DESIGN THESIS

Derek W. Dutton
School of Architecture
Rice University
April 29, 1987

Presented in partial fulfillment of the degree
Master of Architecture
Table of Contents

1. Introduction -- The Thesis Statement

2. A Formal Approach to Didactic Expression -- A Brief Look

3. A Look at Program -- The Creation of the Institution

4. The Experiential Aspect -- Articulation of the Message

5. Conclusion -- Combining the Approaches

6. The Design Project and The Site

7. The Project Program

8. The Drawings

9. Post Script -- Criticisms and Some Rebuttal

10. Final Conclusions

11. Bibliography
In this thesis I intend to develop a more articulate personal philosophy regarding the role of architecture in relating to greater social and political concerns. In my opinion architecture that operates in a conscientious vacuum, concerned only with formal or artistic expression lacks substantive meaning outside the realm of academia. Architecture that operates solely to serve the programatic, economic and shallow stylistic concerns of the client becomes unmeaningful outside the world of the speculative developer. Architecture must, of course, satisfy programatic and economic concerns and further must have clear formal and artistic intentions. However, I believe that architecture can and should also act as a social conscience. Further, it is my belief that these three components must have an interdependent and inter-effective relationship.

Architects are too often unaware of the social expressions they are making and the effects they have. K. Michael Hays writes:

"The contingent authority of the individual architect exists at a sensitive nodal point. The individual consiousness is part of and is aware of the collective historical and social situation. Because of this awareness, the individual is not a mere product of the situation but is an historical and
social actor in it. There is choice and, therefore, the responsibility of a critical architecture."

I do not propose that architects can single-handedly cause social change, or even that they should be able to. I propose that as humanitarians (which I believe is how architects must see themselves) they must be keenly aware of where they stand on social issues and that as artists they must use their art to, among other things, express their beliefs.

Architecture that makes no attempt to comment on or relate to relevant social concerns tacitly accepts, and therefore supports, the status quo. I propose an architecture that makes one of its highest priorities the recognition of relevant social concerns that typically fall outside the realm of building design. This approach will often lead to an architecture that finds itself in complex dialogue with the status quo that often leads to contradiction. As Giorgio Grassi put it, "in order to enter into real contradiction with the cultural superstructure, the architectural proposal should be unequivocal, didactic, and ineffable." That an architectural proposal should be unequivocal in its intentions is certain, regardless of one's sentiments towards those intentions. That the architectural proposal should be didactic is really central to this thesis, and that the architectural proposal should be ineffable speaks
to the power of emotion that must be embodied in the architecture. The intention here is not simply to express, in abstract terms, an ideal, but to make this expression understandable to the architectural beholder. The architectural proposal's place in, and stand on the stream of human activity should be clear. As Melvin Charney writes,

"buildings are made to express their existence in the normal course of human activities. Every building is a monument of sorts. Architecture focuses on the specific condition of buildings to exist as expressive devices; that is, on the creation of monuments."

This monumentality of all buildings is, of course, not a formal monumentality. That all buildings are monuments means that all buildings have a message of sorts, but not necessarily the form of a monument.
Melvin Charney goes on to discuss three examples relating to his statement about monumentality. They are:
1) a Van Doesburg composition of open planes, interpreted as representing an open society; 2) the glass tower of Hannes Meyer's League of Nations project, interpreted as representing transparent and honest politics; and 3) the Plan Voisin of Le Corbusier, representing an urban pattern. In all cases, Charney states that, "we see in such work an ingrained confusion between means and ends, between metaphor and reality." He continues that this confusion persists "particularly in the assumption that the expression of material objectivity in building is equivalent to an expression of social objectivity."

Clearly, expression through form alone is not sufficient. In fact, expression through form alone may lead to a confused interpretation, certainly not succeeding in expressing "unequivocal" and "didactic" intentions.

Constructivism in Russia shortly after the revolution of 1917 was an approach to art and architecture that attempted, among other things, to participate in the building of the world's first socialist state. Books such as El Lissitzky's *Russia: An Architecture For World Revolution* show this relationship clearly. Lissitzky writes,

"October 1917 marked the beginning of the Russian..."
Revolution and the opening of a new page in the history of human society. It is to this social revolution, rather than to the technological revolution, that the basic elements of Russian architecture are tied."

