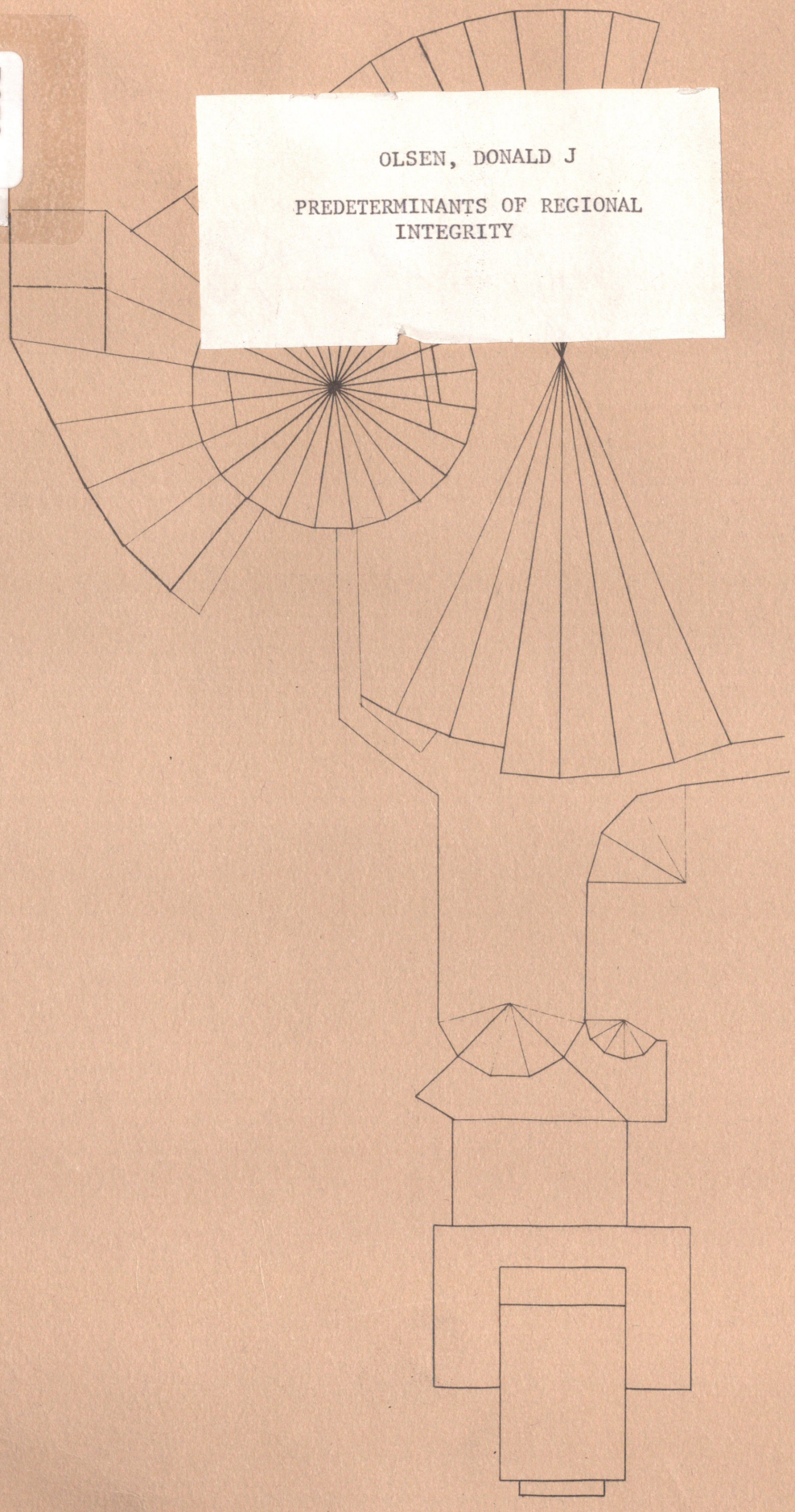
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PREDETERMINANTS OF REGIONAL INTEGRITY



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PREDETERMINANTS OF REGIONAL INTEGRITY

by

DONALD J. OLSEN

A Thesis paper submitted in partial fulfillment
of the requirements for the degree

of

Bachelor of Architecture

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MONTANA STATE UNIVERSITY
Bozeman, Montana

December, 1979

P378
.OL773

Topic

PREDETERMINANTS
OF
REGIONAL
INTEGRITY

Statement

REGIONAL INTEGRITY IN
ARCHITECTURE LIES IN THE
UNDERSTANDING AND
UTILIZATION OF

GEOLOGY
HISTORY
CULTURE AND
CLIMATE

AS THE

PREDETERMINANTS OF THE
BUILDING TO BE
JOINED WITH ITS
SITE

DON OLSEN

Don Olsen

"Architecture, as a reflection of man's longing for order and for adjustment to his natural surroundings, has always been (or at least until not long ago) regional in its essence and character. In the past it has been mostly a communal art, not produced by a few intellectuals or specialists, but by the spontaneous and continuing activity of a whole people with a common heritage, acting under a community of experience."

Pietro Belluschi
"The Meaning of Regionalism in Architecture"
ARCHITECTURAL RECORD, December, 1955

"In speaking of integrity in architecture, I mean much the same thing that you would mean were you speaking of an individual. Integrity is not something to be put on and taken off like a garment. Integrity is a quality within and of the man himself. So it is in a building. It cannot be changed by any other person either nor by the exterior pressures of any outward circumstances; integrity cannot change except from within because it is that in you which is you - and due to which you try to live your life (as you would build your building) in the best possible way. To build a man or building from within is always difficult to do because deeper is not so easy as shallow."

Frank Lloyd Wright
WRITING AND BUILDINGS

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ACKNOWLEDGEMENTS

MY FAMILY

They sacrificed, tolerated, encouraged and believed.
If not for them I probably would not be writing this.

MY CLASSMATES

A better group of friends will be hard to find.

MY ADVISOR

He encouraged me greatly and allowed me my independence.

THANK YOU ALL

INTRODUCTION

The concern of my thesis is Regional Integrity in Architecture: an architecture which is complete and honest in its assuming a place amongst the unique characteristics of the site.

These characteristics shall be referred to as the predeterminants, predeterminants rather than determinants because these characteristics exist before the building project is even proposed. These predeterminants, which will be discussed in detail in Section Three, include Geology, History, Culture and Climate. Unlike determinants such as function and economy which are variables that come into view as the building program develops, predeterminants are those peculiarities of a place which give it a certain character and spirit ... life.

I believe that only through the understanding and utilization of these predeterminants can we hope to evolve an architecture which grows from the site into a maturing relationship with the life around it.

DON OLSEN

Need For Change

The atmosphere in the architectural mainstream is undergoing change. It is changing from a blind acceptance of modernism to a more open minded inclusion of other possibilities. Satisfaction with modernism is dwindling. The lifelessness of the internationalist's version of form follows function is finally beginning to actually die. Before getting to the meat of this thesis it is necessary to discuss the history and failure of modern architecture.

Like most ideas, the idea of modern in architecture initiated worthy thoughts. As man began to mechanize in the 1800's, society underwent a change. The societal focal points of church and aristocracy were replaced with industry and free enterprise. Mass production replaced craftsmanship. Efficiency replaced personality. The romanticism of Baroque inevitably gave way to a new and more precise system.

With this industrialization came revolutions in materials, engineering and science. Architects associated less and less with artists, statesmen and clergy. The former patrons of architecture were substituted with businessmen, engineers and scientists. Resultantly the effect of what was actually being done became less important than the interest for what could be done.

Hand in hand, architects and engineers began to reach as high and as far as they could with the products science and industry provided them, having the interests of business and corporations in mind.

Successful solutions were achieved by the likes of Paxton, Sullivan and Wright which allowed mankind and machine to rejoice together in modernity. Ornament and structure were encouraged into symbiosis.

This attitude of mutuality was short lived, however, and the majority of modern architecture soon became completely absorbed in technology. The fact of human occupation was given secondary status to an interest in high tech machine produced buildings. It is not intended in this thesis to justify the prevalent eclectic historicism of the early modern movement but rather to condemn the absolute stripping of all character which was soon to follow.

This middle period of modern architecture saw all ornament removed from the building. Architecture also came to be conceived of as totally separated from its site. The likes of Gropius and Mies Van der Rohe ushered an architecture based on structure and skin to the forefront of the International movement. Form follows function was its bylaw, but it was not what Louis Sullivan had intended. The human being came to be considered as a part of a building-machine whose duty it was to perform the function which justified the form. Thus evolved an architecture devoid of history, separated from its site, oblivious to its environment and uninterested in the culture of its inhabitants.

Mechanization and technology were the concerns of society, and architecture had come to be as impersonal as the machine it glorified. Architecture was no longer a means to an end, but was now a self impor-

tant end in and of itself. The building was considered as a whole by itself, not as part of a greater complex of life.

The latest phase of modern architecture has been a general degeneration of the first two. While the architecture of the Bauhaus and the International movement could at least claim some sense of purity, the late modern architecture which continues up to today has become obsessed with image and ego: the image of corporations with their monolithic glass office boxes such as the work of Skidmore, Owings and Merrill; and the ego of architects and their self proclaimed symbols of society such as the work of Venturi. Many cases see both of these, such as the work of Johnson. The obliviousness to surroundings of the middle phase has now degenerated to include an attempted coercion towards a reverence for false or corrupted ideals.

Thus we have an extremely brief summary of the rise and fall of modern architecture. There have, of course, been exceptions along the way; Wright, Maybeck, Wurster, Aalto, Belluschi and others. Men of compassion and empathy who were willing to be their own person, but they were never able to redirect the thrust of modernism which by now has nothing really to do with being modern.

Agreement with this oversimplified account is not necessary or expected. It is important, though, that the author's general distaste for modernism is understood. It is equally important to realize that modernism is under attack from both inside and outside the profession.

New styles and approaches to architectural design are being explored.

The major new approaches seem to be the following:

Post Modernism - This is an ambiguous term which implies nothing more significant than chronological context. It is a popular term, however, and seems to be composed of three principles: context, allusion and ornament.[1]

Rationalism - This is a theory of reduction. That is to say, searching for the essence of building, space, etc.[2]

Historicism - This is a theory of architectural language. It seeks to establish a system of symbolic or significant references which are applicable to the situation.[3]

Regionalism - This is a broad theory which rests somewhere on the principle of a building belonging on its site. It can range from indigenous to historic eclecticism to contextualism.

The theory to be proposed in this thesis can be said to touch on all of the above theories. No appropriate theory of architecture can be so tunnelistic as to assume that a single aspect of the situation surrounding design is sufficient base for a livable solution. Architecture must involve itself in all of these things. Regional integrity is the term used to describe the theory which shall be explained.

Architect And its Integrity Regional

Let's begin by breaking the term in two and defining each half.

Regional 1: of or relating to a geographical regions.

2: of or relating to a bodily region: localized.[4]

Integrity 1: Soundness

2: Adherence to a code of values: utter sincerity, honesty and candor.

3: Completeness.[5]

In applying regional integrity to architecture we are trying for a design which is complete and honest in the relationship between a building and its geographical area.

To do that we need to examine and come to understand the characteristics of the neighborhood, city or region which is to be addressed. Empathy is a good word to be brought into utilization here; to be able to participate in the feelings, ideas and facts of a region. To be in keeping with the character of the place; the character which exists before a building is even proposed and continues to exist after a building is finished. The components which make up this character are design determinants which exist before any of the determinants of the specific building come into play. Thus they are the predeterminants of a design.

Only by coming to understand and then utilize these predeterminants can an architect create a building which has its roots thoroughly in the ground of the site. That is to say, a sense of belonging or a localized logic.

