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UNDERGRAD THESIS IN ARCHITECTURAL DESIGN

BY

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1. THESIS STATEMENT

Community is formed for people and by people to support human culture; demeaning the essense of the individual's experience of culture severes him from self actualization.

2. INTRODUCTION

The thesis statement will be tested through a conceptual/ creative community, which will encourage mental diversity, demand responsible conclusions and de-emphasize egotism underlined by greed and envy. The physical form architecture must reflect these axioms.

To comprehend community and the intellectual diversity and composition, communities such as Brook Farm will have to be examined. The realization of the intuitive and consciousness expressed in Brook Farm becomes the emphasis for their study of community. The following quote by George Riply, a founding father of Brook Farm, expounds this theory: "A community is formed to promote the great purpose of human culture, to apply the principles of justice and love to social organizations, to substitute brotherly cooperation for selfish competition, to prevent anxiety in men by competent

supplying in them of necessary wants, and to guarantee each the means of support."

When the community cannot fulfill the needs of its citizens there is uneasiness prompting a level of revolt. Many people find it necessary to revolt through change, others through separation and still others through decay, though the majority becomes part of a conscious or unconscious collective society. This collective society is what many intellectuals believe to be the stripping of the individual's actualization of life. How do we contend with and alleviate this? These are questions to be explored and become the major concern for starting a conceptual/creative community, for the individual must become aware of his place in society and aware of the collective mind.

Juxtapositioning this community on society, providing a conscience and alternative for which society can draw, becomes my second goal. In no way does this lessen the individual's need to deal with this collective mind.

The community will operate under the vision Walter Gropius had of a "team of men who would work not automatically, although in close cooperation to further a common cause."[1]

This common cause may best be manifested through a symbol which I will refer to as a glue. Nationalities such as the Jews find this glue in the Promise Land, while the blacks find it in black power. The force of this symbol will lie in the connection of the implications within it. In this community the symbol Ouroborous, the serpent which devours himself, will be used to express the shortsightedness of man and reminding all of the consequences. Architecture will become the catalysis of thought and production, being not a pragmatic expression but synonymous with the common cause. The organic flexibility of the community will have to be expressed physically and this will be the causation for an architectural solution.

I must keep in mind that, throughout this thesis the following: "Reality is too large and diverse, too vital and fluid to be comprised of cool reason, nor is common sense sufficient."[2] Dreams are beautiful and needed anyone who can dream is lucky but the person who can materialize these dreams goes beyond dreams.

3. INQUIRY

QUESTION: How does the condition of individuality verses the collective consciousness control relate to design in general?

In designing for society, the designer must come to grips with the level of individuality and the control the collective mind has on the individual through groups or institutions. The designer has to have this understanding to consciously:

1. Continue a common belief held by a group
2. Change the belief superficially for betterment
3. Or change the belief completely to perpetuate life, in keeping with natural systems. This understanding is necessary in having society benefit from provocative design decisions by paralleling or altering the society's framework.

Not only must the designer understand this common belief held by groups, but must be aware that the individual needs to express himself for self actualization (the fulfillment of self).

This common belief which Jung coined as an "archtype" is made up of thought patterns, fears and beliefs and is held by groups either consciously or unconsciously. These archetypes are expressed in such things as walking under a ladder, the cross, fake shutters or the car. All of these have collective mind power and must be understood when dealing with them or they will control us. Now when we understand these archetypes, satisfying the past, present and future with an attitude for survival and a betterment of the whole, we will be able as designers, to perpetuate a better way of life.

I believe a continual balancing of individualism and collective mind must be sought.

QUESTION: Why design a conceptual/creative community? Since the problems of collective mind control are perpetuated by institutions, we either have to deal with the institutional framework or operate outside it because of the extreme

amount of power held by institutions. I felt it essential in yielding the most provocative attitude and execution of this attitude to work outside institutions.

This conceptual/creative community provides the break from institutional control, while offering society an alternative to a product oriented society.

This alternative is an attitude about life expressed in the symbol Ouroborous.

QUESTION: How does the symbol Ouroborous relate to the community?

This symbol gives the community a reference point from which to question beliefs. It is the glue that can hold people together, like a common religion, ethnic background or belief. Without it the members would need something which would spiritually create a common ground. Ouroborous, expressive of a cycle of life and a reasonable development of the world so man does not destroy himself, seems to accomplish this need for a common ground and glue.

QUESTION: How does Ouroborous relate to individual philosophies?

The symbol represents a general belief which the individual holds a particular philosophy in an area of research. The general belief is open-ended in that it does not express what the cycle of life is, just that there is one and that man is not limited other than being reasonable, avoiding self-destruction. The individual because of this symbol becomes aware of the connection between action and reaction. He, the individual, has to make the connection.

QUESTION: How does the concept of permanent/flexible unit relate to the symbol, collective mind and each of the society's needs?

The concept reflects the need for an organic solution. It suggests that the designer make general decisions though provide the users with a system that will allow a degree of user input. The concrete permanent structure and metal flexible frame only express one execution of the principle and I believe with further study this concept may be expanded in principle to other architectural problems. The symbol Ouroborous is expressed in the concept by a cycle of growth which the permanent flexible units provide. The organic system along with the placement of the structure in the ground and the use of passive/active sun collection further reflect the cycle of life and the reasonable attitude for survival and betterment of the whole which man should strive to achieve.

The fact that the concept is not a traditional construction method suggest a new archetype. Since the members are conceptual/creative people the acceptance would be much less critical. This test of a new system in this type of

community atmosphere is what the community is striving to accomplish in society. This concept, in short, is the first experiment.

QUESTION: How can the concept of permanent/flexible units be anymore effective than traditional construction? The concept is an alternative, not a replacement for traditional architecture. Where the traditional process of design is to produce a product encompassing the needs of the problem, this concept suggest an on-going growth process. Because of this evolution of the structure the chances for understanding the process of the activities housed can be much more sensitive than in traditional construction in general. Traditional architecture is basically a one shot deal while this concept gives a chance to examine more closely the activity and change where and when needed. The systems; needs to be explored much more, though its essence has became clear.

QUESTION: Should architecture have a variety of levels of thought?

Whenever man becomes satisfied with his world decadence

takes over. Man has to continually be a rebel:

> What is a rebel? A man who says no, but whose refusal does not imply a renunciation. He is also a man who says yes, from the moment he makes his first gesture of rebellion.
>
> Albert Camus

4. SYMBOL

The quickest way to describe a concept is through a symbol, not a paragraph of words but through one symbol (which conveys one hundred thousand thoughts synthesised into one idea.) The symbol Ouroborous, in conveying a multiple of thoughts will provide the cohesiveness of the community and a reference point from which members of the community may question their own beliefs.

"Ouroborous, an emblematic serpent of ancient Egypt and Greece is represented with its tail in its mouth continually devouring itself and being reborn from itself. A Ghostic and Alchemical symbol, Ouroborous expresses the unity of all things, material and spiritual, which never disappears but perpetually changes form in an eternal cycle of destruction and recreation. (For your interest: In the 19th century a vision of Ouroborous gave the German chemist

Friedrich August Kekule Von Stradonitz the idea of linked carbon atoms forming the Benzene rings.)"[3]

In this community Ouroborous will symbolize the short-sightedness of man's actions, revealing the decadence possible in indiscrimately changing the world. Juxta-positioning these two derivations (mythological and community) provides an atmosphere for questioning one's individual philosophy.

