociate them with their religious or rather mystical connotation. In fact, as a result of this symbolism, all of Kahn’s buildings share a religious quality:

They are profoundly religious buildings created by a man who had an almost mystical response to every aspect of architecture including the nature of structure and materials.29

As a result, even his secular buildings retain a somewhat religious symbolism that prevents them from being read as truly secular (Fig. 96).

In comparing Kahn’s works with that of his contemporary Sigurd Lewerentz, it becomes evident that while Lewerentz is transforming his treatment of religious architecture as a means of finding a secular spiritualism, Kahn is transferring his treatment of religious archi-
tecture to secular projects. In all of his works, Kahn is trying to find the forms which will enable people to find their own spiritualism. For Kahn, however, this seems to be a religious-based spiritualism, and not a purely intellectual one; although Kahn did seem to recognize the impossibility of defining the spiritual:

I sense Light as the giver of all presences, and materials as spent Light. What is made by Light casts a shadow, and the shadow belongs to Light. I sense a Threshold: Light to Silence, Silence to Light — an ambiance of inspiration, in which the desire to be, to express crosses with the possible. Beginning to touch on the idea of multiplicity of sensations. Trying to define a sensation (the spiritual) that cannot be defined. It lies somewhere between Light (sight) and Silence (sound).30

Kahn’s architecture is successful at evoking a spiritualism, which although it holds sacred connotations, also possesses some qualities which can be considered universal and secular in its ability to touch our souls (Fig. 97).
Notes

18The Lutheran church, like the other protestant sects, broke with the Roman Catholic Church due to a rejection of the papal supremacy and the powers of the hierarchy of bishops. According to the Lutheran church, the Bible is the sole authority. Furthermore, because there is no central governing body for this church, the churches in each country have developed their own traditions. The Unitarian church is similar in its rejection of traditional doctrine, but in fact is even more liberal in that it has no formal creed and strives to be universal. Although it still believes in God, it denies the trinity. Unitarian services are marked by a freedom from ritual. *Encyclopedia Britannica*, Vols. 14 & 22 (Chicago: William Benton Publisher, 1973) Pp. 1689, 1731, 1840.


21In some of Kahn’s later buildings, such as his design for the Kimball, this line between inside and outside becomes less clear as he uses more courtyards and more glass.


Images of the Museum: The Evolution of a Secular Spiritualism

A comparison of both the sacred and semi-secular projects of Sigurd Lewerentz and Louis Kahn is helpful in trying to differentiate between the sacred spiritual, that which inspires our religious belief and the secular spiritual, that which inspires our intellect. While both architects share similar intentions, the qualities they achieve in their works and the type of spiritualism that is evoked is at times quite different. This form of analysis, however, is only able to distinguish between the sacred and the secular, or more precisely, the semi-secular. In order to distinguish the spiritual secular from the purely secular, it is necessary to examine several works which strive for very different intentions while approaching similar programs.

The program for the museum as a typology has undergone a significant transformation over the past few centuries which is, in a way, analogous to the cultural shift from a more ecclesiastical basis for society to a secular one. For this reason, the museum is an appropriate choice for this analysis since a number of architects have taken quite different approaches towards the treatment of this particular
institution. Since Karl Friedrich Schinkel’s design for the Altes Museum (1824-30) combined typologies which had become symbols of the secular (the stoa) and the religious (the rotunda), architects have been split between representing an institution that is purely secular and one that evokes the sacred (Fig. 98). As discussed in chapter two, Louis Kahn tended towards a more sacred reading of this institution. His design for the Kimball in Dallas, alone in its landscape and raised up on a plinth, is a prime example of his interpretation of the museum as temple (Fig. 99).

More recently, however, architects such as Peter Markli and Jacques Herzog and Pierre de Meuron have attempted to maintain the spiritual aspects of the art museum while altering or abandoning the religious connotations. Both Markli’s museum in Giornico, Switzerland (Fig. 100) and Herzog and de Meurons’ museum in Munich, Germany (Fig. 101) are examples of the typology which have evolved away from the sacred dimension of their Schinkel predecessor.