These predeterminants will be elaborated upon in Chapter Three, but will be briefly introduced now. The four predeterminants of regional integrity are:

Geology

The Land, the Earth

How is it formed and how is it erroding? How does the water flow and where does the vegetation grow? What is the order to geologic formation in the area? What makes a form appropriate on the Earth's face?

The Land, the Earth

History

The Past, the Present

Why are the people here and what are they doing? What are the historical precedents in the area? What makes a building appropriate in time?

The Past, the Present

Culture

The People, the Civilization

How do they think and what do they feel? What do the people appreciate and what do they want? What is the type of refinement of the people? What is the appropriate cultural expression for the place?

The People, the Civilization

Climate

The Warmth, the Storm

How much heat is given and how much must be worked for? How can what is available be utilized and how can the unwanted be minimized? What in the climate needs a response? How can a response be appropriately expressed?

The Warmth, the Storm

Thus, regional integrity in architecture involves an understanding and utilization of geology, history, culture and climate as predeterminants to design; but another point needs to be covered. A few paragraphs ago the word empathy was included, which brings us to the architect of regional integrity.

An architect has no hope of designing an integrated building unless he himself possesses integrity. He must also be able to empathize with the region and see from the people's point of view.

Today, many projects tend to go to large firms centralized in large cities. Having come to town, the firm's representative does a lot of smiling and handshaking. He takes a few local dignitaries out to dinner and says good-bye with site plan in hand. At the office, materials and details are dug out of catalogues and combined to evoke the "firm's style." The site is treated as little more than dimension and contour. A splashy presentation is put together to impress the people out ... wherever this one goes. The representative returns with presentation

and smile in hand. He gets everyone out ... wherever this one goes ... to smile along ... Sale! Bingo, Bango, Presto would you like a large order of fries with that? How can anyone really wonder why the public feels isolated from Architecture? It's not just the product; it's the process as well.

In regional architecture (for that matter in any of the memorable non modernistic architecture) involvement with and commitment to the site is mandatory. How can it possibly be any other way?

The regional designer must separate himself from the office and go totally involve himself in the project. Feel the site and its surroundings, research the place, talk to people. They must become friends with the region and the project. Do unto architecture as you would have architecture do unto you.

Imagine if you will two situations intended to clarify this viewpoint of integration.

The first situation is that of a young man who has just moved to town. Knowing nothing about the place he begins a long process of trial and error to try to understand the town and its people. He soon finds that a friendly greeting is better than a formal introduction. He discovers that his clothing is wrong for the climate. His opinion of the landscape goes no further than to say "It sure is pretty around here." If he's lucky he'll make the necessary adjustments fast enough to begin to belong. If not his place in the community will be transitory.

The second situation is that of a young lady who grew up in that same town. She knows what to expect of the weather. She understands the people and is a part of their history. She has a feeling for the land. She belongs because she is a part of the community.

The young man is like the large firm who sets its building in town and then hopes everything works out okay. If it does, great; if not ... "well they must not appreciate architecture."

The young lady is what the regional designer strives for; to make the building as totally aware of and responsive to the place as possible, before, not after it arrives from the site. The building then belongs because it is truly a part of the region.

And so we have the foundation of regional integrity: the architect working to have the integrity and empathy to be able to understand and utilize the predeterminants of regional design. These predeterminants are the subject of the next section.

Predeterminants Of Regional Architecture

To be able to understand and utilize the predeterminants fully requires more information on these topics in general as well as in relation to a regional integrity. This section will deal with each topic, both as it stands now and as it is applied to regionality.

GEOLOGY

When mankind began to congregate more and more into cities during the 1700's, the beginning of the separation of man from nature was at hand. Before this time a reciprocity with the land was vital to existence. The congregation of food and services into a city began to remove the need for this mutuality. Soon the idea of extracting profit from the land was common and real estate was born.

Feudal lords and the church were in control of virtually all the land. The lords, realizing they could raise rents by dividing up the land and promoting cities, did so. Soon the same desire for finance took hold of the church.[6] Divine right was given a new application.

Thus began the long history of man's alienation from nature and the land; it had come to be viewed as a possession of one rather than a part of us all.

Baroque brought with it physical manifestations of this growing feeling of superiority. The earth was seen as a vast stage for the undertakings of man. For the first time, man began to consciously reconstruct the land to form his own ideal. Also for the first time, elements of nature were brought into the city as landscape.

As man moved into the enlightenment his separation from nature was all but total. He had learned to exploit and manipulate the land under the guise of Divine Right.

As industrialization began to flourish, the three major elements of the city were 'factory, railroad and slum.'[7] The lessons and emotions of the past were forgotten in favor of technology, the almighty. Most cities grew on strict orthogonal grids for purely economic purposes.[8] It is easier to survey, sell and build on square lots, so forget about natural land forms. Cities degenerated into regularized hell holes with the factory as its heart and profit as its mind.

Conditions became so wretched over time that the human spirit could no longer withstand them. It began to be realized that this deterioration of environment could not be allowed to continue, which gave rise to the picturesque landscape garden. It was most certainly better than nothing, but it was by now a sentimentalized fantasy. The gardens were not considered as an existing and natural aspect of man's experience but rather as a gift to the people. This sentimentalized dream could never hope to substitute for life. It did, however, make man begin to think about a sympathy for nature.

Sympathy for turned into avoidance of with the rise of modern architecture. The building was considered to be totally independent of its site. Nature was allowed into the environment but only in carefully regulated doses. Even Le Corbusier's concept of sunlight,

space and greeness had a sentimentalized ring to it.

Finally, minds such as Aalto and Wright promoted the fact of nature and the land being a part of life to be worked with, not an abstract to be worked upon. Their warm and moving architecture sent ripples through the architectural community. They helped to create a new fragment of thought which is still growing today; the belief in man as part of a greater whole.

While an alternative now exists to modernism, the latter still has a strong following. Mostly due to the fact that many clients are corporations who identify with the timeless, self righteous, holier-than-thou atmosphere of modernism. Most corporations still see nature as something to be exploited.

Many architects have come to share this abstract opinion of nature with their clients. Resultantly, through judging from their constructed surroundings and being manipulated by corporate advertising, much of the general public's conception of nature is distorted also.

To many, nature has become something to be seen on television or through the windshield of a car. Getting into nature is taking your Winnebago and T.V. to a campground. Being one with the land is owning a tract house in Suburbia. They have come to this attitude not by normal progression but through coercion.

To summarize, as technology grew the need for harmony with nature lessened. Modernism's admiration for technology resulted in a

"rational" reason for ignoring the earth; it is unpredictable and varied.

To be geologically integrated, a premise of being of or from the site as opposed to being on the site is necessary. This can be done only through a careful and thorough understanding of the formative processes of the land. Having this knowledge one can begin to realize how to begin formation of a building which is to be of the land. Geology's major influence upon architecture is therefore upon how a building is formed.

Evolution from the ground into the building is of key importance. This is where it is established whether a building is from the site or merely on it. The intention is not necessarily to design a geologic formation, but rather to establish the same type of repose as a geologic formation, a natural form in a sense.

To further establish a geologic naturalness, attention to materials is required, both to their type and to the manner in which they are combined, not trying to imitate nature, trying to compliment it.

The list of geologic predeterminants could go on and on; water, vegetation, mass relationships, scenic values, etc. It is more important to discuss a beneficial attitude in coming to terms with the land as a design influence. That attitude is one of striving to fix a building securely upon the face of the earth. A great deal of architecture today appears to be in limbo between earth and sky. Its transition from earth to building is ambiguous and weak. One cannot pretend to aspire

to regional integrity until a strong and mutual transition is achieved in the building between where it is and what it is.

HISTORY

There are two major flaws afflicting architectural history which are incompatible with regional integrity: sentimentalization and aggrandizement.

In sentimentalizing history, as in sentimentalizing nature, we separate history from reality. History becomes a fantasy compared to which the real facts of the day-to-day existence cannot compare. Resultantly, architecture has gone through periods of classicism and eclecticism which attempt to return elements of the past to realization, not because they have a relevant place in society today, but rather in a shallow attempt to bestow the fantasy of past greatness to today. This is not to say that symbols cannot maintain validity over time, but those symbols must be used as sensitively and logically as they were originally. As an example: over time a languages alphabet of symbols evolved to secure communication. These symbols can be combined to achieve greatness as in poetry and literature. Those same symbols can be combined into mindless pornography or to make no sense whatsoever. The same results exist in historicism.

By aggrandizement, reference is made to the practice in architectural history of examining and remembering only the "Great" buildings. Such extreme selectiveness serves to give a false impression of the past.

These "great" buildings were only a fraction of a percent of the construction. To understand a building's place in history it is necessary to perceive it in a more wholistic sense.

To be historically integrated requires a good grasp of the nature of a place and its people. By nature, here, I refer to the peculiar quality or basic constitution of a person or thing. This may be acquired only by coming to understand the history of the place. The region's history must be considered in two aspects: the social base of history and the physically constructed history. Why are these people here? Where did they come from? What significance does this building occupy in History? History's major influence on architecture is therefore to influence the nature of the building.

While geology determines how a building evolves from the site, history affects how far it evolves from the site. That is to say it determines the prominance of a building. The importance of a building's place in the region's history affects how much it should stand out in the constructed landscape.

To further establish a historic naturalness, attention must be paid to texture and color. Both of these elements have a strong effect upon the feeling and strength a building conveys: its nature.

In using history as a design influence the intention is to fix a building securely into the biography of a place. Too much architecture today has an inappropriate mood or dominance. This usually exists as careless eclecticism or insubstantiated prominance. It is impossible

to be integrated with a region until one concentrates upon allowing a building the correct character.

CULTURE

One prevalent attitude towards culture is incompatible with regional integrity. That is an attitude which considers humanity as a generalized mass.

The problem lies in the fact that architects too often idealize culture. The type of refinement prescribed by the architect is generalized towards a preference rather than the reality of the place. Idealization is similar to sentimentilization in that both result in a separation from reality.

The common definition of culture is the refinement of intellectual and artistic taste. Too often this refinement is considered to be a singularized process to a special degree. As a result when someone speaks of culture we find ourselves looking off towards the clouds to see what the wealthy elite are recognizing as the cultured existence.

Something needs to be said about the arts and the opulent "upper crust." That something is that the wealthy elite virtually own the arts. That same elite controls the communication networks. Furthermore the elite thrive on a generalized concept of social refinement. They thrive on it because it serves to reinforce their status. Consequently, when one combines possession of the arts with control of communication directed by an ego based only on money and power it becomes

easy to convince the Bourgeois that they should be something other than what they are. This inevitably leads to a conception of a singular, ideal form of culture. In fact, however, that aspect of culture is a reality for a very small percentage of the population. To accomplish an appropriate building for a culture requires a close examination of the actual art and intellect of the place.

To be culturally integrated involves a more specified concept of the refinement of the place, specific in its knowledge about the total pattern of human behavior and its products, a concept of refinement that has no bias as to an ideal degree.

To achieve this, an open mind is key. That open mind must examine the thought, speech, action and artifacts of the region. Being informed on these elements of a culture, one can proceed to understand the capacity for learning and transmitting that knowledge to succeeding generations; the complexity of a people. Human complexity is more precisely defined as a system of repressed desires and memories that modify the individual's response to a subject or situation. By coming to perceive the memories and desires; the personality and artifacts of a region, one can begin to appropriately integrate a building into a pattern of human behavior.

The complexity of a building is the intricacy of the combination of its elements. This combination of elements can be made to harmonize with the memories of and satisfy the desires of a people. The people's complexity and the building's complexity can interlock. Therefore,

culture's major influence upon architecture is to determine the intricacy used to combine the elements of the building in an attempt to reflect the people's memories and desires; complexity.