5. CONDITION

"The collective mind is not the terrain of individuality; on the contrary, it is a quicksand in which the individual may become engulfed beyond hope of recognition; nevertheless, it is so pervasive that any discussion of individuality must attempt to draw its outline."

This collective mind encompasses prevailing ideas, wishes, purposes and fears, which are stored in a society through archetypes and passed on to posterity through institutions. Archetypes are universal thought forms held mainly by a transpersonal unconscious and in part by a conscious mind. These latent memory traces are inherited from man's ancestral past.

The individual's desires which he may or may not be able or willing to cope with, many times are taken over by institutions, pacifying an individual's tensions. By satisfying these

desires a formulation of archetypes creates an order and then is simplified so a new psychic matrix will be absorbed into the culture.

Culture: "Anthropological sense refers to the full range of behavior in a group not just to literature, music, drama and art but all aspects of each group; aesthetics, law, language, religion, personality, therapentics kinship, attitutdes toward equality and change....closely interwoven into a pattern that is unique to each group."[5]

All social life takes place within these groups or institutions, generating culture, which in turn generates the collective consciousness. This collective consciousness is transferred from generation to generation through groups and institutions by ridicule, shame, guilt, threats of ostracism, coercive power, love, kindness, friendship, etc.

"As long as a person is upon his ground he does not fall back upon the defenses of a common denominator."[7]

The problem occurs when the average man has no incentive to draw upon spiritual resources, courage or his determination to help himself knowing the social parent will do it for him. Today through cognitive dissonance the theory proposed by Festinger in 1957 which states that when the mind

experiences a disagreement or disharmony between what one does and what one believes there is pressure to change either one's behavior or one's beliefs.[8] This becomes apparent in the diversions of recreation, intoxication, and amusements, which pacify cultural growth and the self actualization of the individual.

Self Actualization: The term self actualization was coined originally by Carl Jung. He referred to self actualization as the development of the full individual with all aspects of human experience somehow in harmony. It is the fulfillment of those hopes and aspirations of life.[9] Maslow, of the humanistic school of psychology, believed in the concept of a hierarchy of motives, (General Motivational Hierarchy). There are lower level motives "deficiency motives" which have to be satisfied first. When these reach peak experience creation happiness, wholeness, perfection, self sufficiency, the higher motives "being motives" can be satisfied. It is important to note that it is not until these lower motives are satisfied that the tendency for full play of self actualization can be obtained.[10]

Isurmize that there are numerous, highly gifted individuals who, given the proper cultural condition in which to work, could go on to make necessary innovations and decisions toward a survival adaptation between man and the world environment. Although these individuals may be able to resolve problems, there is still the problem of a power force for---"in every great social structure there is a power force, a mover, a doer, and just because one wants something to take place does not necessarily cause it to happen. One has to have the power to exercise it. So what happens when you cannot resolve these problems; you become a recluse, a hermit. You hide within your ivory tower and do your little dreams on paper and you never really affect society, because you know to affect society you don't have the power to do it."[11]

Not having the power, the individual, through cognitive dissonance, allows the archetype to conflict with natural systems to the point of not even realizing there is a problem. "The duty of society therefore, is to overcome resistance, compensate inequalities and supply spiritual nourishment to individuals in order that they may share

fully in the common life."[12] By becoming more and more removed from the decision making process the individual is becoming more controlled by the collective world and not spiritually nourished to share in the common life. Why did we allow this transgression to occur? Naturally the collective mind is necessary to retain archetypes so each generation would not have to re-examine, prove and theorize the same thoughts. If we worked out our own conclusions on every subject, one generation would be no farther ahead of the last. The problem occurred when institutions did not question the essence of archetypes or re-examine old archetypes. This maximising of the collective mind to some extent deters self actualization, placing the individual in a controlled behavior setting.

In referring to individuality and the collective mind it must be understood that these two are but parts of personality. It is not a Jekyl and Hyde situation, (but the co-existence of these two giving order or disorder to behavior.)

Freud explains personality as being made up of three parts: Id, Ego, Superego.

The Id, present at birth, reveals a basic or true psychic

reality which bears on a pleasure principle. This primary process provides the hungry person with a picture of food. Wish Fulfillment Principle.

Ego is reflective of the real objective world being a mental or physical perception of objects. Tangible or Reality Principle. Superego is the society's interpreted values enforced by a system of rewards and punishment imposed from birth. Moral Principle.[13]

In Freud's theory the ego and the superego have a direct parallel to the individual (ego) and collective (superego) thought processes. Through defense mechanisms such as denial, reaction-formation and distortion the ego and superego are altered. When altered it is difficult to abolish what has been learned. Even if the individual is reassured, because of the uniform belief system between the ego and superego there might not be any desire to question. This in turn encourages irresponsibility since the individual excepts an archetype and through cognitive dissonance puts all disagreements out of mind. The individual tends to become egotistical, believing he has control of his environment and thoughts.

The individual will have to make the decision as to whether he will arrive at the future allowing the collective mind to unwittingly control him or be conscious of the collective mind actualizing self in a collective world. This is the challenge of this conceptual/creative community.

6. ALTERNATIVES

Through the development of civilization man has had dreams of curing the dilemmas of his particular spatiotemporal society. Although in vain man has and will continue to seek that pinical of truth in all disciplines. I will deal with a variety of groups who approached the advancement of society through different means. The background will be valuable in determining the form of the community I will be designing.

BROOK FARM

Brook Farm was a community started by W. H. Channing, George Ripley, Maragret Fuller and others in the early 1850's. It was mainly an experiment emphasizing spiritual living and man's personal relationship to God rather than indirectly through intermediate ritualistic churches. There was a strong feeling and need for intellectual companionship and dignity of manual labor. They believed in living close to nature...."while holding different opinions about many things, the group seemed in general harmony toward their convictions that within nature of man there was a something which transcended human experience."[14] People such as Emerson and Hawthrone who joined after the community was set up, added to the intellectual ferver. Emerson being the most vocal interpreter of the group stated that: "Man has a responsibility to be brave and upright, he must find or cut a straightpath to everything excellent in the earth, and not only go honorably himself, but make it easier for all who follow him to go in honor and with benefit."[15] In this way most of the reforms were attempts to awaken and regenerate the human spirit rather

than to prescribe particular and concrete movements which were to be fostered. The form of the community was democratic and based on intense individualism. The members felt that the present society could not be dealt with individually, but through a concert of doctrinaries freely expressed, there could be established certain opinions or movements in literature, philosophy and religion. It proved to be just that, a concert of thought. Although Brook Farm only lasted for 7 years, "The Transcendentalist" provided the American society and the world with an intuitive transcendance above the limits of the senses and of logic and introduced higher truths and greater knowledge denying mundance methods of knowing.

THE NEW ALCHEMIST INSTITUTE

The New Alchemy Institute is made up of a group of rational professionals who are seeking an insight into science on a smaller human scale. They feel this is needed to live more gently upon the earth. "In the mid 1900s Todd began research into fish navigation and communication at the University of Michigan. There he discovered that some fish have evolved a complicated chemical language, and he also met a young American fish ecologist, William McLarney. Several years later the two men worked together at the San Diego State University, prying into the influence of environmental stress on fish behavior. They found that minute amounts of poisons, such as DDT, could effectively sever the social bonds that link an animal's behavior, its environment and its vulnerability to stress. In the late 1900s their work led Todd to the Woods Hole Oceanographic Institution on Cape Cod, while McLarney co-authored the now standard text on aquaculture."[18] Since neither of them liked the "doom-watch aspect" of society they took positive steps and started the New Alchemy Institute.