The secular dimension of the Altes has also been reinterpreted by contemporary architects. James Stirling’s design for the Sackler Art Gallery in Cambridge, Massachusetts is perhaps one of the more explicit examples of this new secularism (Fig. 102). As in some of his other projects, his primary goal seems to be one of questioning the traditional architectural
language of the Cambridge site as well as trying to give the building a certain conceptual identity. Although there are aspects of the building which seem to suggest a sacred symbolism, they are entirely subordinated to the secular notion of function and precision.

For the most part, all of these buildings are free from the overt religious symbolism that we found in Kahn’s work, but the treatment of the institution, the relationship to the site and more importantly, the phenomenal and tectonic properties remain as the essential categories for distinguishing those buildings which intend to embody some sort of spiritual quality from those which are intended to capture a single character or essence.

Although Peter Markli’s museum housing the sculptures of Hans Josephsohn is similar in its materials and intentions to Lewerentz’s flower kiosk for the Malmo Eastern Cemetery, there are vestiges of sacred symbolism. Unlike Kahn’s Yale Art Gallery, however, he does not achieve this sacred quality through the use of platonic references. While Markli admits to being influenced by the three stone churches in the nearby village, the symbolism is much more subtle. Only through the singular entry/exit, the procession through the building’s three rooms, the roof lighting through thick colored composites from above, and the four niches which appear on one side of the final room (Figs. 103-105) do we associate this
place with a church's atmosphere and ritual. There is no overt religious symbolism, and even those qualities which evoke this quasi-religious association have been distorted. Although one proceeds through the series of rooms on a longitudinal axis, the axis is not on center. Furthermore, the niches in the final room, although they suggest side chapels, are only on one side of the room; thus, any associations we may have connecting this museum with a church are based purely on the subtle experiential qualities of the space and not on the use of specific iconography or overt religious symbolism.

In comparison, Herzog and de Meuron's museum in Munich lacks any suggestion of religious symbolism. On the one hand, the Herzog and de Meuron project appears to be quite similar to Markli's building. Like the Giornico museum, it is a longitudinal building which is relatively small in scale and is subdivided into three equal rooms, on the upper level (Figs. 106-107). The ground level, however, is reduced to two unequal rooms which are separated by a large space which is emerging from the basement level. While there is a certain element of a ritual progression through the regular spaces on the upper level, the movement becomes much less regular and linear on the lower levels. Furthermore, rather than locating the doorways of the rooms just off center, they are pushed all the way to one side of the room (Fig. 108). As a result, the
spaces are experienced much more as individual volumes than as a nave with side aisles, and the stairs which connect the three levels are along the short axis, using up only as much space as is functionally required. Like the Markli project, the Herzog and de Meuron museum is stripped to the bare minimums of construction, relying on the materials and their connections for an architectural language; however, it takes the suppression of religious symbolism one step further, relying purely on phenomenal and tectonic qualities to convey a sense of the sacred.

Stirling’s project also suppresses the use of religious symbolism, but then, his intention is not to evoke the sacred or in fact the spiritual. Although, to a certain extent, Stirling uses primary geometry in his buildings, such as in the Staatsgalerie, his intention is not to evoke the symbolism of platonic form in the manner of Kahn. Rather, his concern is primarily with the typologies which those forms have come to symbolize. The symbolism is rooted in architecture itself, not its sacred origins (Fig. 109). In fact, in the Sackler museum, these forms are almost entirely lacking. If there is any aspect of this building which could be capable of symbolizing the sacred, it would be some of the monumental tomb-like spaces of the lower galleries and the aspect of procession (Fig. 110). In this case, as in most of Stirling’s buildings, however, the procession is much more intricate and complex. In fact, the
circulation becomes an object in and of itself and not just a part of the spaces it connects (Fig. 111). Stirling himself admits to this when discussing the main staircase which connects the gallery levels:

But I prefer to think of this staircase as an event in itself, more a picturesque and less a sequential element in the spatial whole. I hope the visitor will experience circulation through the building as a succession of minor shocks or jolts; movement through the building tends to be interrupted by stop effects and contra axes.31

As a result of this form of precision and complexity of events, the ritual nature of the procession becomes subordinated to the mechanics of connecting the disparate pieces. As the procession becomes much less ritualized, it becomes less symbolic of the sacred. In this case, precision is focused not on the tight connection of parts into a spatial whole or on the interaction of the phenomenal and tectonic properties, but on the mechanistic and precise functioning of the individual pieces. Precision, therefore, has both the ability to evoke the spiritual through tectonics as well as suppress the spiritual by being too mechanistic, and leaving nothing to the imagination.