Allowing a building to communicate is vital to its integrity. This communication is twofold; first and foremost, the building must express the spirit of the populace. It needs to convey the forces which animate the people. Secondly, the building must communicate ideas to the populace. Without such inspiration the building becomes culturally stagnant.

This communication from the people and to the people will consist of symbols and symbolisms used sensitively and in a regional vocabulary in order that cultural integrity will not be violated.

To further establish a cultural naturalness, attention must be paid to the resources of the region. It is fundamental to cultural integrity to fully utilize the talents of the people. One should look for arts, crafts, industry and any other unique products and abilities which can be included in the building.

To utilize culture as a design influence, the concern is to understand the people. It is necessary to find out exactly what the people are. Discover how they think, what they believe and what they do to enrich their lives. Having come to terms with these issues one can begin to develop an appropriate cultural expression.

The symbolism used must be relevant to the people. Too often

cultural symbols are an importation from another set of circumstances. This results in those symbols being obscure or completely meaningless. Once a regional cultural vocabulary has been developed and used to establish a sense of here, one can then attempt to influence the direction of the culture. Man has always lived to progress and elevate his mind but it must come in steps and in a regional context.

CLIMATE

Little can be said about the sad state of climatalogic interaction that hasn't been said already. A short period of excess resources led us to believe that we could afford to ignore climate. We came to believe that with an endless supply of energy there was no environmental problem which could not be manipulated into comfort. Well, the moment of cheap, plentiful energy has come to an end. The architectural world is slowly beginning to wake up to its environment.

At present the primary concern is with economics. It's cheaper to let the sun warm a well insulated building. It is also true, however, that a building lacks integrity if it ignores the sun ... and the wind and precipitation. To be complete and honest is impossible if that which nature provides is not fully recognized.

Most often, climate is seen as something to be fought against. Just screen the sun, take off the rain, hold up the snow and block the wind and you have environmental architecture. While it is true that these approach a solution, it is not true that a solution has been

reached. Climate..... must be utilized as well. The sun for warmth, the rain for water, the snow for insulation, the wind for energy and air circulation. When a building not only withstands the elements but also utilizes them, it then approaches integrity.

To reach full integrity requires an expression of the climate. That is to say that beyond utilizing it as an economic resource, the climate must also be utilized as an aesthetic resource. Due to its constancy, we have begun to evolve a sun aesthetic. It looks as well as feels good in the sun. It is possible to evolve other types of climate aesthetics. Rain, wind and snow can all have a building which looks and feels good during their occurence.

To be climatalogically integrated requires knowledge of the predominant elements affecting the site. Having this information, one can begin to utilize and express those elements. We can no longer afford to do battle with climate. We need to utilize it functionally and aesthetically. Climate's major influence upon architecture is a resource for the building.

While the shapes of the land begin to form the building, the climate has a strong effect on form also. The direction the sun shines, the direction of warm and cold winds, the amount of rain and snow; all help to define the form which the land begins.

To further establish a climatalogic naturalness, attention must be paid to motion in two aspects. First, the motion of people around

the building and through the elements. Secondly, the motion of the element itself. All the elements of climate may be thought of in terms of momentum; an object with a force and a direction. The direction and strength of the sun's rays, the directions and pressures of the wind, the fluidity of rain in motion, the static and dynamic qualities of snow. All of these can be expounded upon and utilized to achieve climatalogic integration.

In using climate as a design influence the intent is to consider the meteorologic phenomenon as a beneficial resource. It is foolishness to fight with an ever present aspect of the site. Being fully integrated with a region is to make the most of a given situation.

Approaching Regional Architecture

Having elaborated on the predeterminants individually it now becomes necessary to bring them into a single body of thought.

To begin with, it is important to realize each of the predeterminants are an influence for regional design, but only one of four. One cannot be allowed to consume the building. All must relate to the greater whole of the building. The building must in turn relate to the greater whole of life with all its complexities.

This brings us to forming a conception of what architecture is. Architecture is an expression of a specific place and its populace. To be truthful in that expression the architectural process must have all the facts about the situation to be expressed. If some of the facts are unobserved or ignored then the expression can be only a half truth, approaching a lie.

Clarification is needed of another aspect of architecture, that being the debate of art or science. This dichotomy seems absurd upon examination.

Is architecture an art? Of course it is!

Is architecture a science? Of course it is!

Architecture by its very nature is art. Any art can be said to be an attempt to express or evoke an emotion or response. Art can be extremely simple or very complex. Art can be subtle or it can be boisterous. Art is the systematic use of knowledge, skill and imagination in making or doing things. Most assuredly architecture is all of

this, but it is more. Architecture cannot be a pure art because 'It has practical boundaries and duties which it must acknowledge, satisfy and respect.'[9]

Those aspects of architecture which make it not a pure art are the very ones which make it also a science. There is a scope of realism in architecture. There are specific functions and requirements which architecture must satisfy. Both of these involve the observation and classification of facts in an attempt to establish a theoretical explanation: Science.

Architecture is both art and science. It deals with humanity (Art) as well as performance (Science). The concern is the attitude with which each needs to be understood for regional integrity.

Art in a nutshell can be termed as any and all human talent. Human talents and abilities are the thing which constitute culture. Alvar Aalto saw the indication of culture as 'the ability to create a balance in the whole environment.'[10] Creating a balance of environment is the art of regional architecture. To do this the architect manipulates all the classic arts; sculpture, painting, design and composition, into an environment which comfortably houses all the other arts; movement, speech, emotion, artifact, etc.

It is vital to regional architecture that it be just this way. The classic arts of sculpture, painting, design and composition translate to architecture as form, emotion, intention and order. To focus

on only one or a few of these elements is to approach a pure art which it has been stated architecture cannot be. Focusing on one or a few also begins to ignore the spatial experience; that creates an imbalance of environment which results in a weaker indication of the region. The necessary attitude with which to incorporate art is therefore not one of art in architecture buth rather one of being comprehensively artistic about architecture.

Science can be termed as the development of a systematized knowledge about some type of performance. In architecture this performance is of two types: mechanical systems and the function of space. While these two interrelate the method of scientific thought employed to understand them is not the same.

There are three methods of scienctific thought:[11]

1. Dealing with problems as simplicity
2. Dealing with problems as disorganized complexity
3. Dealing with problems as organized complexity.

Problems of simplicity are those with two variables. No conditions are considered other than the relationship between those two variables. Simplicity was necessary for early explorations into the physical sciences. Great progress was made in the theories of light, sound, heat and electricity through the variable problems.[12]

Problems of disorganized complexity are those with a vast number of variables. Probability theories and statistical mechanics are both

such methods of scientific thought. Disorganized complexity is then a process of deductive logic, assuming generals to discover specifics.[13] The crux of regional integrity is the assumption of no generals in the beginning. This method of thought should therefore not be applied to the art or science of regional architecture.

Problems of organized complexity are also those with many variables. The difference is that the approach to understanding the whole is through the study of the interelation of those variables: cause and effect. Organized complexity utilizes inductive logic, which is a process of understanding the whole through knowledge of the specifics.[14]

In dealing with architectural performance it is necessary to apply the proper method of scientific thought to the problem.

Mechanical systems in themselves are problems of simplicity (i.e., electricity equals wiring; water equals plumbing; volume determines heater size). As the mechanical system becomes integrated more with climate or becomes autonomous, organized complexity comes into use. The essence of mechanics, though, is always one of simplicity.

Spacial functions are problems of organized complexity. They are so because a building is a problem which deals simultaneously with a large quantity of factors which have to be interelated into an organic whole. To employ a method of simplicity in dealing with spacial function results in mechanization of space rather than an experientially enjoyable relationship of space.

There are some important habits of thought in employing organized complexity.[15]

First, one must think about processes. The elements of a building must be considered in the occurence and context in which they exist. 'Buildings are always involved in differing, special processes.'[16]

Second, one must think inductively. Buildings are too multifaceted to assume generals or to be abstracted. 'To reason from generalizations ultimately drives us to absurdity.'[17]

Third, one must study those factors of the situation which are unusual. By doing so it becomes possible to have a clearer understanding of the usual. 'To learn how things are working we need pinpoint clues.'[18]

To create a balance of environment requires such inductive logic. Reasoning from particulars to generals leads to a balanced understanding. To reason from generals to particulars (deductive) assumes a balance to start with which is idealistic and egotistical. To treat environment as a two-variable problem (simplicity) can create a balance in those two variables but never in the whole. The attitude with which to incorporate science is therefore not one of science in architecture but rather one of being properly scientific about architecture.

Having clarified the attitude toward art and science in regional architecture, it is time to clarify how to be properly scientific and comprehensively artistic when working with the predeterminants.

Geology, history, culture and climate can and should be understood through the scientific method of organized complexity. One should start by determining the components of each predeterminant as it exists in the region. One can then begin to understand further by observing the processes, circumstance and context of the predeterminant. Having come to a minimal understanding thus far, one can identify the unusual, unique and specific as they relate to the situation. Inductive logic begins to develop a knowledge of the place which can understand the generals more fully by understanding the specifics very well. Knowing the specifics and the generals which they present one can begin to develop a regional body of thought about each of the predeterminants and their interrelation.

Having come to know the predeterminants through being properly scientific, one can then utilize and express that knowledge by being comprehensively artistic. To speak of utilization and expression begins to suggest the start of a physical building. That is something which has not been discussed in this thesis. It hasn't been discussed because to speak of a real building is to speak of something tangible. Integrity is not something tangible. Integrity is a quality, a spirit, an aspect of character.

Integrity will manifest itself through the senses but will exist in the soul. The soul of the people ... of the building ... and of the region.

Concern about the extent to which the region's integrity will be manifest brings us back to the architect's integrity. The honesty and completeness with which the architect comes to be a part of the region is the foundation of hope for regional architecture. The foundation is in the knowing.

From a foundation of knowing one can proceed to a structure of application. Being comprehensively artistic now becomes the concern. The architect must be honest and complete in utilizing form, emotion, intention and order in such a manner as to breathe a spark of life into an idea. As that idea begins to become a building the architect must continually look to the foundation to be sure the creation is standing firmly on all four predeterminants. Only by being committed to all four can an environmental balance be achieved.

The building has now inherited from the region traits which influence form, emotion, intention and order. As it now begins to open its eyes to the world it must also utilize the influences of function, economy and client. These things too are fundamentals and constraints in the building's reality.

Having grown from a foundation of knowing to a structure of application the regional building is now ready for a skin of individuality. That distinction comes from the imagination and style of the architect. Regional integrity need not define the full appearance of regional architecture. Regional integrity does not mean a building must look just

like its neighbor for it to be regional architecture. Regional integrity need not result as salt boxes in Massachusetts or adobe in New Mexico or verandas in Georgia or log cabins in Montana. So long as the predeterminants have formed a foundation and influenced a structure, the architect is free to apply himself to an exploration for regional architecture. Just as integrity is an aspect of character, so is individuality and creativity. Just as the regional architect must respect each region as unique, so much the region respect each architect as unique. Being unique does not preclude belonging.

When a building has its foundation in a place; when that building takes its structure from the realities and desires of a place; when the building has sufficient strength to be unique and still belong, then that building is of the region. It is regional because as it comes to life and fully opens its eyes it already belongs. It belongs because that region is in fact where it was born.

The intention of this thesis has been, and will continue to be, the four predeterminants of regional integrity. To me, the success or failure of any building lies in the attitude with which that building addresses its environment. A building's environment is of two sorts; the earth's processes and society's processes. The earth's processes are geology and climate. The society's processes are history and culture. My intention is to design a building which fully and equally involves these four predeterminants. While the building will be thought out enough to be functional, my time will be limited and devoted mostly to an exploration for regional architecture; an exploration for belonging.