Catherine Cooke writes that Constructivism "has been presented as a philosophy predominantly concerned with the function of architecture as a social catalyst." The social agenda of Constructivism was, of course, only one of its primary concerns. Building in a severely deprived economy necessitated intense technological research into construction methods and materials. Additionally, Constructivism has been accused of being inordinately concerned with shape-making -- with formalism. Manfredo Tafuri writes of two positions on intellectual work relevant to Constructivism:

"1. The self-recognition of intellectual work as essentially work pure and simple, and therefore not something able to serve a revolutionary movement. The autonomy of such work is recognized explicitly as relative, only the political or economic patron being able to give a sense to the efforts of the intellectual disciplines.

2. An intellectual work that negates itself as such, claiming a position of pure ideology, and that itself wants to substitute the political organization, or to
honor or criticize it from within. Its objective, however, is always to get out of productive work and stand before it as its critical conscience."

Tafuri continues by saying that the mediation between these two positions is the theme of Constructivism. Its social agenda stems from the latter position, while its formal agenda from the former.

A brief look at Constructivism may be useful to this thesis in that some parallels between its first stated intention and the intention of this thesis can be drawn -- namely in the concern for social issues in architecture.

The design for the Palace of Labor Competition in 1922 by the Vesnin brothers (Viktor, Leonid, and Aleksandr) represents "the first truly Constructivist work in the field of architecture," according to Anatoly Kopp. The competition specifically called for a building design according to classical, monumental ideals. The Vesnin brothers rejected this approach in favor of one they felt would better express the social essence of the building.

The building was to include an auditorium for 8,000. The Vesnin solution was an oval form (perhaps left over from their eclectic days) that clearly dominates the geometry of the building. The auditorium represents and expresses the importance of the collective. The space was to be planned without the traditional tiers, balconies and rows to divide up the public and the classes. The other dominant feature of the building is a tower section
crowned with an elaborate web of antennae, part of the radio station which was included. The antennae "stood as a worldwide tribute to the victorious proletariat," according to A. Chinyakov, translation found in Shvidkovsky's book.

Perhaps most significant about the Vesnin project from a social standpoint is its complete rejection of traditional palace images -- so prevalent in Russia at the time. The Vesnins simply could not rationalize the use of a "rich and palatial appearance" as called for by the competition's authors. Instead they strove for an imagery that would express a new order, one not based on wealth. The new order was to be rational and functional. The building comes off as severe and over-simplified, but as Chinyakov states, this is perhaps a reaction to severe times.

We can see a similar kind of formal expression in the Vesnins' project as Charney discussed in the projects of Van Doesburg, Meyer, and Le Corbusier. Through formal expression, the Vesnins attempted to express a new social order. Perhaps their expressions read clearly in contrast to the traditional palace types of early twentieth century Russia. Likewise, perhaps Van Doesburg's point was more clear when seen in contrast to early twentieth century American skyscraper design. However, one must ask what happens to these expressions over time. When an image,
such as a glass curtain wall, catches on and is used for other buildings that lack the same social expression, the expression of the original use may be lost. Relying strictly on formal devices to make social or political statements in architecture is not sufficient. Manfredo Tafuri writes of Konstantin Melnikov, a Russian contemporary of the Constructivists as follows:

"It is at this point that there occurred a break between linguistics and architecture, proven by the personal and dramatic experience of Melnikov. That is to say, by the experience of the most coherent of Russian architects who tried to translate into an architectural method the formalist theses of Skolvsky and Eichenbaum. In fact, if the communicative system refers only to the laws of its internal structure, if architecture can be interpreted -- in its specific aspects -- only as linguistic experimentation, and if this experimentation is realized only through obliqueness, through a radical ambiguity in the organization of its components, and finally, if the linguistic 'material' is indifferent and matters only in the way the various materials react with each other, then the only road to be followed is that of the most radical and politically agnostic formalism."