Aside from the architects' intentions to evoke or not evoke the spiritual through the use of religious or sacred symbolism, the relationship of the building to the site is also essential to
distinguishing the spiritual secular from the purely secular. While the specific conditions of each site vary from the rural to the suburban to the urban, it is possible to compare the relationships of the buildings to their sites on the basis of their ability to evoke a sense of place or a sense of the institution they are representing.

Although the Josephsohn museum by Markli is located in an extremely rural area, in fact, in a slice of vineyard that runs between a stream and a road, it conveys an important relationship to its site (Figs. 112-113). Unlike Lewerentz’s more urban project for the flower kiosk, Markli’s museum is much more closely tied to the site. The building is intent on enhancing the length and tightness of the site as it incorporates those very qualities in its own plan. Furthermore, the exterior articulation of the rooms as they become shorter and taller and then longer and wider add to the sense of movement experienced by the site itself (Figs. 114-115). The building itself looks as though it is moving along the site, parallel to the river and the road bed. In this sense, Markli is enhancing the existing nature of the site much in the same way that Lewerentz does by incorporating and complementing the quality of the birch trees in the exterior of his church for St. Mark at Bjorkhagen, discussed in chapter one.

In terms of reading Markli’s museum as an
institution, the message is somewhat ambiguous. Like Lewerentz’s flower kiosk, this building has a monumental presence although its size is actually quite small. Upon one’s first glance of the building, one sees only the walls and volumes. There are no windows to contaminate the purity of the walls. In fact, the facade we are faced with upon locating the building is not the formal entry end, but the back of the building which is blank and asymmetrical (Fig. 116). We must walk the whole length of the building to find its only entry, a solitary wood door raised up off the ground with only a small foot plate cantilevered out for a step. As we move along the outside of the building, we are confronted by a series of changing facades, each revealing something different about the space within: first, a tall rectangular volume, followed by a shorter elongated volume of the same width, and then finally, another tall volume which widens on one side (Figs. 117-119). It is object-like, but it lacks the symmetry of Kahn’s institutions. While the monumental nature of the building and its formal entry suggest its status as an institution, every other aspect of the building denies this reading. In this sense, the museum behaves much like Lewerentz’s flower kiosk; although its location is much more rural.

Herzog and de Meuron’s museum shares this more rural context. Located in a suburb of Munich, the building is located on a spacious site set back from the main road and partially
obscured by birch trees (Figs. 120-121). If the Markli museum denies its identity as an institution through its uneven treatment of facades, then this museum denies its institutional quality through an entirely even treatment of its facades (Figs. 122-123). There is not one entry but two, since the opening extends through both sides of the building. Architecturally, there is no front or back. Only the siting suggests how one is to approach the building. It is an object which entirely free from its context; perhaps, even more free than the Giornico museum which draws its length in part from the long and narrow site. It could be a private home or a warehouse, just as easily as a museum. This is because one cannot distinguish what is public and what is private. By not declaring a public front or by revealing its interior in any way, the Munich museum reads as neutral and plays a rather uncertain role as an institutional building.

In terms of its physical relationship to the site, the Munich museum also attempts to enhance the site. Instead of complementing or mimicking the mottled quality of the birch trees, this building reflects them. The frosted glass at the top and bottom of the building multiplies these trees while also giving off a light of its own (Fig. 124). The building begins to bleed into the site through these phenomenal qualities while in fact remaining entirely contained. The building almost disappears. It is this imaginary extension of the building which
begins to evoke a spiritual response.

This bleeding of spaces also becomes enhanced when on the interior of the building. The treatment of how the building sits on the site is brought to our attention as we enter the building. Herzog and de Meuron clearly mark their foundation with gravel, separating the grass from that which is man-made yet hiding that which supports the building (Fig. 125). As a result of this attention to detail, we become more aware of the building’s relationship to the site. Moving inside, we begin to see a space emerge from below as if bleeding from the earth and extending outwards through the glass walls (Fig. 126). Here, the site becomes integrated with the phenomenal and tectonic properties of the building.