Region

Cody, Wyoming is the region I have chosen to deal with.

Cody is a small but dynamic town of approximately 10,000 people. It grows in Northwestern Wyoming some 56 miles from Yellowstone National Park.

The principle industries are: U.S. Corporate Headquarters of Husky Oil Company, Husky Oil Refinery, Marathon Oil Regional Office, Big Horn Gypsum, Y-Tex Manufacturing, Tourism, Farming and Ranching.

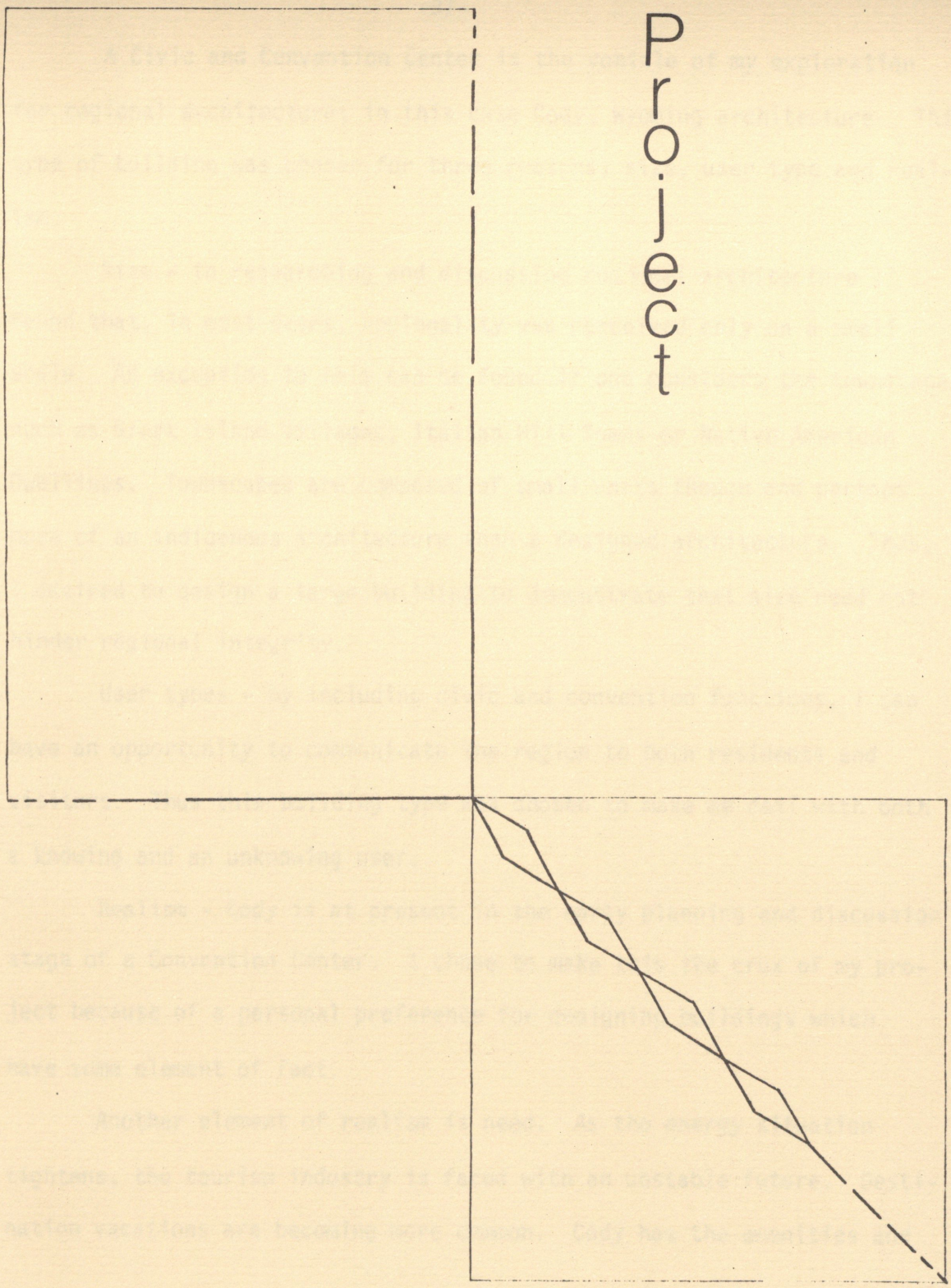
Cody is also home of the Buffalo Bill Historical Center. It is a very large building complex which houses four components: Buffalo Bill Museum, Whitney Gallery of Western Art, Winchester Western Rifle Collection, and the Plains Indian Museum.

As the diversity of industry would suggest, Cody's population is made up of a broad variety of people for such a small town. Furthermore, the motels and hotels can accommodate almost 5,000 resulting in the summer population being half again as big as the winter population.

Summer recreation is greatly varied: hiking, fishing, backpacking, boating, river floating, Yellowstone National Park, Beartooth mountains, rodeo, Buffalo Bill stampede, Oil Trail Town, the Historical Center and more.

Winter recreation is more limited: Community Concert Series, Downhill and Cross Country Skiing, Big Game Hunting, Buffalo Bill Birthday Ball and others.

Cody's growth is slow, steady, and well planned. The people are friendly and it is a pleasant town to live in.


Project

A Civic and Convention Center is the vehicle of my exploration for regional architecture; in this case Cody, Wyoming architecture. This type of building was chosen for three reasons; size, user type and realism.

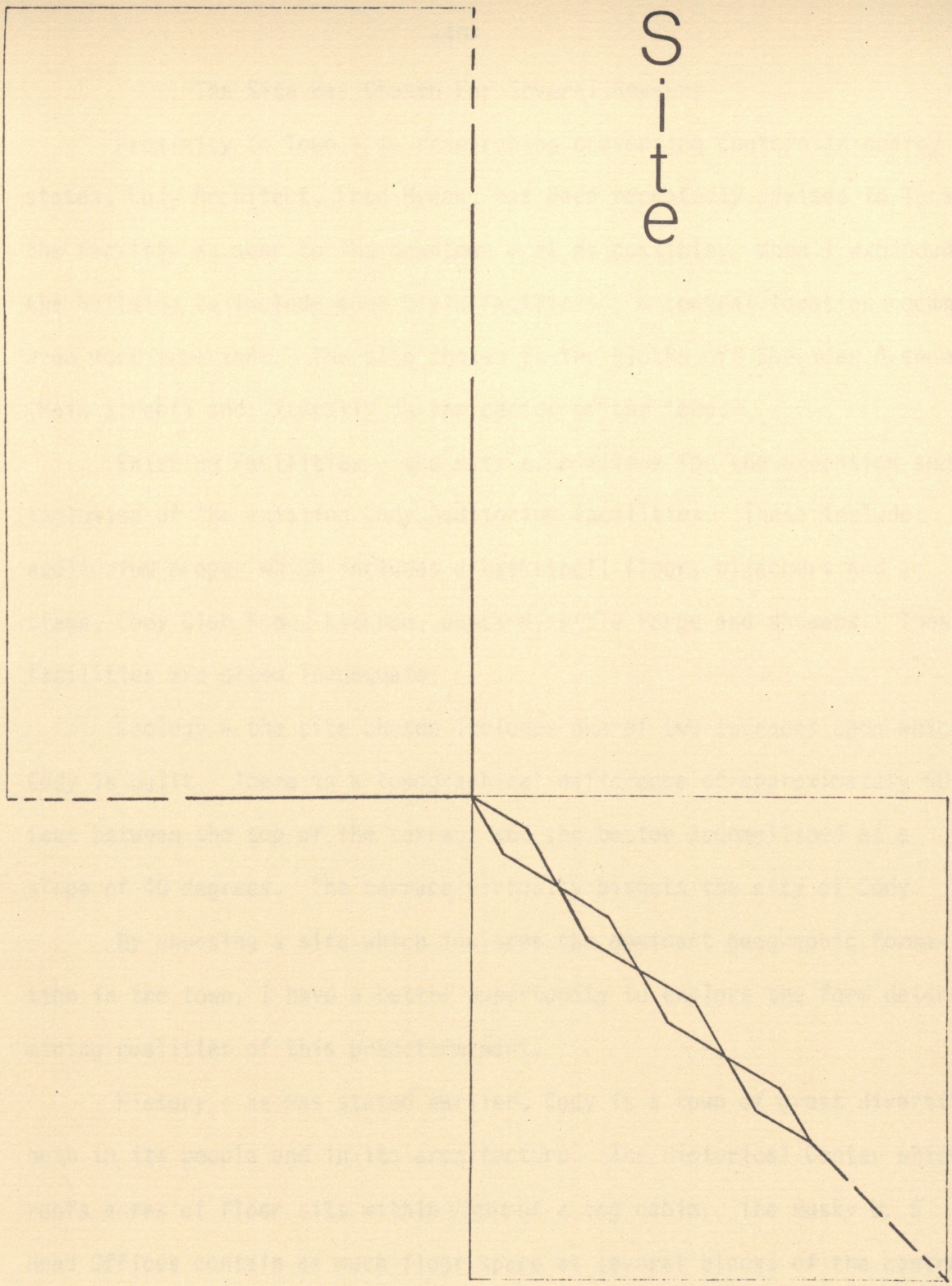
Size - in researching and discussing regional architecture I found that, in most cases, regionality was perceived only on a small scale. An exception to this can be found if one considers the townscapes such as Greek Island Villages, Italian Hill Towns or Native American Dwellings. Townscapes are composed of small units though and perhaps more of an indigenous architecture than a designed architecture. Thus, I desired to design a large building to demonstrate that size need not hinder regional integrity.

User types - by including civic and convention functions, I can have an opportunity to communicate the region to both residents and visitors. Thus this building type was chosen to make me deal with both a knowing and an unknowing user.

Realism - Cody is at present in the early planning and discussion stage of a Convention Center. I chose to make this the crux of my project because of a personal preference for designing buildings which have some element of fact.

Another element of realism is need. As the energy situation tightens, the tourism industry is faced with an unstable future. Destination vacations are becoming more common. Cody has the amenities and

proximity to beauty needed to make it an excellent destination vacation town. A convention facilty can help to ensure such a role.


Site

The Site Was Chosen For Several Reasons

Proximity To Town - in researching convention centers in nearby states, Cody Architect, Fred Hynek, has been repeatedly advised to locate the facility as near to the downtown area as possible. When I expanded the building to include some civic facilities, a central location became even more important. The site chosen is two blocks off Sheridan Avenue (Main Street) and literally in the center of the town.

Existing Facilities - the site also allows for the expansion and inclusion of the existing Cody Auditorium facilities. These include: auditorium proper which includes a basketball floor, bleachers and a stage, Cody Club Room, kitchen, daycare, rifle range and showers. These facilities are often inadequate.

Geology - the site chosen includes one of two terraces upon which Cody is built. There is a topographical difference of approximately 60 feet between the top of the terrace and the bottom accomplished at a slope of 40 degrees. The terrace virtually bisects the city of Cody.

By choosing a site which includes the dominant geographic formation in the town, I have a better opportunity to explore the form determining qualities of this predeterminant.

History - as was stated earlier, Cody is a town of great diversity, both in its people and in its architecture. The Historical Center which roofs acres of floor sits within sight of a log cabin. The Husky U. S. Head Offices contain as much floor space as several blocks of the central

business district. One of the mansions in town has eighteen bedrooms while the house across the street has one. Thus, Cody is a difficult place to develop an appropriate biographical context for.

The contour of the site will allow me to diminish the mass of the building while maintaining a prominant position and visibility in town. This site allows for great flexibility in exploring the historic predeterminant.