Tafuri's point here about the futility of formalism to express anything other than formal concerns is of great
importance to this thesis. Architecture that expresses itself solely through formalism cannot hope to meaningfully express such non-architectural concerns as social or political concerns. Clearly more tools are needed.
A Look at Program -- The Creation of The Institution

Another examination of some of the design examples used above, namely the Vesnins' project and Meyer's project, reveal that program and patron were instrumentally important in imparting the intended messages. Both of these projects work to create and solidify social or political institutions. The architecture is an important part of this creation. Without the physical manifestation of the institution through architecture these institutions have no public visibility. The problem, then, becomes one of creating a physical manifestation of the institution that embodies these values. Referring again back to Charney's statement, this manifestation is really a monument to the values. The monument attempts to make both tactile and experiential the abstract values of the institution. The monument does not attempt to create these values, nor can it express adequately these values unless the importance of institutional strength is addressed. Walter Benjamin writes of the ways in which buildings are perceived. He writes that "appropriation (of a building by the beholder) cannot be understood in terms of the attentive concentration of a tourist before a famous building." That is to say, not all buildings enjoy the notariety that spawns a conscious, attentive examination from the public. Rather, most buildings must rely on incidental recognition. Through the creation of
the institution, the building can begin to become notable, known beyond its immediate surroundings, and hence, enjoy the "attentive concentration of a tourist." It is at this point that more subtle architectural messages may begin to be read.
The Experiential Aspect --- Articulation of The Message

Once the institutional nature of the proposal is established, a series or sequence of experiences within the building can be employed to impart particular social messages. Benjamin writes further on the perception of architecture as follows:

"Buildings are appropriated in a twofold manner: by use and by perception -- or rather, by touch and by sight... On the tactile there is no counterpart to contemplation on the optical side. Tactile appropriation is accomplished not so much by attention as by habit. As regards architecture, habit determines to a large extent even optical reception. The latter, too, occurs, much less through rapt attention than by noticing the object in incidental fashion."

As long as architecture is "appropriated" in such a manner, its communicative value will be limited. Through the work of people like Lars Lerup or Frank Gehry (different from each other in approach) we can see an attempt to awaken the beholder by juxtaposing familiar objects or materials in unfamiliar relationships. The beholder is thus forced to re-evaluate the project, and cannot simply appropriate it in an unconscious, incidental manner. This awakening can be unsettling to the beholder. It is this uneasiness that must be avoided if a sympathetic understanding of the architectural proposal's
message is to be imparted to the beholder.

Lars Lerup's "No Family House" is a good example of this approach. Lerup writes of the house:

"The family narrative, with all its mini-discourses and associated behaviors (feeding the children, taking a nap, going to the bathroom, eating dinner, sleeping, entertaining, and so on) consumes the house with a ruthless disinterest in architecture. The physical house is merely the vehicle for the narrative. The decision to disrupt is both to delay the narrative, to break it open and to reveal its mechanics, and to bring forth the physical by peeling off its assigned functions. The struggle is between the family and the architecture."

This struggle between the family and architecture brings to the conscious mind a re-evaluation of the concept of home. The family is the home and the architecture is the home. A conflict between the family and the architecture breaks the concept of home apart. Lerup concludes on the "No Family House": by saying:

"If the no-family house were to be built, it too would eventually be consumed by the family and the raw surfaces would be bridged over and repaired. These repairs would be the technology of the family."

The consumption of the house by the family and the bridging over of the raw surfaces is the family
re-assembling the concept of home. Through this re-assembling of the home the family will have reached a more conscious understanding of what their home is. Lerup has provided a kind of critical architecture -- one that by not simply reflecting traditional family values, forces the family to make their own definitions. Hays defines critical architecture as follows:

"Critical architecture pushes aside other kinds of discourse or communication in order to place before the world a culturally informed product, part of whose self-definition includes the implication of discontinuity and difference from other cultural activities."