In contrast, the phenomenal and tectonic qualities of the Sackler Museum are segregated from the site. This is in part due to the site itself (Fig. 127). Stirling did not have the rural sites that Markli and Herzog and de Meuron had for their projects. The historic urban fabric of Cambridge and Harvard University posed its own set of constraints. Whereas Herzog and de Meuron’s museum essentially ignored its context, this museum was governed by its context. More importantly, this museum was conceived as an addition to an existing institution, the Fogg Museum, across the street, and the university as a whole. As a result, the site plan takes precedence over any
other connection to the site. As a result, the phenomenal and tectonic properties are subordinated. The tectonics of the site are now on a much different scale. Rather than focusing attention on how the building actually and physically engages the ground, Stirling is more concerned with the site on a broader scale.

The role the Sackler museum must play is another important distinction between Stirling's project and those of the Swiss architects. The more rural nature of the sites and specificity of the collections found in the Giornico and Munich museums allowed for much more object-like interpretations with little in the way of institutional readings. In an urban condition, however, the necessity for an institution to declare itself becomes more of an issue. In the case of Stirling's project, however, it is serving a function similar to that of Kahn's Yale Art Gallery, discussed in chapter two. Like the Yale Gallery, the Sackler is an addition to an existing museum and institution with a prominent street front (Fig. 128).

The site for the Sackler is not just the ground it sits on. Here the site is characterized by the neighboring buildings, the nearby overpass and the character of that particular section of the street. If anything, the Sackler embodies more of the character of its site than the other two buildings previously discussed, because the plan of the building itself becomes an
extension of those qualities inherent in the site. The Sackler continues the wall-like quality of the street created by the Fogg and the Harvard Graduate School of Design, but its face is not this long facade. The building becomes two interlocking pieces. Like the Yale Gallery, it presents a rather neutral and somewhat blank face to the public. In this case, however, the wall is not just a facade, but a thick buffer of offices, storage and libraries which wraps around the western corner of the block to face the GSD protecting the museum proper from the street (Fig. 129). The museum galleries are then connected by a long processional stair (Fig. 130).

Only a small portion of the museum proper reveals itself and that is on the eastern side which faces the Fogg, but in so doing, it is exposing its split personality. Only here does the building reveal itself as a connector piece between the two institutions of the GSD and the Fogg. In fact, early schemes for the building show a skywalk connecting the two (Fig. 131). This is rather appropriate when considering the fact that the design school is in a sense where art is produced. The theoretical connection between these two neighboring institutions is undeniable. Stirling is simply emphasizing the connection while at the same time contradicting and denying it by curving the corner of the exterior as it attempts to address a different aspect of the context. In this way, the Sackler does not compete with its
neighbors. Instead its long facade provides a subtle connection between these two buildings and with the infrastructures surrounding it. This idea of connection pervades the entire building. In fact, it becomes the essence of the building's character. Stirling has imposed this quality upon the site after recognizing a certain kinship between the two institutions. This is not a quality that was necessarily pre-existing in the site itself. Furthermore, the fact that this is an urban site automatically introduces a set of relationships of a much larger scale than that of building's specific tectonics relationship to the phenomenal. Nature can only be felt through light here. There is no landscape to connect to. As a result, such connections to the inherent qualities of the site are subordinated to broader issues of context.

These differences in the treatment of the site are indicative of the way these architects address the tectonics and phenomenal qualities of their buildings. Whereas Stirling is using material as means of tying his building to an existing context, namely brick, both Markli and Herzog and de Meuron are choosing materials for the emotional qualities they evoke or the phenomenal qualities they possess. Stirling uses material to evoke a certain response through the juxtaposition and unexpected combination of materials and colors (Fig. 132). Markli and Herzog and de Meuron use materials more in the spirit of Louis Kahn (Fig. 134): for the specific emotional response
they elicit and their tactile or phenomenal qualities.