Culture - the site chosen is important to this predeterminant for two reasons.

First, it allows the opportunity to create a center of the town. Cody at present has no such place. I believe an idea of center is important to a culture's perception of its own complexity (memories and desires).

Second, the site will allow for a pedestrian link between "on the hill" and "below the hill". At present it is a difficult task for any but the young and healthy to climb the hill by any means other than a car. By making this easier it should diminish the hill's concept as a barrier between two parts of Cody.

This site will allow me to explore the strengthening of a culture's concept of centrality.

Climate - the dominant climatalogic elements of Cody are the wind and the sun. This site can accommodate both.

The wind is almost always from the West. Having the hill top as

part of my site will allow for wind generation and expression. Having the hill itself to build into will allow for protection from the wind.

Cody gets a great many solar gain days. The few solar houses in town are very successful. Even though the hill on my site faces north, the rest of the site is flat. Through good planning this building will be able to approach self sufficiency.

The site therefore presents a benefit and a challenge to my exploration of the climatalogic predeterminant.

Design

To express all the factors which have gone into the design of this building would be impossible. This section of my thesis will focus on three aspects of design; how I design, what I designed and the predeterminants influence on my design.

HOW I DESIGN

The buildings I create always exist thoroughly and completely in my mind before they materialize on paper. The seeds of many thoughts germinate and burst into life in spirit, not in graphite. As these various thoughts begin to take form I sort through them and retain only the most healthy. These sprouts now arrive on paper so as not to be lost, but then return to the imagination where I adjust them and direction them and begin to give them size. This process of mind to paper and back to mind continues until I can mentally walk through, around, above and below the solidifying form.

I create the form while at the site, not while at the drafting board. I bring to life in my mind a building while I have the sun, wind or rain in my face and the site under my feet.

When I can feel comfortable while experiencing the building in my mind's eye, only then does the final form begin to take its place on paper. Of course , as it is finalized many adjustments must be made and then I have to walk again through the altered version to determine the effect of the changes.

Good design, I believe, must feel right in the mind, not just

appear good on paper.

WHAT I DESIGNED

Beginning with a Convention Center, I expanded to answer other criteria.

For a portion of the funding to come from the Federal Government (the desire of the City Council) a building of broader usage is required. This multiple use will come from including recreational facilities, civic facilities, day care, senior citizens center, and through making the convention space flexible enough to accommodate a variety of events.

The City's outdoor swimming pool, which is immediately west of the Cody auditorium, is outdated and far too small. The pool will be relocated and enlarged.

In his research of other small town convention centers, Fred Hynek learned that they all lost between $50-100,000 per year. To alleviate this commercial space, office space, bar and a restaurant have been included. This should serve to provide rents and revenues to offset maintenance of the assembly hall (no longer convention center). It should also increase the participation of residents with the Civic Center.

Another source of income for the city can come from wind generation of electricity. The residents of Cody currently buy electricity from the city on a non-profit basis. The generated power not used by the center could be fed into the city grid to reduce the amount which must be bought from outside the community. This self-generated power could be

charged for, if needed to meet expenses, or could go toward reducing electric bills.

Thus, I have brought the design to be a self-sustaining building complex which can serve conventions and civic desires.

THE PREDETERMINANTS DESIGN INFLUENCE

Geology - Geology's major influence on architecture is upon how a building is formed. Evolution from the ground into the building is of key importance. Attention to the type and combination of materials is also required.

Cody sits just east of the dividing line between the Absaroka Range of the Rocky Mountains to the west and the Dry Plains of the Big Horn Basin to the east. Resting as it does in the basin, it is necessary to know the geologic history of the basin.

The Big Horn Basin was once a great Ocean Basin, with the Absarokas to the west, the Big Horn Mountains defining the east and the Bridger Mountains to the south. For untold thousands of years deposits fell layer upon layer to the ocean floor. The oceans eventually dried and prehistoric plant and animal life flourished. Generation after generation died and sank into the swampy floor of the jungle, accounting for the abundance of oil and natural gas found in the basin.

The Ice Age sent rock laden glaciers down from the north and when they melted, layers of stones worn round by friction remained. Also as the glaciers melted, the runoff water, seeking its way back to the

ocean, accumulated into rivers.

Such is the Shoshone River which runs past Cody. When the river began it was higher than the present elevations of Cody. As it meandered back and forth, seeking its course, it eroded down through the glacial deposits to the ocean bed creating a terrace. The river continued to meander and erode creating another terrace. It eventually found the easiest course, stopped its meandering, and eroded a cliff sided gorge. This is what now exists.

The hill on my site is the first of these terraces. There is a thin layer of top soil covering a strongly bonded conglomerate of round stones and sand. In plan, the terrace is a meandering remnant of the river. In section it is a softly rounded form at top and bottom with a moderate grade of regular slope in between. The vegetative covering is of prairie grasses and sage brush.

The influences of the hill on the building will be many. The meandering freeform of the terrace will be reflected in plan. The ridge line of the terrace and its subsequent slope of descent hill will be utilized in vertical and horizontal relationships. The color of the hill will become the color of the roofing. The building will generate from the hill into the building and back into the hill. The idea of terracing will permeate the building.

An element of water will be introduced to the hillside to justify the erosion of the building to create a pedestrain link as well as to

strengthen the pedestrian experience.

Materials will generate from earth to concrete/sandstone to either a high grain plaster over insulated block or timber and wood construction depending on the situation. All will be capped with a gently sloping roof which will share the color of the hillside.

History - History's major influence on architecture is upon the nature of the building. A building's prominence must coincide with its historic significance. Texture and color are both important in establishing a building's character.

The first white man to visit the Cody region was John Colter. The year was 1807 and his purpose was to make contact with the Indian tribes for trading pruposes. One of these tribes was the Shoshone (sheep eater) who lived in the mountains west of Cody. As he passed through the area a few miles west of Cody he noticed the sulphur deposits and hot springs which are now Demaris Hot Springs. When he later told a map maker of these hissing, spointing, strange smelling springs they were labeled Colter's hell.[19]

The first homesteaders began to arrive in the 1870's. At this time there were still vast herds of buffalo in the area. Cattle ranches became common by the 1880's and the increasing population, along with the buffalo hunters, drove the buffalo and the Indian out of the history and the area.[20]

People continued to arrive as there was still plenty of open land.

A few small settlements began to blossom on the prairie; Meeteetsee, 30 miles south of Cody and Marquette, 10 miles to Cody's west.[21]

The history of Cody really begins with a man named George T. Beck. He was living near Sheridan, Wyoming when, in 1893, he hired an engineer to investigate the possibility of irrigation in the Big Horn Basin. The engineer's report was favorable so, in the spring of 1894, Beck took a group of people to the area for further investigation. One of these people was Horton S. Boal, the son-in-law of William F. (Buffalo Bill) Cody.[22]

Buffalo Bill Cody came to Sheridan in the fall of 1894 to rest after his wild west show had closed for the season. Horton told Buffalo Bill about the virgin land to the west and all its promise. Cody approached Beck and, together with several other men, formed the Shoshone Land and Irrigation Company. Cody enlisted the support of some wealthy easterners and the company became financially solvent.[23]

Cody's interests didn't stop here. He envisioned a scenic route to Yellowstone Park. He also wanted to found a town which would bear his name.[24]

The first town site was founded in 1895, slightly west of present day Cody, on the south side of the Canyon above Demaris Hot Springs. It was named Cody Town. Due to some conflicts with the railroad who wanted to own the town, Cody and friends relocated the town to where it now sits and named it Shoshone. By 1896 buildings began to accumulate enough to

say that a town had been born.[25]

When a Post Office was needed the name Shoshone was rejected by the government because there was already a Shoshone Agency on the books. The new Postmistress proposed the name Richland without consulting anyone else. This was accepted, but the town founders protested and Richland became Cody.[26]

1897 saw the first water trickle into Cody via the Cody Canal. The need for a railroad to bring in homeseekers resulted in a compromise on land ownership and work was begun. The first passenger train arrived in 1901. By this time Cody had a school house, newspaper, churches, hundreds of new residents and the Irma Hotel.[27]

The Irma was built by Buffalo Bill and named after his daughter. It still remains one of the major buildings in town. It is built of native sandstone and lumber but the flooring and trim are hardwoods from the east. It would later receive a cherrywood back bar which was given to Buffalo Bill by Queen Victoria. It was made in France, shipped to New York, taken by rail to Red Lodge, Montana and then by freight wagon to Cody.[28]

In 1902 an easterner wrote a letter about Cody to his friends in Plymouth Rock.

> "Conclusions: In Cody everybody hustles - even the wind at sixty miles per hour. Everybody is temperate, for it costs money even to ride the wate wagon. The red flag doesn't mean scarlet fever nor an auction, but how dry I am.
>
> Cody's motive power is a concentrated essence of "do and

> dare", fed by the fuel of perennial hope. There is more enterprise, energy and public spirit in this community of half a thousand souls than there is in an eastern city of half a million." 29

The essence of do and dare along with high community spirit continues today.

By 1905 Cody was the largest town in the Big Horn Basin, a position it still holds. Also in this year, construction was underway on the Shoshone Dam west of Cody which was the tallest in the world at the time of its completion in 1910. The dam brought irrigation to hundreds of square miles of the basin.

Cody has continued a steady growth over the decades since it began. It has become the home of a national oil corporation as well as the largest collection of western art in the world. It has become a major tourist town and home for cowboys, artists, executives and thousands of others who live there because they love the place.

Cody has a highly differentiated architectural history due to the people's nature of do and dare. This is the historic predeterminant of Cody that will affect my building. I won't be afraid to do and dare. The prominence will vary as the town varies; from small to huge, from contemplative to boisterous. The textures shall be rough. The colors shall be warm.

Culture - Culture's major influence on architecture is upon the complexity of the building as determined by the complexity of the people;

their memories and desires. Communication of the people and to the people is vital. Also of importance is the utilization of the region's resources.

For the last time, I'll talk about what a varied culture Cody is. There are in Cody a wide variety of occupations and backgrounds. Due to this, the people's complexities are extremely varied. As a result of living in a friendly, close-knit town with a broad range of memories and desires, there exists in Cody a kind of veiled complexity. In other words, people of Cody tend to conceal their past memories and desires by replacing them with a common complexity. This exists in several types of Codyites: The corporate executive who goes out of their way to be one of the locals, the cowboy who will never let you know how much he really knows, the person with a college degree but doesn't let it affect them, the western artist who never talks about the big show in San Francisco. All of these are attempts to veil ones real complexity and assume the common memories and desires of the place they live, because they love the place they live.

This varying and veiled complexity will be apparent in the building I design. As a building, the complexity of the combination of elements will vary as will the overall complexity of the elements themselves. Beyond this, the complexity will often be veiled in that some of the elements will appear complex yet be simple and some of the elements will appear simple yet be complex.

Communication of the people will concentrate on two areas. One will be communicating the people's varying complexities. The other will be communicating their memories of geology, history, culture and climate.

Communication to the people will also concentrate on two areas. One will be the need to instill an idea of a centralized focus of the varying complexities. The other will communicate their desire to be exceptional.

The resources of Cody to be used will be material and human. Material includes sandstone, concrete, wood, sheetrock, furniture and any others which present themselves. Human includes a quality labor force, donation of big game trophies, murals by local artists, photo murals by local photographers, curtains and draperies by local church groups, building design by a local boy and any others which come to be realized.

Cinder blocks can come from Lovell, Wyoming 40 miles away. Prestressed concrete can come from Billings 100 miles away. Whatever else is needed can come from the lowest bidder.