Their aim is not perfection in itself (they must have read

Popper) but a creation of a whole that is greater than any separate part, though each part must have quality if the whole is to be valued. I must add, they are not anti-science or anti-technology but feel the use of science and technology should be on a human scale. This human scale attitude reflects such books as Small is Beautiful by E. S. Schmacher and Design With Nature by Ian McHarg. The physical framework of the institute reflects their beliefs and expresses positive steps taken for a reasonable whole.

TWIN OAKS

The community of Twin Oaks patterned after Walden II holds a concept with a positive attitude. This concept in behavioral engineering by Skinner proposes to substitute our present day negative reinforcement practices with a positive enthusiasm. Upon closer study the sophisticated methodology of Skinner is rudimentarily a controlled environment to meet predetermined desires. This type system bares heavily on the type of people who set up the parameters at first. The goals of self-sufficiency, elimination of unnecessary labor and the use of behavioral engineering is honorable though the values of the individuals must be checked. Much more study has to occur before this positive reinforcement can be enforced in areas of society.

THE SALK INSTITUTE FOR BIOLOGICAL STUDIES

The Salk Institute is a free standing institute dedicated to the public good. It deals with the smallest relationships of cells as well as serious scientific and medical challenges, cancer, diabetes, growth and development defects, immunology and the brain and nervous system. To further the intellectual climate and in assuring the staff keeps in touch with the scientific community the institute has "resident faculty" and non-resident fellow, numbering four nobel laureates among them.

The members of the board of directors come from business, industry, government, science and the arts, which further adds to the high degree of concern for keeping in touch with a comprehensive direction.

The Salk Institute fosters new research ideas and provides collaboration with other scientific groups.

HUTTERITES

The Hutterites, virtually self-sufficient communes, were prompted because of a need for religious freedom. Mainly an agrarian society with a communal effort for survival, the Hutterites see life as a ritual. Everyone is of equal value and each person learns a trade comparible with the society's direction of dedication to God and self sufficiency. When a commune grows to more than 130 persons a natural evolution takes place dividing the community and starting another community modeled after the parent community. The society only deals with the outside world in the purchase of machinery and the sale of their farm products. In this way the community does not have to deal with the pressures of the outside world.

7. PHILOSOPHY

Any person who has not been mind boggled by a religion or a philosophy, who has not pierced into darkness unhappily, remorsing and confessed, has not questioned. Questioning is my framework, for if we do not continually question our most basic thoughts, the essence of design may be lost for the sake of a framework or philosophy. "....when one is considering systems it's always wise to raise questions about the most obvious and simple assumptions."

There is an essence in architecture which is comprised of order, spiritualism and sensation.

Order is pragmatic information which is derived from natural and man-made systems. The strength of the order is directly related to the translation of the environment into beliefs. There is a continual process in checking order

against environment and adding to the storehouse of information.

The designer should not stop at order, looking up the answer in graphic standards, but should synthesize his own prolific idea with order. Spiritualism then is the personalization of order giving feeling to a progmatic solution.

Sensation is rare! It is an element of design which can stimulate, excite and go beyond cliches. It is the use of Order and spiritualism to create experience.

Essence, if one may use a comparison is like a "vast lake. On the surface appear ripples which we call the individualized particular things. But these rise upon and go back to the main still body of water. The ripples are transitory, the lake is permanent."

The exhausting responsibility of being conscious of and understanding essence is unfounded. The designer can only add to his understanding toward synthesis of a whole. I feel strongly that there is a need for an extremely comprehensive information system which would allow this intermesh of information to be obtained by the designer. As yet it seems an overwhelming problem. When essence is strong

the designer has a better chance of bridging content and form. Having this foundation the designer can then start to visualize concepts (generalized ideas) and theme (the topic). Understanding essence and visualizing concepts is the point where the content and form touch and become one. The testing of concepts against the essence generates a system. If the system lacks essence it most likely will take the form of house and not house/home.

As designers we have a responsibility not just to create form but to fuse form/content! In conclusion I must say that design philosophy is what provides direction so the designer does not just batter off in all directions. This does not demean questioning but gives a reference point, from which to work.

8. COMMUNITY FORM

In any social framework there are groups. The group is "a number of people who engage in symbolic interaction. The members of a group are mutually aware of and influence one another; they recognize their membership in the group, and are, in turn recognized by the group as members; and they accept the roles, duties, obligations, and privileges that result from group membership."

The group has a stratification, which is expressed in status, class and power. The fact that is some cases there are biases and vigotary operating along with this stratification does not eliminate it, but further stratifies. Naturally there will always be a stratification and it is the moral obligation to have this operate without social inequality.

In this community there will be a natural stratification by the level of intellectual pursuit. There will be five basic

divisions of members as follows:

1. Supporters - support workers - These members work as apprentices to other division members. (receive room and board and basic necessities)

2. Populous - creative thinkers - These members are the conceptual/creative thinkers of each society. (receive a fixed wage)

3. Activists - communicators - These members provide the communication between the members of the community and the outside society. (receive a fixed wage-same as populous)

4. Fellows - These members are inactive, but contribute when able. (receive-by arrangement)

5. Guests - These individuals are visiting speakers, experimenters and thinkers who work with and teach the members. These individuals may act as mentors. (receive by arrangement)

NOTE:

The populous and activists make the decisions under a democratic system.

Each division (supporters, populous and activous) will have representatives who are spokesman for the group (receive-

personal gradification)

The attitude of the community will not be for verification or perfection, but the creation of a greater whole. This deems a reasonable positive atmosphere. Through the symbol Ouroborous the spiritualism, reasonability, seriousness, greater whole attitude and higher truth desire can become united. Give and you have received!

Community is dedicated to public good!

The community is free from outside institutional control.

The community will have a board of directors made up of one member from each society and of fellows and guests.

Programs will be started to coordinate with schools and other research communities. It will be of utmost concern to be aware of society and to get involved with the intellectual community.

The community is made up of a central communications section and three societies, which are the scientific, fine arts and agrarian. The commo section, takes in, stores and disseminates information for the community as well as being the link between the conceptual/creative thinkers of the community and society. The three societies' major

concern is research and use the commo section to acquire information for projects.

9. SITE CONDITIONS

Location: The site is 5 miles east of Mansfield City in Tioga County, Pennslyvania.

This location is within 150 miles of Philadelphia, New York, Boston, Wilmington, Pittsburg and other small but important communities like Corning and College Park, providing access to major cultural/industrial centers. The location also had a great deal to do with the cost of land which goes for about $250 an acre when buying large areas of land.

The land could be purchased as a Federal Land Grant under an agricultural bill which gives farmers a chance to buy new farms.

About 75% of Tioga County and much of the surrounding county land is either state forest or state or private game land. The game land has deer, elk, grouse, pheasant and

a variety of fish such as trout and bass. This provides a large market for hunters and gives a number of jobs to wild life people. Since the market is a pretty stable one I plan to have the community have a wild life farm (pheasant to start) and a hatchery that will primarily raise trout, but may research other species.

The site can support the desired activities the community might be acting on such as orchards, gardens, grass lands for the bird farm and other animals as well as proper soil for building into the side of a hill.

The area is filled with natural beauty which is an extra for the members of the community and a type of learning experience.

Orientation: Because of the desire to use passive and active solar collection systems a southerly orientation was chosen. This orientation is further emphasis by the hillside facing south.