Much of the character of Markli's museum comes from its material. Rather than choosing a carefully formed concrete like that used by Lewerentz and Kahn, Markli chooses a rough-hewn concrete. Whereas Kahn carefully controlled the construction of the forms, the pouring of the concrete and the finishing of the joints to achieve specific textures and details, Markli uses the most basic techniques, leaving most of the work to the mason. In the Giornico museum, the joints from the forms and minor flaws such as the discoloration at the base of the wall are left untouched. For Kahn, concrete was a unique material: "It is a cross between steel and melted stone, and you can make it do things which no other material can do." In Markli's museum, the power of the concrete lies in its poor quality, natural and unmanipulated. It reads more as an artifact than a new construction. The manner in which the concrete is then put together seems to gain added strength. Even the poorest materials can be used to achieve a certain emotional response or convey a certain quality. As discussed by Carles Vallhonrat in his article, tectonics depends on gravity, the structure of the materials we have or make, and how we put those materials together. Such attention to the tectonics of the building becomes clear in Markli's treatment of the interior and exterior. On the exterior of the
building, Markli carefully locates the joints. The vertical joint marks the line of the skylights (Fig. 135), the left side and right side each treated differently. The interior, however, is left to the mason (Fig. 136). Markli is concerned that his architectural intentions do not conflict with those of the artist. Markli’s building is so deferential that it almost begins to rely on the sculptures as ornament.

As a result of this relationship, these sculptures are able to play a unique role in the experience of the architecture. Rather than relying on ornamental detail found in more traditional architecture, this building engages the sculptures it contains. These sculptures, in fact, are so intertwined with phenomenal qualities and the tectonics of the space that they themselves begin to take on architectural qualities, not only shaping the character of the rooms but shaping the actual space within the rooms. It is difficult to imagine these works in any other setting. It is difficult to imagine this building housing any other works. There is a symbiotic relationship between the two: one, very abstract and deferential and the other figural and aggressive. Hanging on both walls of the first room, the high relief sculptures force the visitor to stop (Fig. 137). The next room, being much more linear and compressed spatially and now displaying relief sculptures on only one wall draws the visitor through the space, directing him towards the final room (Fig. 138). In the final room, sculptures hang
on the wall as well as establish themselves as free-standing elements, placed randomly about the room (Fig. 139). These larger sculptures become like sentinels guarding the sculptures in each of the four small side chambers on the opposite wall (Fig. 140). The nature of each of these rooms, combined with the strange quality of light, seem to animate these sculptures. They become more alive as one moves through the space. The progression from room to room is not simply one of a ritual procession. It is the transformation of these sculptures into living beings, spirits. Having witnessed this transformation, it would be impossible to experience the sculptures or the building in the same way upon one’s exit.

The nature of Markli’s museum and the relationship of the building to the sculpture is unique. Few museums house such a singular collection or attempt to compliment the collection in such a way. While Markli’s design appears to be a neutral backdrop, its ability to engage the sculptures in the making of the spaces is anything but neutral. In comparison, Herzog and de Meuron’s museum seems to be an even more abstract and silent container. This perhaps becomes most evident in the even treatment of the upper gallery spaces. All three rooms are equal in size and are lit from clerestories on both sides of the building (Fig. 141). The upper galleries are entirely seamless, finished with white walls and wood
flooring, as they are elevated above the ground plane. This distinction is even carried out through the detailing of the wall section (Fig. 142). At ground level, the glass is flush with the outside of the foundation. On the upper level, however, the glass is attached to the outside of the wood panel walls, giving the sense from the exterior that the upper level is somehow detached, separate from that which is imbedded in the earth, and reacting to the shifting ground plane.

This simplicity and clarity of the plan of the building is carried over to the exterior treatment of the building. Such an even treatment of the facades is what enables Herzog and de Meuron to manipulate the sectional qualities in very subtle ways (Sectional comparison, Fig. 143). Despite the somewhat unexpected location of the floor levels, we experience a very even treatment of the interior spaces in terms of their lighting. The lighting becomes the one constant on the interior, both in its size and location in the various rooms and at the various levels. Through the subtle manipulation of the construction details, the two sizes of continuous bands of exterior glass are transformed into equal strips of windows on the interior, an unexpected contradiction.