Climate - Climate's major influence upon architecture is as a resource for the building. Climate also serves as a form determinant. Attention must also be paid to the motion of people through the elements and the motion of the element itself.

The dominant climatalogic elements in Cody are the sun and the

wind. The skies are clear in Cody a high percentage of the time. As a result the opportunity for heat collection is very good. The wind is almost always from due west. Occasionally summer storms come from the southwest and some winter storms come from the north, but these are relatively infrequent.

I will utilize the climate as a resource in several ways. Greenhouses and collectors will absorb and store warmth. Natural light will be allowed wherever possible. Wind generators will provide power to the building and the town. The wind will also be used for ventilation purposes. Runoff water and the water from the pedestrian link will be put into a combination cool storage basin/dry well water return system. This will serve to cool the building as well as put rain water into the ground where it belongs.

The form of my building will show derivation from both the sun and the wind. Heat collection and natural lighting will be very present in my building and thus determine much of its form. The wind will make the building develop into protective forms. The wind will also be utilized in an attempt to express its capabilities. This will vary from windward and leeward forms to wind eroded forms to wind generative forms.

The concern for motion of the people through the elements will result in exposure to the sun, protection from the wind and shelter from inclement weather.

The motion of the elements themselves will result in streamlining into the wind, opening up to the sun and utilizing positive negative wind pressures.

FOOTNOTES

1. Robert A. M. Stern, "A Comeback for Architectural Theory", PROGRESSIVE ARCHITECTURE. May, 1977, p. 94.

2. David Dunster, "A Comeback for Architectural Theory", p. 82.

3. IBID.

4. THE MERRIAM WEBSTER DICTIONARY, Ed. Henry Bosley Woolf (17th printing; New York: Pocketbook, 1977), p. 587.

5. IBID., p. 372.

6. Lewis Mumford, THE CULTURE OF CITIES, (New York: Harcourt Brace and Company, 1938), p. 26.

7. Lewis Mumford, THE CITY IN HISTORY, (London and New York, 1961), p. 458.

8. Mumford, op. cit., p. 184.

9. Pietro Belluschi, "The Spirit of the New Architecture", ARCHITECTURAL RECORD. October, 1953, p. 144.

10. Alvar Aalto, SKETCHES, (Cambridge, Mass.: The M.I.T. Press, 1978), p. 127.

11. Jane Jacobs, THE DEATH AND LIFE OF GREAT AMERICAN CITIES, (New York: Random House, Inc., 1961), p. 430.

12. IBID.

13. IBID., p. 431.

14. IBID.

15. IBID., p. 439.

16. IBID., p. 440.

17. IBID., p. 441.

18. IBID., p. 442.

19. Lucille Nichols Patrick, THE BEST LITTLE TOWN BY A DAM SITE, (Cheyenne: Flintlock Publishing Co., 1968), p. 3.

20. IBID.

21. IBID. p. 6-12.

22. IBID. p. 15-16.

23. IBID. p. 16.

24. IBID. p. 17-20.

25. IBID. p. 20-22.

26. IBID. p. 23.

27. IBID. p. 25 and 47.

28. IBID. p. 45.

29. IBID. p. 57.

IMPORTANT QUOTES

"A building should appear to grow easily from its site and be shaped to harmonize with its surroundings if Nature is manifest there, and if not try to make it as quiet, substantial and organic as She would have been were the opportunity hers."

Frank Lloyd Wright
IN THE CAUSE OF ARCHITECTURE

"We are inclined to think of the environment as outside; our structure, heredity, and experience, inside. But everything from chromosomes to the world around us are part of the same."

Paul Shepard
MAN IN THE LANDSCAPE

"We have rediscovered on our own terms that architecture is the art and science of organizing space and relating it to man for his pleasure and comfort, and that an architectural work really lives and shines only when it is part of a larger organization."

Pietro Belluschi
"Architecture and Society"
ARCHITECTURAL RECORD
February, 1951.

"True enough, we need an environment which is not simply well organized, but poetic and symbolic as well. It should speak of the individuals and their complex society, of their aspirations and their historical traditions, of the natural setting, and of the complicated functions and movements of the city world."

Kevin Lynche
THE IMAGE OF THE CITY

"Landscape, like and with behavior, instructs and informs. The most attractive objects of all for geographic study are expressive landscape features, and the structures of exterior connection feeding into them. Such, with the people themselves, are sources of culture."

Phillip Wagner
MAN, SPACE AND ENVIRONMENT

"And yet the true sign of culture is the ability to create a balance in the whole environment of cities, villages, traffic arteries, nature, and other elements that form the framework of our lives.