Adjacent environment: The surrounding environments are mainly forest (deciuous and conifers) and rolling hills. These hills are the foot hills of the Armenia mountains. About 20% of the land area in Tioga County is farm land.

Topography: The topography is mainly rolling hills with small valley area. The site is 50% hill with the other 50% flat valley area. There are two ponds and a stream.

Vegetation and other Natural Features: Twenty percent of the site is wooded (mainly hard woods). The other land has low brush and grass land.

Soil Analysis:

Allis-(gravelly silt loam)-not good agricultural land - bedrock at $1\frac{1}{2}$ to $2\frac{1}{2}$ feet below surface mainly for pasture and mowing.

Fremont - (gravelly silt loam)- light gray and yellow loam-gritty heavy grave and stone are common throughout the soil (angular gray shale and rounded stone fragments-silty clay loam 36" compact claypan, glacialdeposit 4 to 20 feet below surface, with gravel and store-runoff good - internal drainage is poor-productivity of soil-fair-grass and shallow rooted grains-moderately high acidity.

Chenango - (gravelly silt loam)-good productivity-organic matter low, acidity moderate, water holding fair or poor-for clover and timonthy (for hay), oats, buckwheat, corn for silage, potatoes or alfalfa, sweetclover.

Middebury - (silt loam)-yellowish brown river loam, - drainage is sluggish-productivity almost equal to Tioga - organic matter good, acidity slight, excellent pasture and grass land - not good for alfalfa (drainage problem).

Tioga - (silt loam) mellow yellow brown loam fine - good for mechanized farming (river loam) best soil - drainage is excellent native poplar, willow, elm, maple, sycamore and beech- high productivity-most fertile, acidity slight to moderate, water holding good dairy farming-same as Chenango plus-wheat, barley, cabbage, tobacco, gardens, fruits, berries.

Availability of Utilities:

Five (5) miles: Fire station, train, sewage and water, gas

Two (2) miles: Interstate

Next to site: Power lines (high voltage)

Traffic, transportation, roads, railroad, air transport

There are no traffic problems!

Private vehicles will be used for most transporting.

Roads are paved w/access to interstate (2 miles).

Railroad is 5 miles away - also 15 miles away.

Air transportation is limited to a small field for personal vehicles (15 miles).

10. CLIMATE

Because of the unavailability of climatic information of the micro climate of the site, the evaluation of the New York area written up by Olgyay in "Design With Climate" was used. The building, placed into the hill and orientated south became part of the landscape so wind continues naturally over the slopes and the solar collectors acquire reasonable amount of energy.

It is important to understand that the flexible frame houses the passive/active solar collector system, insulated panels, and is adjustable, for orientation charge for further improvement of wind energy collection models of the building could be placed in wind boxes to improve air foil and placement at windmills.

11. CONCEPT

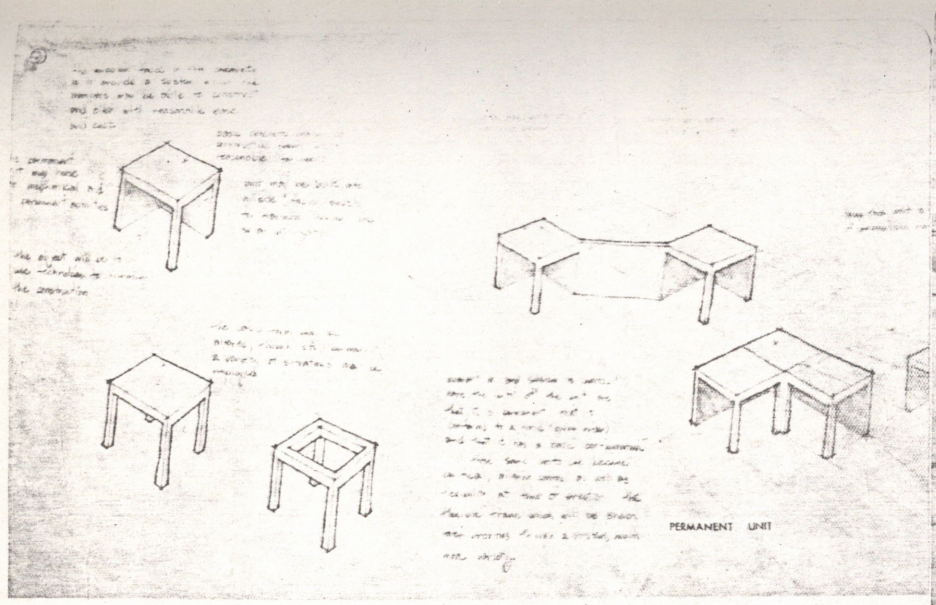
I approached my thesis with the hopes of developing a thought process. This process I felt architecturally would be conducive to an advancement attitude rather than a restatement of a traditional execution of a building as product. My concept I feel fulfills this hope presenting a thought process about architecture and a solution for the community.