Stirling's project lacks these subtleties of construction, but possesses its own forms of unexpected contradiction that are more suited to his intentions and a project of this scale.
Material is not used as much for its inherent or phenomenal qualities as it is used for its role in the “succession of minor jolts and shocks”. Not only does the long striped brick wall along Quincy Street further Stirling’s concept of this building as a connector, but it also denies this connection by curving at the corner and contrasting with the brick of the university and the concrete and stone of its immediate neighbors, the Graduate School of Design and the Fogg. Compared with the simple, even striping of this facade, the main entry facade is a significant jolt (Fig. 144). This facade, more than the other, is emblematic of the building’s character, a complex composition of disparate parts. It is precisely this emblematic reading which the projects by Markli and Herzog and de Meuron resist. Here, a more typical Harvard brick meets concrete, glass and neon green metal grating and railings. While using these different elements for shock value does have some relation to his overall intention about the building, Stirling’s use of contradiction is not related to a singular intention for the spatial experience of the building. The connections between the disparate parts become more important than the overall coherence of the pieces.

For this reason, the phenomenal aspects of Stirling’s building, as revealed by the lighting of the upper galleries, are diminished by the constant shifting of movement through the spaces (Plan comparison, Fig. 145). This
building will not allow neutrality, even in those spaces which suggest it, such as the upper sequence of almost equal size galleries. Spiritual moments may occur in this museum, some sacred, like the basement level galleries, and some more abstract like the upper galleries, but their impact is lost to the precision of the orchestrated movement and the clash of the disparate spaces. Stirling has achieved his intentions quite effectively, but the potential for evoking the spirit and the imagination has been denied as all of the phenomenal and tectonic qualities of the building become subordinated to a mechanistic interpretation of a specific essence or character: the building as connector.

Stirling is concerned more with the specific architectural elements as objects within a mechanism than with the spatial phenomena of these elements. As a result the experience of Stirling's Sackler Museum in Cambridge is primarily a physical one. The "shocks and jolts" created by the juxtaposition of forms, languages and materials appeal solely to our physical being. In Markli's and Herzog and de Meurons' museums, however, the experience is more of a psychological one. Through abstraction and an attention to the relationship between the phenomenal and tectonic qualities of the building and site, our imagination is inspired and our physical experience of the material qualities of the buildings becomes both heightened and more difficult to define.
Notes

The Urban Market as Communal Sanctuary

PSYCHOLOGICAL SPACE is at the core of spatial experience. It is intertwined with the subjective impression of actual spatial geometry and born in the imagination. The absolute side of rational planning is in a contrapuntal relationship with the pathological nature of the human soul. It is in this mix, at its architectonic conception, that the spatial spirit of a work of architecture is determined.36

As discussed in chapter three, it is precisely this psychological dimension which contributes to the spiritual power of Markli's and Herzog and de Meuron's work. In both cases, it is the suppression of a sacred language and an attention to the phenomenal qualities with respect to the tectonics which have allowed the imagination to freely explore this psychological space.

Having traced the gradual shift of spiritual architecture from the sacred world towards the secular world via the museum, it is now important to address programs of a purely secular nature. Two examples of such programs are the warehouse and the market. These are programs which are historically
functional and are not typologically rooted to an architecture of the sacred. Herzog and de Meuron’s project for the Ricola Storage Facility in Laufen, Switzerland is an excellent example of a warehouse that possesses this secular spiritualism. This thesis explores the spiritual potentials of a commercial program for an open-air market.
4.1 General Site Analysis

Houston is perhaps an extreme example of the contemporary urban condition. The public spaces have either been purchased by private corporations or have been left as abandoned strips housing the infrastructures of the city. Despite the marginal character of these zones, they represent one of the few connections to the natural world.

The site was chosen for its inherent phenomenal, tectonic, and spiritual qualities. Located just south of Highway 59 and west of Kirby Drive, the site is a segment of a larger slice of land left by the various infrastructures that have cut through the city. Originally the site of the Houston Railroad which ran all the way through downtown, the land is now dominated by the electrical towers of HL&P and the underground phone cables which service the greater Houston area. Much of the rail line has been removed from the downtown area to allow for the highway to the north. I refer to this contemporary urban condition as an expanded or compound boundary. According to Steven Holl,

The expanded boundary of the contemporary city calls for the synthesis of new spatial compositions. An intensified urban realm could be a coherent mediator between the extremes of the metropolis and the agrarian
plain.\textsuperscript{37}

Such boundaries between urban and rural areas do not exist solely on the periphery of the city as suggested by Stephen Holl's article, "Edge of the City," but are in fact dispersed throughout the urban fabric. In these residual and marginal slices of land lies the potential to alter how we see and experience the city.