The key, then, seems to be in making poignant, articulate juxtapositions of architectural forms and spaces to instill a kind of conscience into the architectural piece.
Conclusion--Combining The Approaches

A three-fold approach to creating architecture that can relate to political and social concerns has now developed. This architecture need not operate in a conscientious vacuum, but may develop a meaningful dialogue with the status quo. Its three venues are 1) formal, 2) programatic, and 3) experiential. Through this approach I hope to begin to synthesize in the design studio my social and political beliefs with my architectural interests.
The proposal is to design the headquarters for the Campaign For Nuclear Disarmament. In order to be successful I believe I must choose specific and well defined beliefs to express, and a specific, well defined facility through which to express them.

The site chosen for the studio project is in Livermore, California, near the Lawrence Livermore Laboratories run by the University of California. The Lawrence Livermore Laboratories are the site for much of the nuclear weapons research and design carried out by the United States Government. The lab is the site for an annual demonstration by the Campaign for Nuclear Disarmament.

Livermore is a part suburban, part rural town on the edge of the San Francisco Bay Metropolitan Area. One of the attractions of the site is that it is not a tightly packed urban site that could present possible contextual influences on this project. Without significant contextual issues with which to deal, the architecture will be able to focus without distraction on the problem of expressing an opposition to the continued proliferation of nuclear weapons.
Program

Offices -- for a staff of 10:

director 200 sf
director's secretary 100 sf
reception desk and waiting area 200 sf
department offices:
    media specialist 150 sf
    third world liaison 150 sf
    international coordinator 150 sf
    special projects coordinator 150 sf
    special events coordinator 150 sf
    training supervisor 150 sf
    field staff director 150 sf
    publication director 150 sf
open office space for a staff of 15 1500 sf
this staff shifts responsibility in assisting the above department heads

Work spaces -- for up to 30 volunteers

graphics studio 2000 sf
storage for graphics material 100 sf
phone bank 200 sf
film editing (adjacent to library) 150 sf
tape editing (adjacent to library) 150 sf
mailing office 200 sf

Library

book/pamphlet storage 2000 sf
film storage 2000 sf
tape storage 2000 sf
office for librarian 150 sf
reading room 200 sf

Meeting rooms
2 small conference rooms 250 sf ea
with slide and film projection room
1 large conference room 500 sf
with full audio/video capabilities
Press conference facility 500 sf
Press room 500 sf

Lecture/Presentation spaces
small auditorium -- for 100 2000 sf
with full audio/video capabilities
4 seminar rooms 300 sf ea

Exhibition space 5000 sf

The building is to be seen partly as a means to bring together concerns from many fields -- science, politics, and art. The exhibition space should be able to house exhibitions from all of these fields:

science
informational boards with pictures and text -- regarding the effects of nuclear war

politics
informational boards with pictures and text -- regarding political successes and failures of the movement, with comments by and about key politicians who have both aided and impeded the movement.

Art

art works -- graphic and sculptured on the subject of nuclear war -- intended to provide a forum for concerned artists.

Lobby 2000 sf

Caretaker’s residence

residence for one or two people
apartment or small house 1500 sf

Scholar’s residence

residence for one or two people
apartment or small house 1500 sf

Subtotal 26,550 sf

Mechanical/electrical

Loading dock

Storage

Outdoor court/garden

the garden will include space for a large gathering with a platform of some kind that can be used for
public speaking

Parking -- 50 cars

Outdoor space to accommodate the coming
and going of buses

In addition to its day to day functions, the building
or buildings will serve as support for the annual
demonstration centered around the LLNL. All major spaces,
both inside and outside, including meeting and exhibition
spaces will designed in such a way as they can be used for
the gathering and organization of large numbers of people.
Criticisms and Some Rebuttal

The final jury was held on April 23, 1987 at one o'clock in the Jury Room, Anderson Hall, Rice University, Houston.
The jury consisted of:

Andrew Bartle
William T. Cannady
Lars Lerup
Rodolfo Machado
O. Jack Mitchell
Peter Waldman

The majority of the criticism of the project centered on what Lerup called the "anemic" imagery. He seemed to feel that the expression of the ideals of the program were not carried through strongly enough in the architecture. Machado seemed to agree. Lerup's criticism centered particularly on the tower, while Mitchell's centered on the two pavilions.