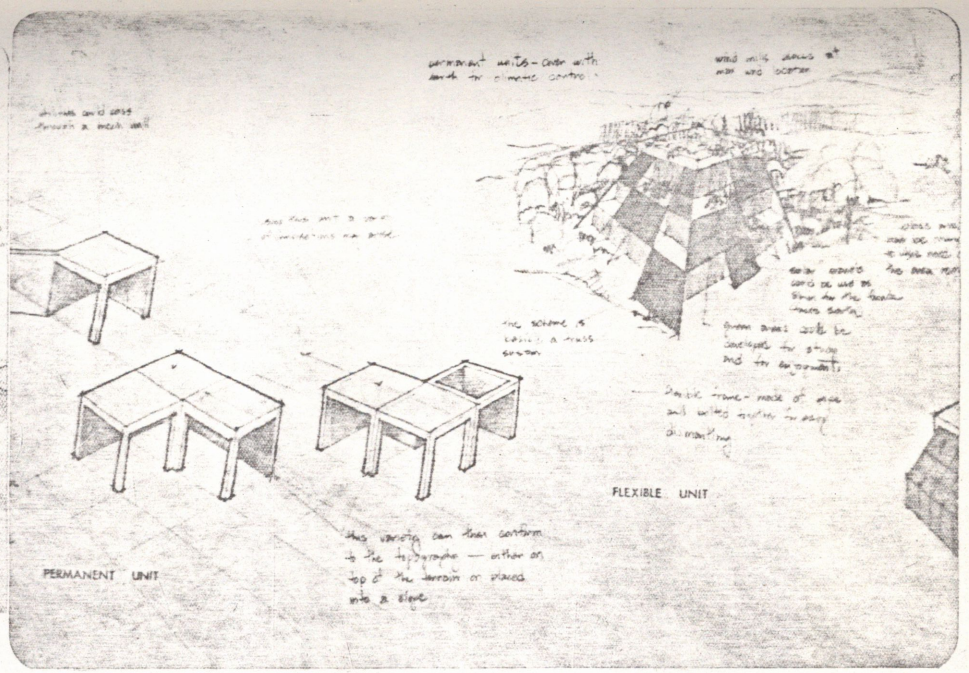
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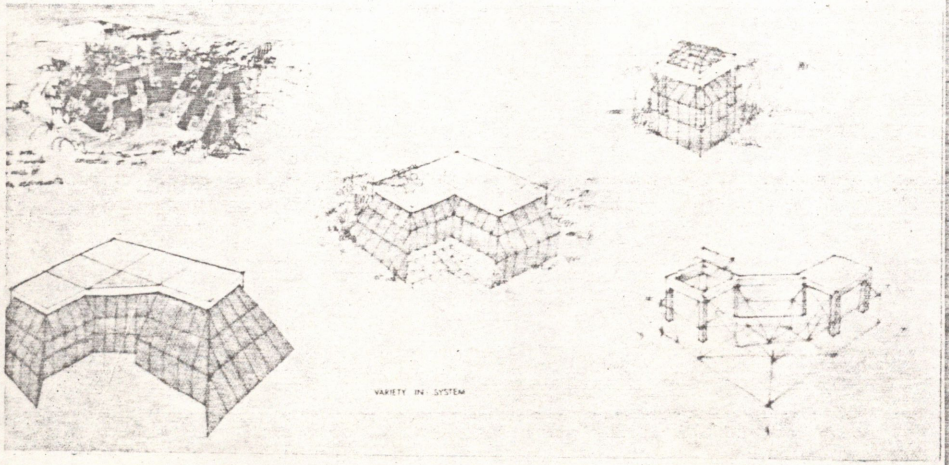
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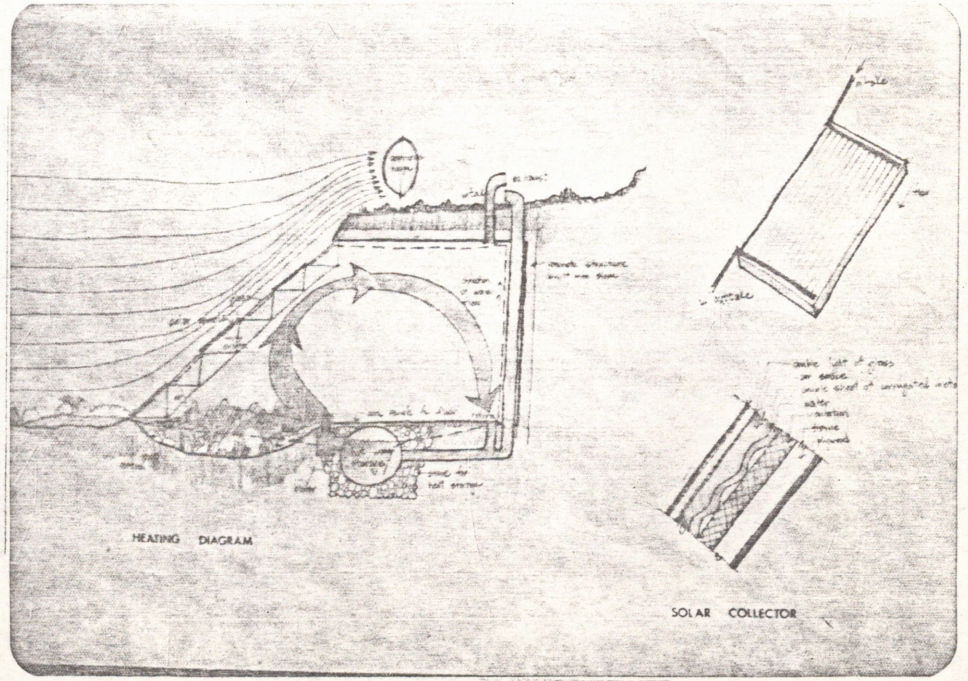
My first precept of the permanent/flexible concept was acquired from the camera with its permanent body and flexible lens which interchange. From this precept I took the next step by checking this concept against the symbol, community needs and my hope for a process and not just a product. After an extreme amount of questioning I feel strongly that this concept is a reasonable approach.

12. OVERALL COMMUNITY (DESIGN)


PERMANENT UNIT


PERMANENT UNIT
FLEXIBLE UNIT


VARIETY IN SYSTEM


HEATING DIAGRAM
SOLAR COLLECTOR

13. COMMUNICATIONS

Today a new art form has come forward and as Siegfried Geidion states "the entire process of mechanization has become an art process." The creative thinker has to learn to deal with these new medias. For this reason the Communication section of the community is extremely vital to the continual process of the community.

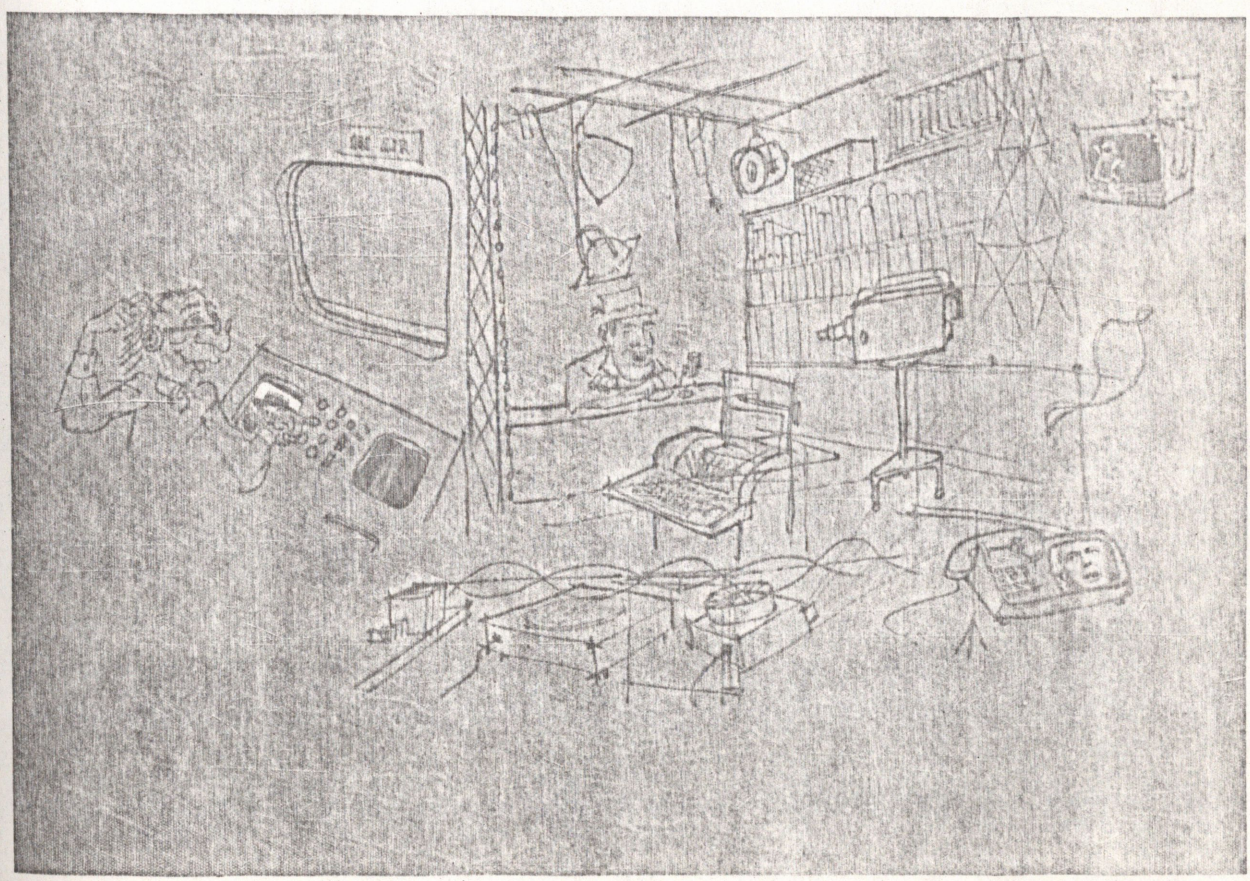
The design of the communication section is in three major parts - library, offices and production.