Alvar Aalto
SKETCHES

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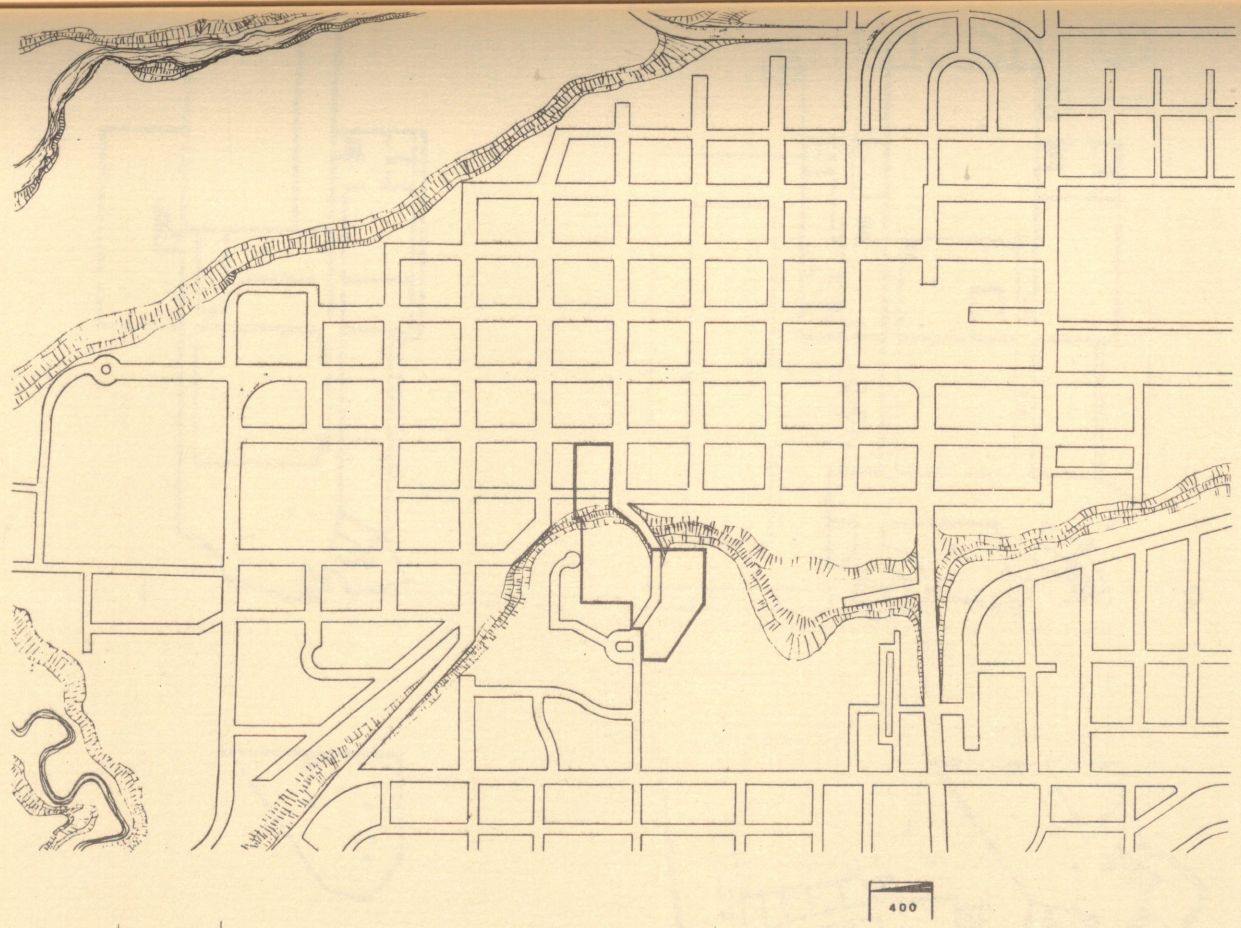
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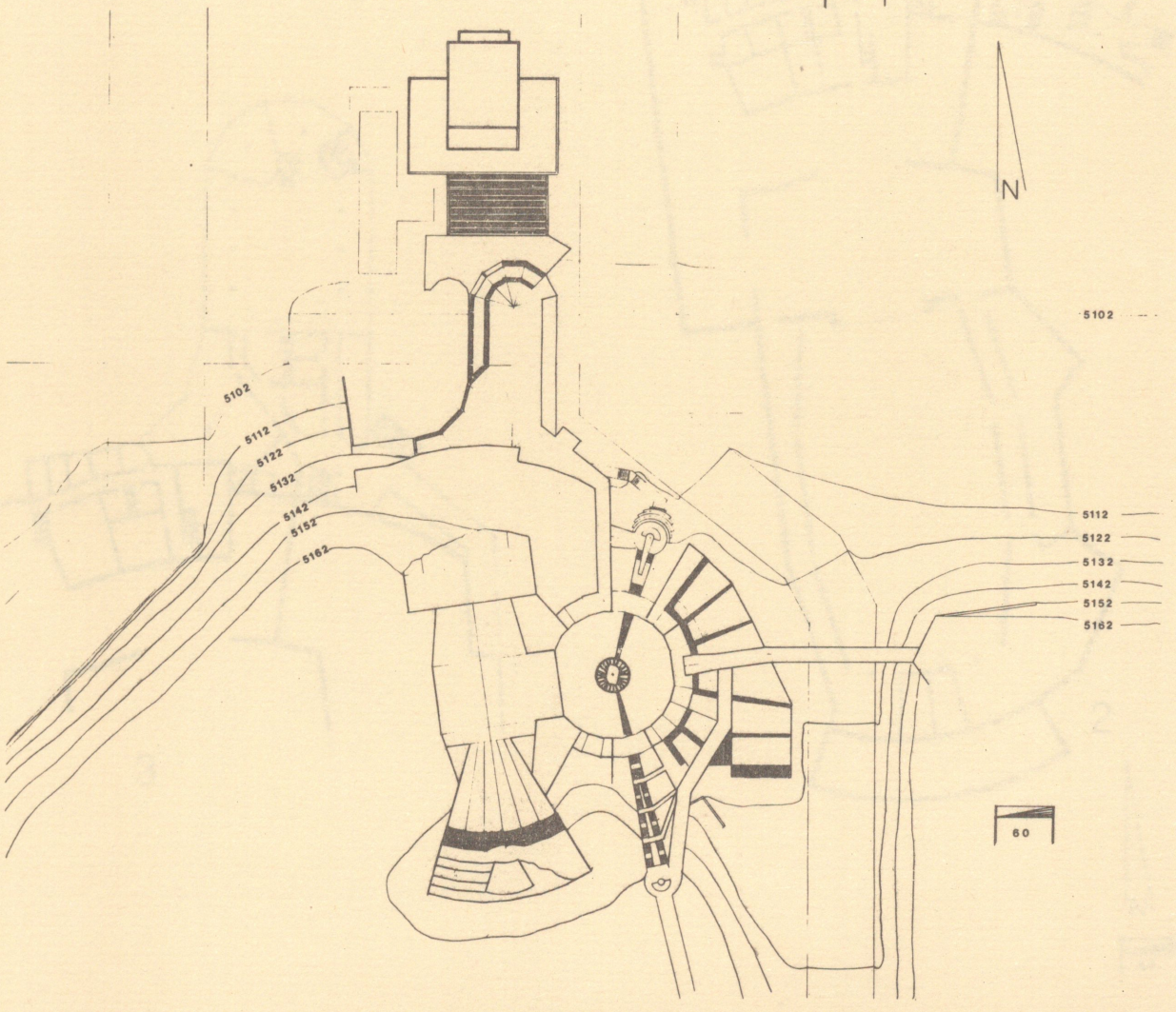
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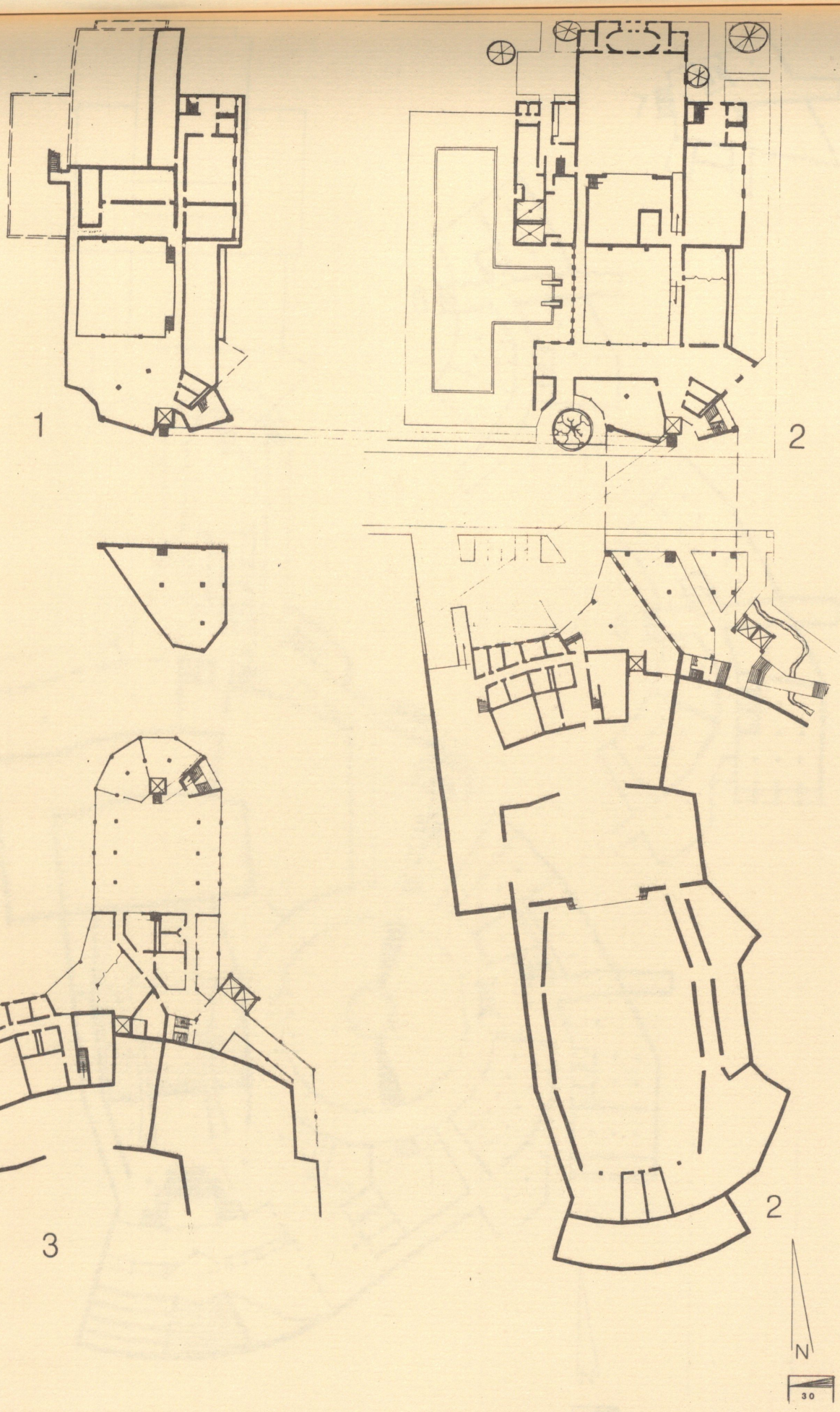
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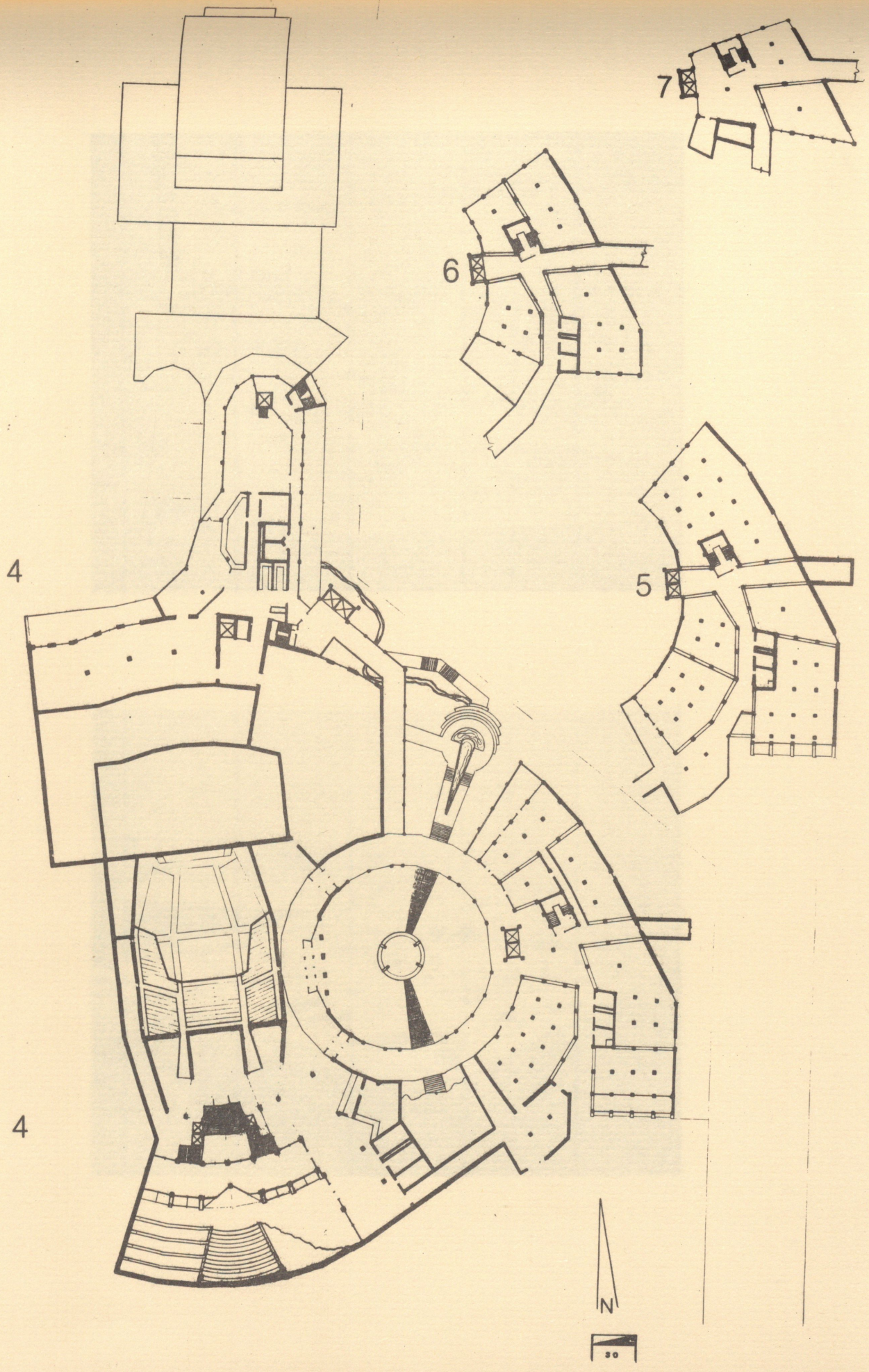
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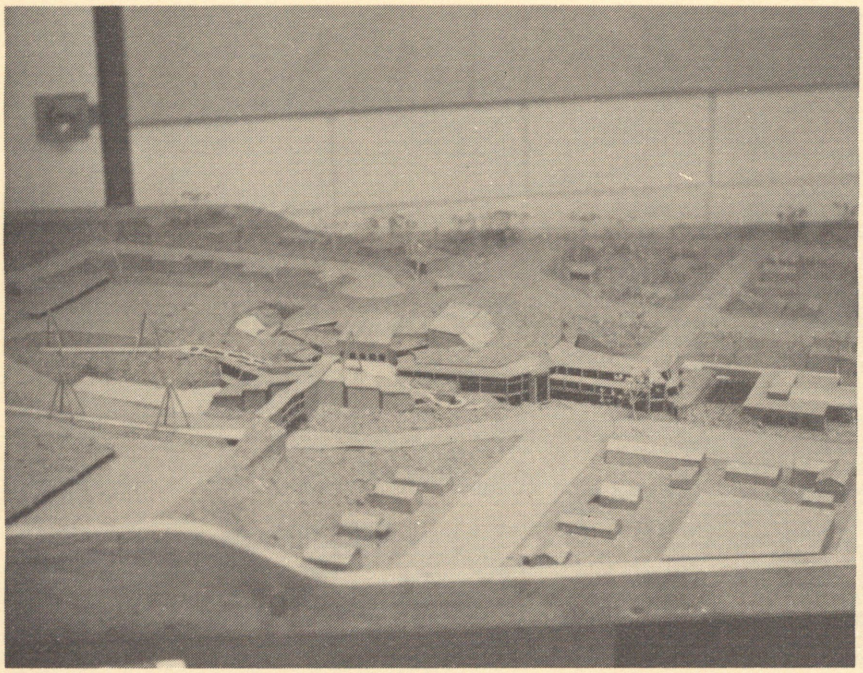
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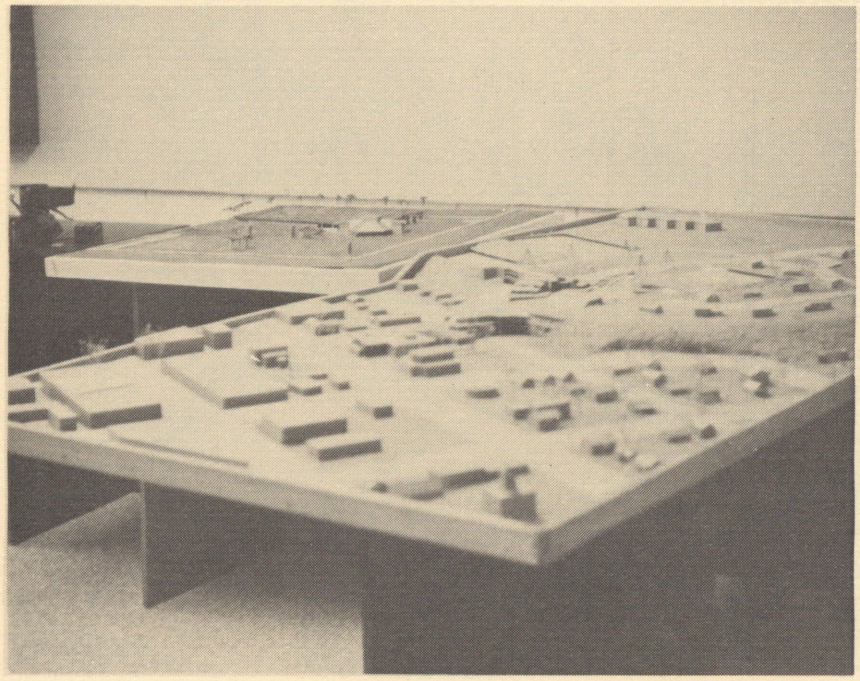