\textbf{ON THE FRINGE} of the modern city, displaced fragments sprout without intrinsic relationships to existing organization, other than that of the camber and loops of the curvilinear freeway. Here the "thrown away" spreads itself outward like the nodal lines of a stone tossed into a pond. The edge of a city is a philosophical region, where city and natural landscape overlap, existing without choice or expectation.\textsuperscript{38}

The tract of land south of the freeway is a boundary that is more than a mere property line; rather, it is a series of boundaries, some clearly defined, some which fade and yet others which are suggested. In this boundary, the city and natural landscape do not merely overlap. They become intertwined in a complex set of relationships. On the one hand, this swath of land is a void trapped within the fabric, but it is also a double edge separating the commercial from the industrial. Furthermore, it is a boundary that lies within
another boundary, as infrastructure is placed on top of infrastructure and as Westpark Drive and Highway 59 further isolate the site and neighboring warehouses to the north. In this case, the void becomes its own kind of rural infrastructure within the city.

Because this zone has so many identities, it is clearly distinct in character from its more singularly defined surroundings. As a means of trying to understand and identify this character, several methods were used for the site analysis:

  Photography
  Mapping
  Collage
Site Plan: Urban Context
Human Habitation of Site
4.2 Specific Site Analysis

Specific Site - located west of Kirby near Westheimer Storage and just past Wakeforest where the railroad tracks have been removed and several electrical towers form a head piece which connect to a nearby substation.
Character of Site
Existing Site
Site Sections
Mapping of Phenomenal Properties
Spatial Mapping
4.3 Design Intentions

To enhance and reveal the existing spiritual qualities of the site through a purely secular program.

To suggest a way of inhabiting the site which might have been previously unimaginable.

To make visible a psychological space created by the towers, making visible a space that is defined by conditions which are traditionally not considered spatial.

To abstract one from the typical experience of the site.

Sections showing sequence of movement in and out of space of towers.
4.4 Program

24 hour open air market

Typology:
Canino's on Airline Drive, Houston

Reasons for program choice:
Chosen because no specific ties to religious architecture in terms of a language based on a specific iconography or dogma

Goals of the project:
To provide a market that allows for a variety of market activities to occur, since this site is constantly changing
To resolve the antagonistic relationship between the market program and the spiritual experience of the site
4.5 Preliminary Design/Concepts

[Diagrams of various architectural concepts]
Initial Reactions to Site
4.5 Market Design

Two ways of being on the site:
Experiencing the random movement and intensity of activity in the market
Experiencing the subtle relationships on the site through the cuts

Reasons for the cuts:
Cuts are drastic but characteristic of the ongoing construction and earth moving on the site
Cuts are a reaction to the formwork left on the site
Cuts are intended to abstract one’s experience of the site by forcing one’s view upward.

Opposition between market and cuts:
Market suggests movement, sets up rhythms like those on the site
Market separate from Kirby, not attached to strip but autonomous within urban fabric
Market detached from context of Kirby but attached to site
Market structure becomes more ephemeral as move away from Kirby
Market structures: Prefab concrete sections, wood frame, light steel
Cuts are related to more individual moments on the site
Cuts are intended to emphasize how the different towers act on the site: Object,
Pinch, Gate, Frame
Cuts move in and out of space of the tower
Cuts become more autonomous as market structure becomes more ephemeral
Cuts formed by driving corrugated steel sheets
Hard materials in quiet, non programmed spaces of cuts
Softer, more tactile materials in market spaces
Mapping: Existing Rhythms & Spatial Conditions
Mapping: Proposed Design
Spatial Shift Diagrams
Wall Sections: 1'-0" = 3/4"
Oral Defense: December 3, 1993

Jurors: Robert Mangurian, Sci-Arc
       Steve Izenour, Venturi Scott-Brown
       William Sherman, Director
       Albert Pope, Reader
       Lars Lerup, Dean, Reader
       Yung Ho Chang, Visiting

Discussion of the thesis was led by Robert Mangurian, Lars Lerup and Steve Izenour. The thesis was accepted overall as being a worthwhile and pertinent investigation, although several of the jurors felt the site was typical of recent architectural projects at other schools. For the most part, discussion was limited to the project's validity as a thesis.