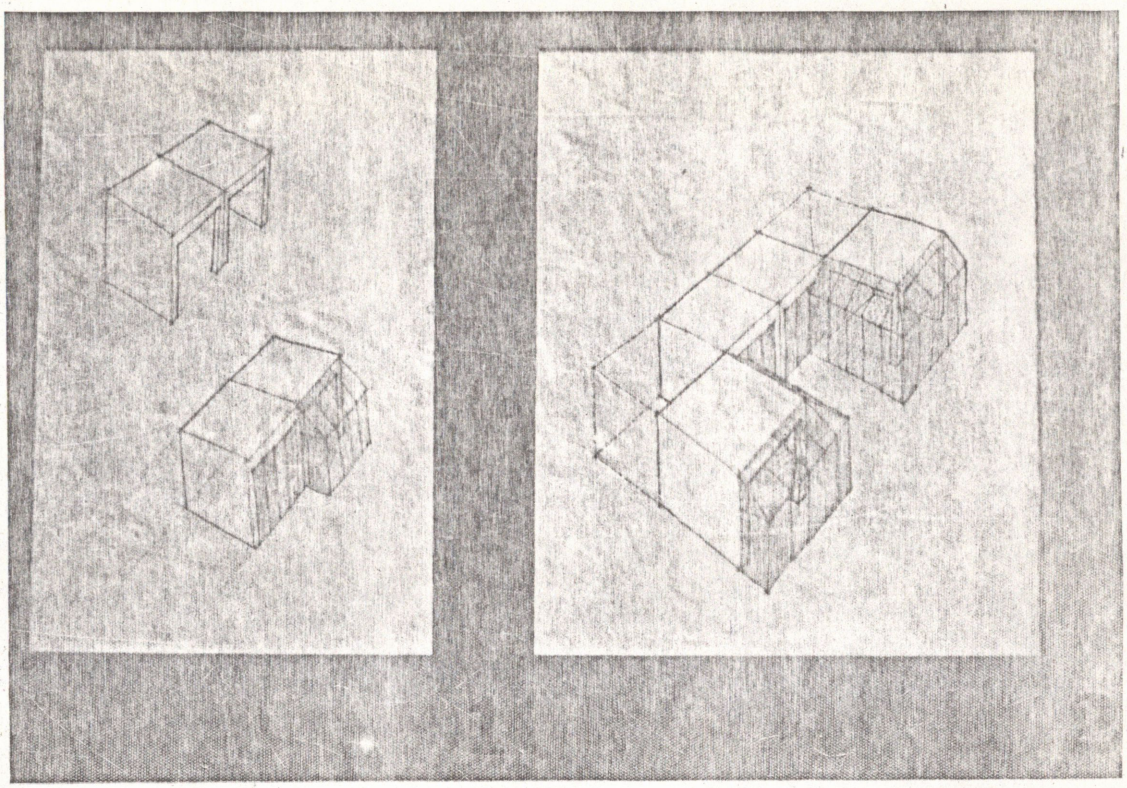
A Library is a place for storage and extraction of information. The storage of information is accomplished by books, tapes, computer printout, microfilm and other future medias. These medias are best stored in cool areas, some dry and some humid. This was accomplished by enclosing storage and controlling the environment. The reading area, gives

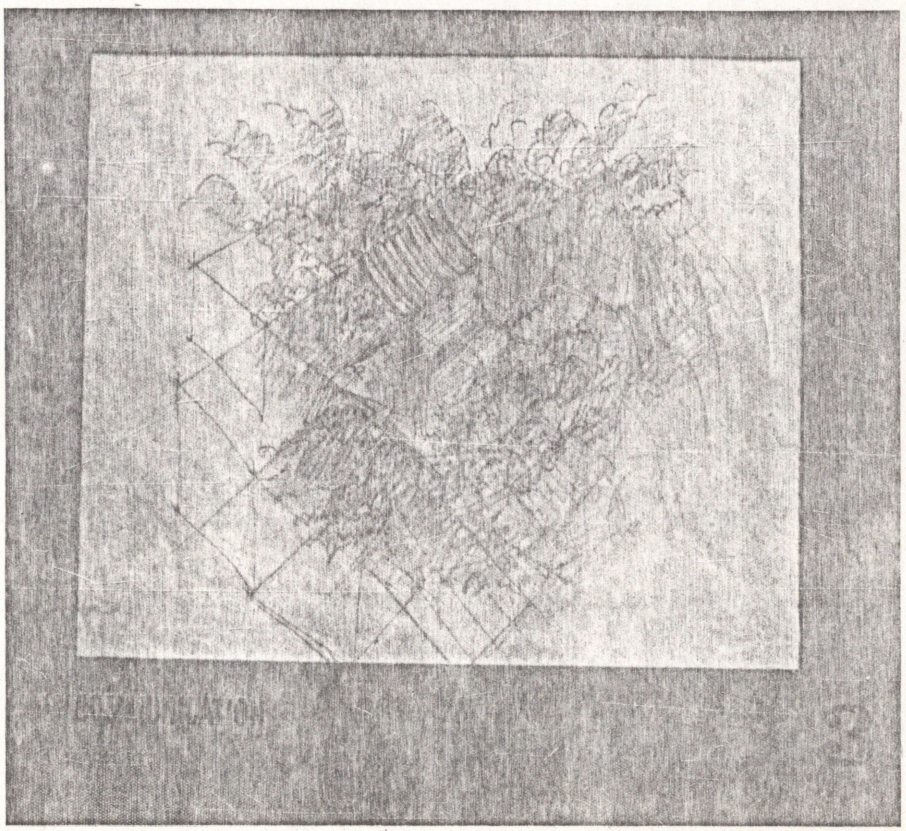
people a variety of spatial settings providing choice of light, size and position of environment.

The Office building is comprised of individual and group offices, seminar, lounge, mapping, mail, machine and main office areas. The intention was to design well lit work areas with the juxtapositioning of other areas mainly through the feeling of expansion of space. This was accomplished by balconies, glasswalls, exterior areas and open areas.

The placement of areas in the Production complex became mainly a pragmatic solution since the mechanics of the two auditoriums, production, control, engineering and supportice areas had very precise requirements. The lobby into the main auditorium, although accommodating exit and floor area requirement went further to provide a more personal environment with the ledges, grass, bushes and lighting of the space.