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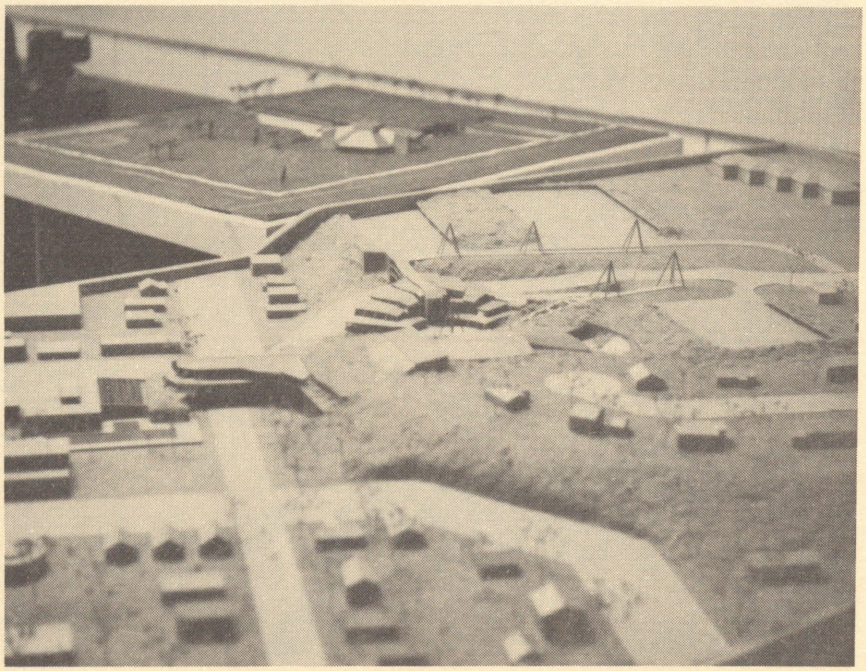

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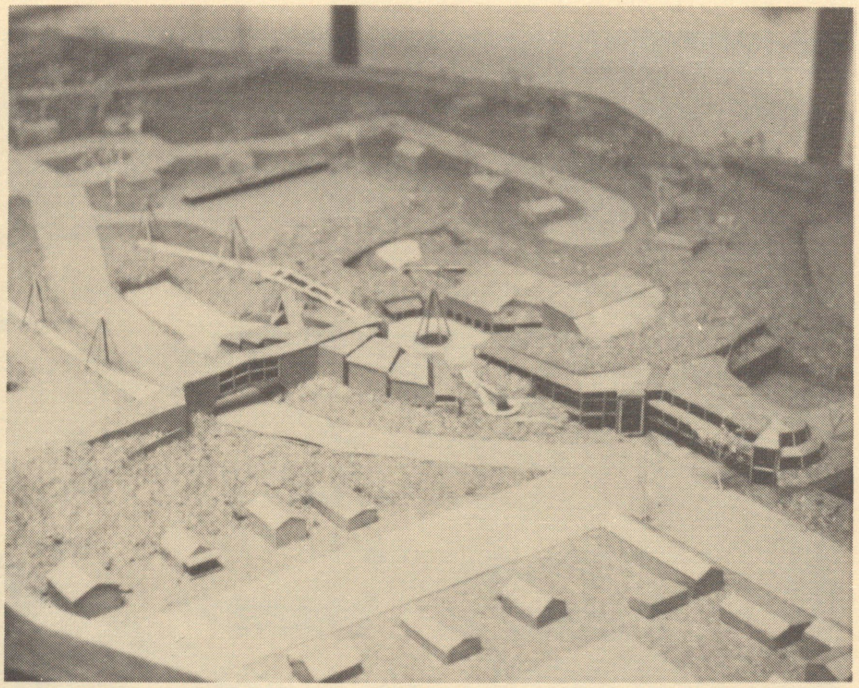

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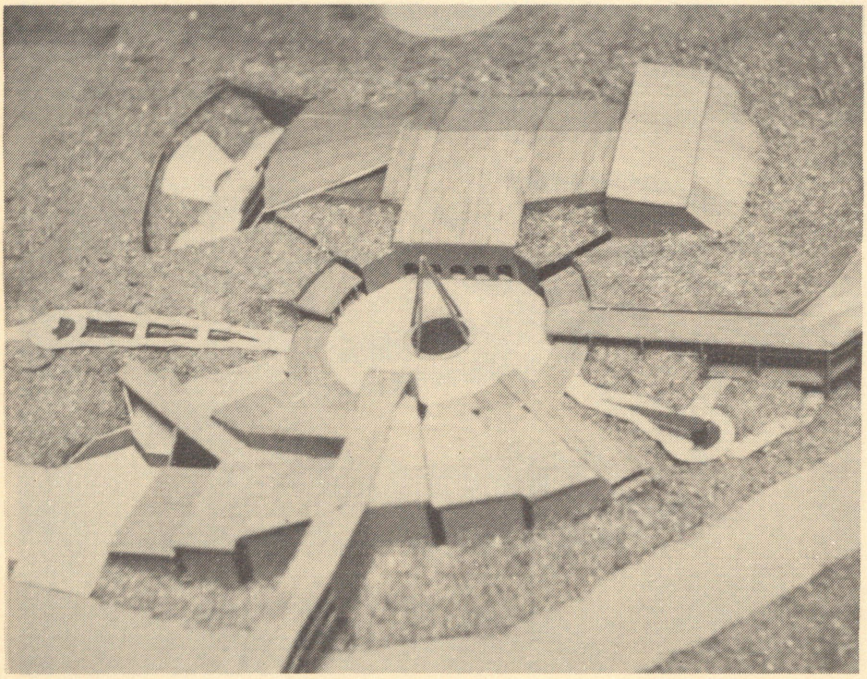

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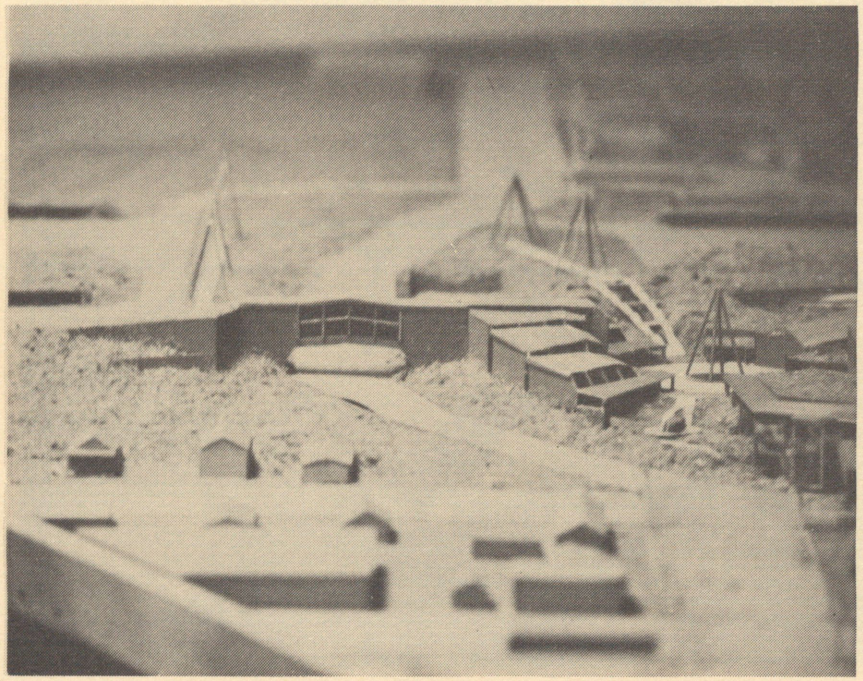


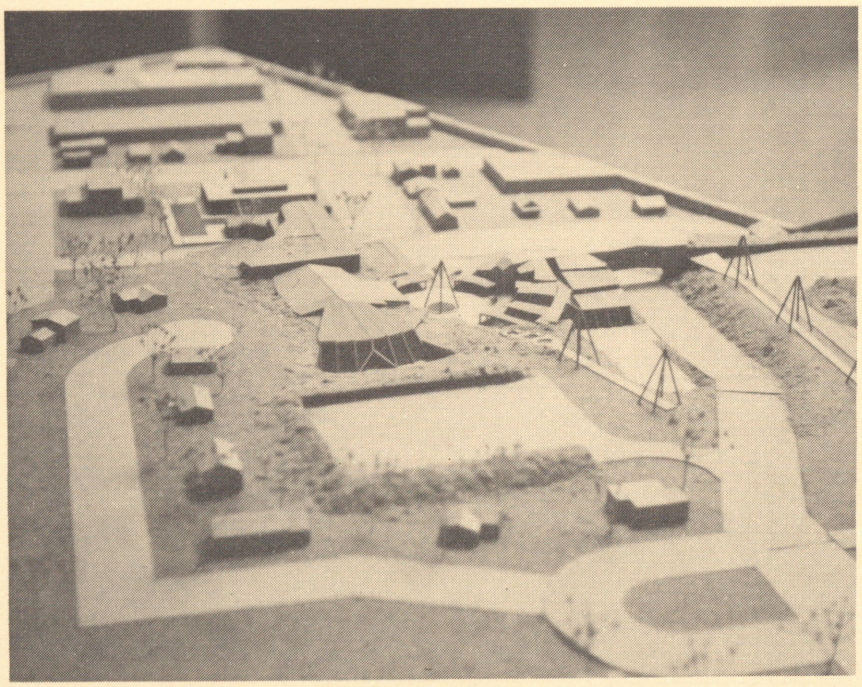


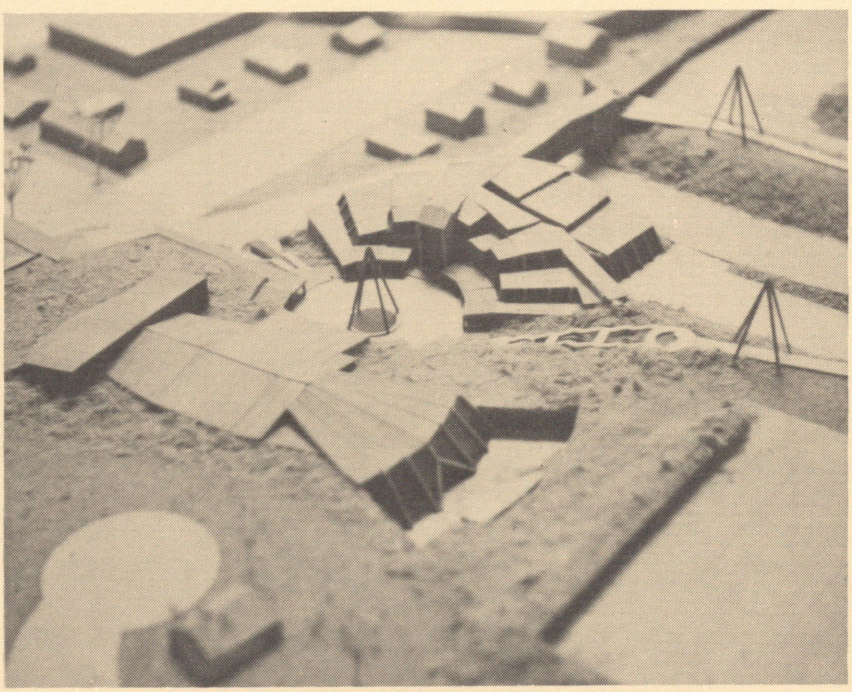












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