On the whole, these jury members, particularly Izenour, questioned the need to actually build on this site and were in favor of a more innocuous approach to the design solution. Both Mangurian and Lerup felt the market design was too stable and too ordinary, suggesting that the design reflect a more nomadic or less defined quality; yet, they also felt that it was too busy and maybe required less change within the structure. One suggestion was that the market could be a single long building like the navy buildings found on Fishers Island.

Additional comments were made by Izenour regarding the electrical towers themselves. His suggestion was that maybe lighting alone could have achieved my intentions just as well.

Specific discussion of the design was limited to the cuts themselves. Yung Ho Chang felt that more could have been done with the cuts. He felt the cuts were playing too minor a role. The cuts needed to be more: either an imprint or trace of a building or a future site of a building. The cuts were too singular; although they were intended to be a neutral counterpart to the cacophony of the
market. The bottoms of the cuts could have been sloped or contained other cuts. Lerup commented on the design's potential viability as a future infrastructural/works project. Some references which were suggested by Lerup and Mangurian were the "Jockey Lot" and God's Own Junkyard.
Notes


Conclusion

The subversion of a sacred language, the revelation of the inherent spiritual and phenomenal properties of the site and a self-conscious attempt to manipulate the relationships between construction, material and light have been the means for trying to attain a secular spiritualism in an urban market. As demonstrated by the initial research and analysis, the spiritual cannot truly be defined. It can only be identified by what it is not, by some of the qualities it possesses and the sensations it is able to elicit. The ability to provoke simultaneous and conflicting responses is perhaps one of the more identifiable characteristics shared by the works of Lewerentz, Kahn and Herzog and de Meuron and contributes to their power and strength. Because the site and tectonics, material and light are all used to elicit these conflicting sensations, they become inextricably intertwined in a complex set of relationships. It is this kind of response which I have tried to achieve in the market design.

The site itself is already rich with spiritual qualities, but they are not all readily apparent. The cuts, intended to abstract one’s view and experience of the site are located in various relationships to the electrical towers in order to make one more aware of their space as one moves through the site. The pattern of movement at first seems logical and consistent; however, there is a contradiction in the relationship of these removed, unprogrammed spaces as one reaches the middle of the site. This is intended to make one more aware of the constriction of the site by locating a cut along the central axis. As the two paths of circulation meet, the market and the cuts merge. By segregating these paths but allowing their overlap, the antagonistic relationship between the commercial and the spiritual is both eased and made more evident.

In terms of the actual cuts themselves, their material and depth are all intended to heighten this ambiguity. Likewise, the wall sections where the market struc-
tures and cuts overlap also become a means for recording this conflict. As the cuts become more autonomous, it is these walls which combine simple stick construction with driven sheet metal which remain as a vestige of the antagonistic relationship. Ordinary, but inherently different materials are combined in a simple construction as a means of suppressing any representation. As a result, it is impossible to be distracted by form or language. Instead, it is the subtle play of light and sound off of these materials and how they connect within these spaces which begin to heighten and altar our perception of the site and the market.

In its planning the market is entirely autonomous from the commercial zone of Kirby, acting more as a piece of the void than a piece of the urban fabric. In its autonomy, this open-air market is not unlike the institutions represented by Kahn, but in its construction, it is more ephemeral in character like the debris found on the site. Although it is impossible to ascertain the spiritual potential of a project that can only be represented two-dimensionally, the subversion of a sacred language and the lack of representation combined with evoking conflicting responses are some of the qualities which seem to contribute to our experience of a secular spiritualism.

The intensive site analysis and urban diagramming employed during the design of this market has made it possible to characterize and define specific zones within the urban fabric. By creating an architecture that addresses the nature of a site in such precise terms, it is possible to achieve this secular spiritualism. Despite the predominance of the infrastructural approach to urban planning, this thesis suggests that the urban condition can be altered by constructions at the scale of architecture and that secular spiritualism is not bounded by scale.
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