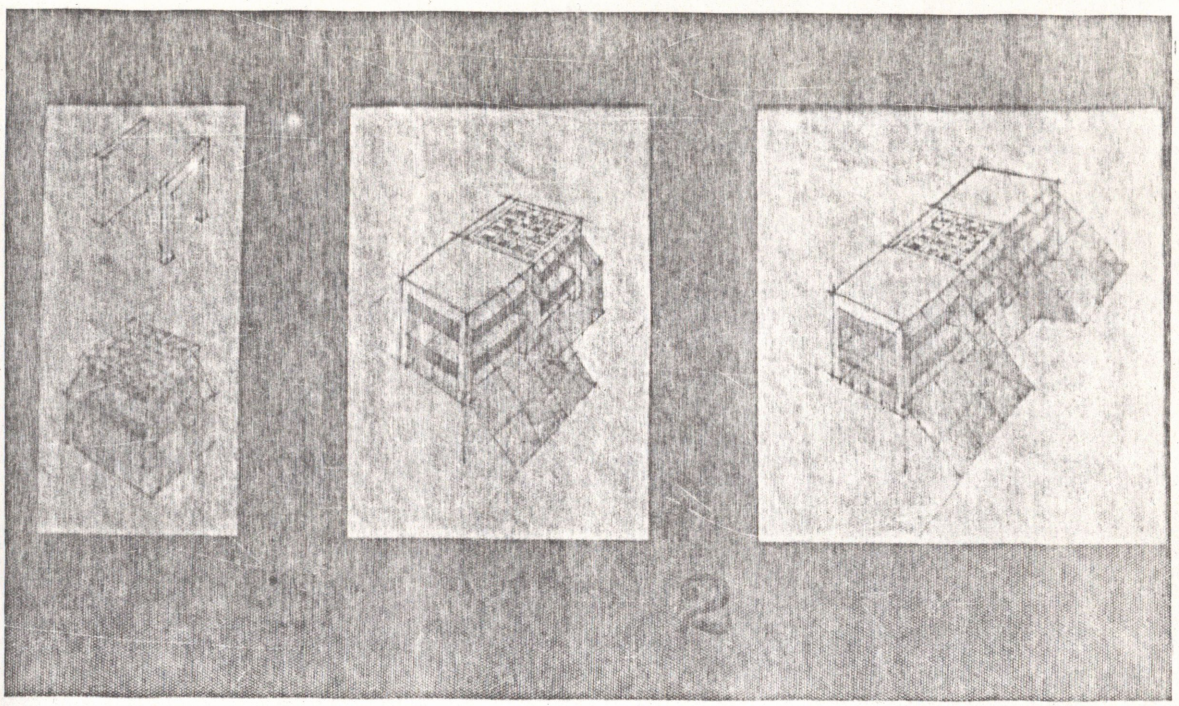


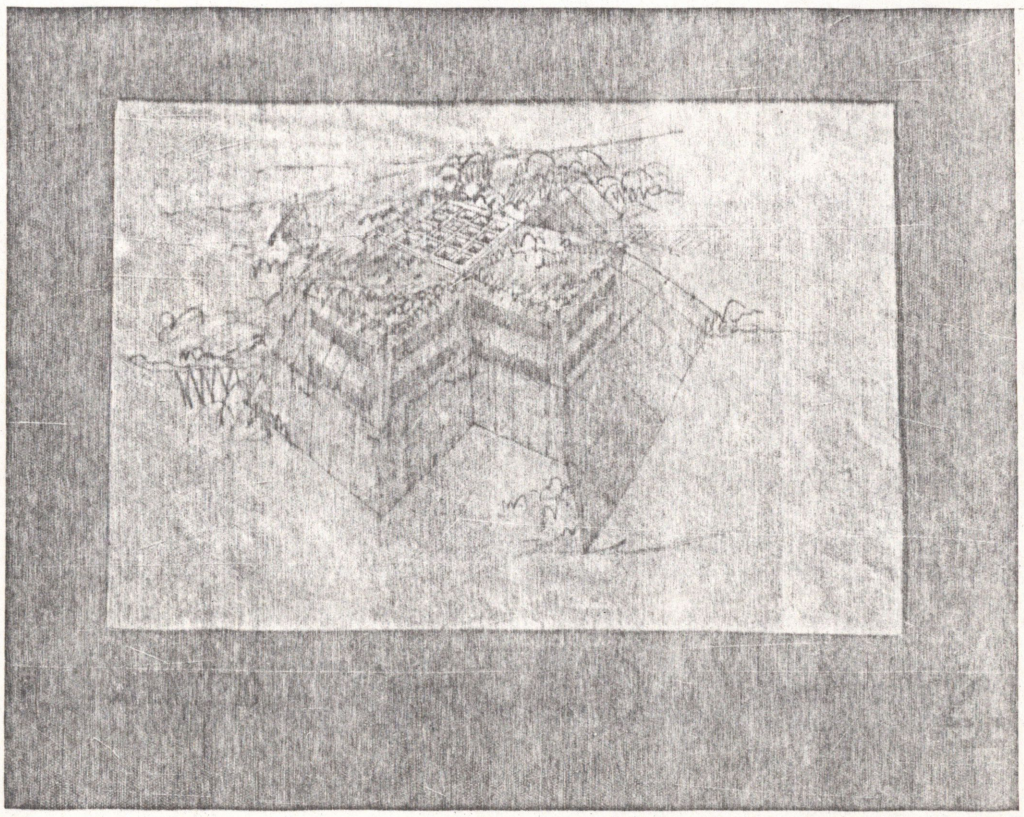


14. SCIENTIFIC

The modern research laboratory requires a great deal of flexibility because of the continual changing of equipment and experimental techniques. The mechanical system which is the life line of the facility, must be readily accessible to all work areas and meet safety codes and common sense. To meet the variety of situation a vertical core and horizontal plenum system will be utilized. This system makes the building an organism and not just an answer to a check list of needs.


brad was a scientist, but boring don't we know what he taught was H_2O with H_2SO_4





15. AGRARIAN

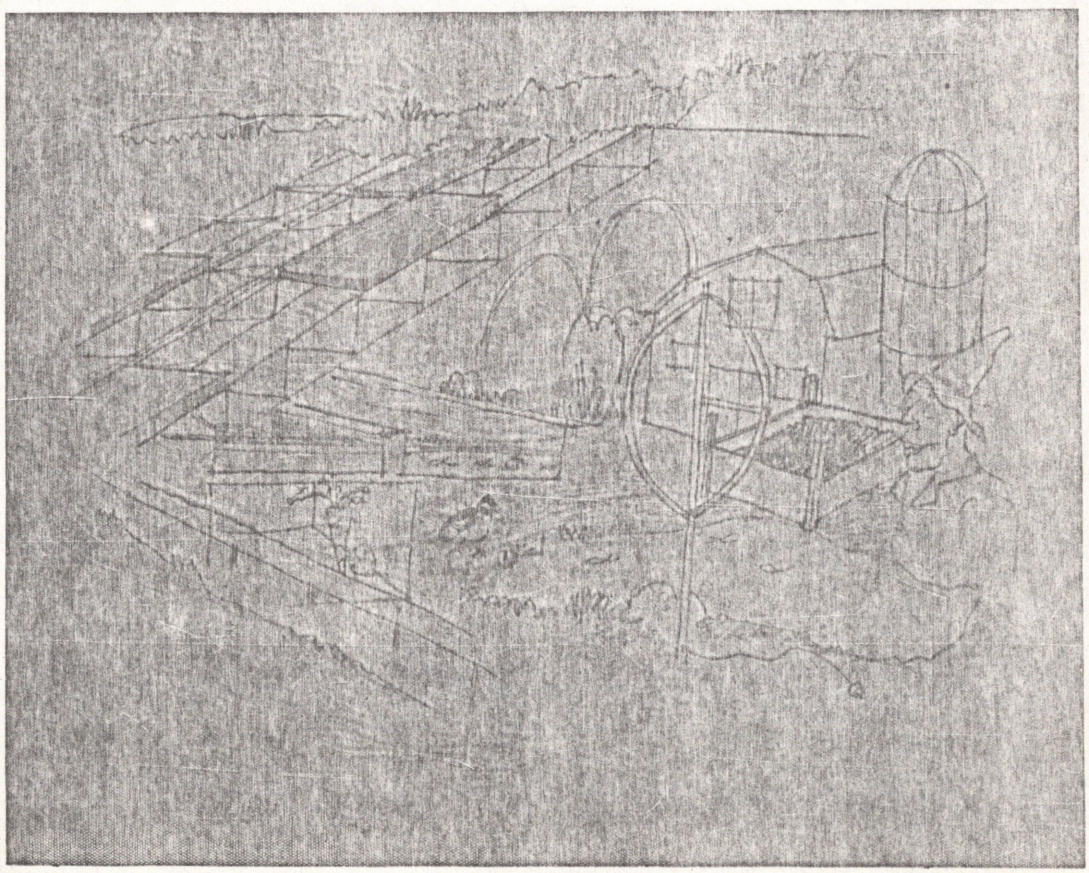
The Agrarian Society will have five main areas Horticulture, agriculture (limited), bird farm, fish hatchery, acquacuture. These areas will have three main concerns, food supplement for institute, research and economics (sale of products to support institute).