Lerup indicated that the tower should have been a stronger expression of the program, and specifically, that it should have been able to accommodate many people at once, not just a few. Mitchell, along similar lines, expressed a reservation about the similarity of the two pavilions. He felt that they should have been more different.
As to a response to both criticisms I would like to first say that I partially agree with what was said. The imagery of the buildings in this project has been a difficult task for me all along. I have grappled with different approaches to them. One involved the idea of a transformation of a typology, but I never felt satisfied with any typological beginnings, except, perhaps in the case of the tower. None surfaced as one whose transformation might embody a strong message relative to the program. A second approach was one that involved the use of more specific models. The problem here was one of inappropriate reference. Any referential message, centered outside the program or its issues, would have detracted from the reading of the central message concerning disarmament. The approach that was taken was to work from an experiential point of view. With regard to the tower this meant building a strong shaft with platforms at various heights to relate to specific views. The journey up the tower affords alternately constricted and open views. Each view is seen as part of a sequence whose allegorical content is the full explanation of the project.

The two pavilions were designed with considerations to different light qualities and different senses of
enclosure. The science pavilion uses mainly indirect light, diffused by a double wall system. The light is therefore cold and even. The sense of enclosure is profound, due to the fact that one must move through an outdoor, and then an indoor vestibule before entering the central space. Views out of this space are through three windows, two of which are largely covered by the ceiling "hood" formed by the double wall. This cutting off of the window acts to accentuate the sense of enclosure. A third window, overhead, provides a view to the top of the tower.

The political pavilion, on the other hand, embodies completely different attitudes about light and enclosure. Entrance is gained through six glass double doors on the north side, with clerestorey windows above echoing the doors to give them visibility beyond the double wall. The doors appear again at the south side, without clerestorey windows above, where sunlight is allowed to flood the space. The double wall system is used here to create two porches, very public elements, to accentuate the buildings function as a gate to the garden. The double wall heightens the openness, whereas in the science pavilion it heightened the sense of enclosure.

Another major criticism, again from Lerup, centered on what he called an ambiguity of mood. He asked if it was tragic or hopeful. The project embodies both emotions but
in an unambiguous way. The project sets up a duality between the science pavilion, in an landscape of barren columns, and the political pavilion in a landscape of fertility and survival. Thus one side is seen as embodying tragedy (a feeling this institution must communicate if people are to consider disarmament an important issue), while the other side is seen embodying hope (which the institution must also embody if they are to generate any motivation to action).

A major, general criticism had to do with the overall site planning. Questions were raised about the lack of inevitability of the placement of all elements of the program. I would defend the placement of most of the elements. The two pavilions, the library and the office building, and the tower, together with the crater, the arroyo, and the two landscapes are placed in clear and logical relationship to each other. Other elements -- the caretaker's residence, the scholar's residence, and the press room -- admittedly weaken the diagram and perhaps should be placed elsewhere, or more likely, incorporated into other structures. The strength of the project is in the simplicity of the diagram, and these elements served to unnecessarily and unbefittingly complicate that diagram.
Final Conclusions

In conclusion, I would say that this project has been an extremely educational one. It has opened up issues of architectural representation that I have, admittedly, not completely resolved. These issues will, however, continue to be of concern to me in my work in the future. This thesis has provided me with the foundation from which to further explore issues that are fundamentally important to me in developing my own philosophical position relative to architecture.
Bibliography


<table>
<thead>
<tr>
<th></th>
<th>Authors</th>
<th>Title</th>
<th>Publisher</th>
<th>Location</th>
<th>Year</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Lerup, Lars</td>
<td>&quot;The No Family House&quot;</td>
<td>Lotus International</td>
<td>no. 44</td>
<td>p76-81 1984</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Lissitzky, El</td>
<td>Russia: Architecture For World Revolution</td>
<td>MIT Press</td>
<td>Cambridge, Massachusetts</td>
<td>1970</td>
<td></td>
</tr>
</tbody>
</table>