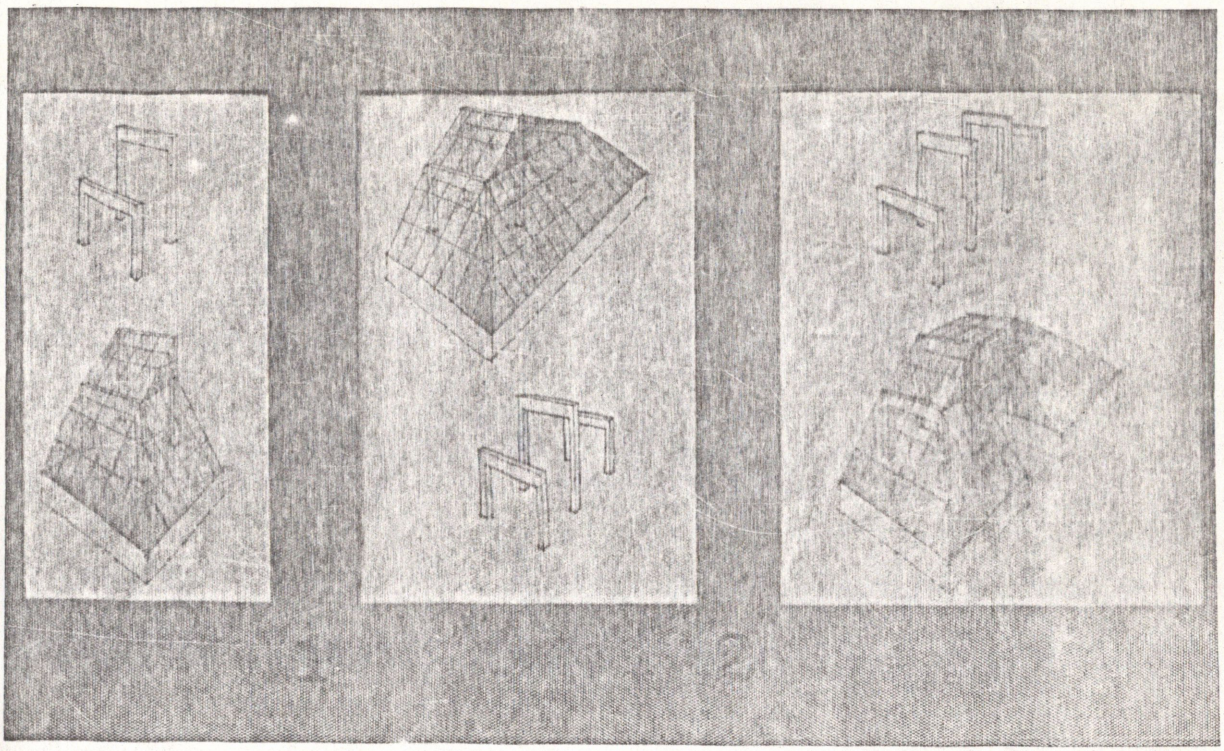
Horticulture - Mainly a research area - "Deals with crops that are intensively cultivated; that is, plants that are of high enough value to warrant a large input of capital, labor and technology per unit area of land." Such sub areas as pomology (fruit crops), olericulture (vegetable crops), floriculture (ornamentals) and landscape horticulture are part of horticulture. The physical needs are, green houses with varied environments, propagation benches, root cellars, separate room research and work areas.

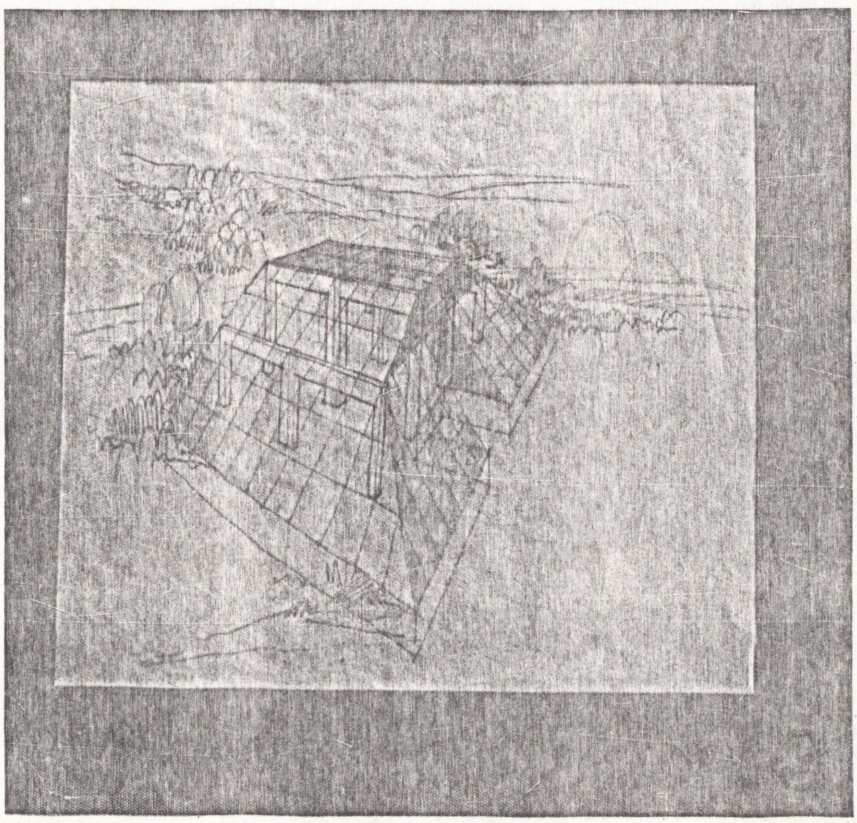
There will also be cold frames, hot beds and artifical ponds for water storage.

Agriculture - (limited) the main purpose of this area is to provide food and economic stability for the community. The crops would be decided upon testing soil at state labs against regional plant material. Physical form will be generated by indigenous farm practices.

Bird Farm - See report by wild life major Fish Hatchery and Acquaculture area provide - further research needed before designing.







16. FINE ARTS

The fine arts building is a combination of shop/office and enclosed exterior areas. This combination provides a concrete floored work area and a grass or gravel, work or display area. The fractured wall surfaces of the flexible frame along with the hard line concrete permanent structure further defines the activity of each area respectively. The terracing of the building gives individuals a chance to experience place. Beyond this experience each individual through his or her creation may further define place.



17. CONCLUSION

18. FOOTNOTES

1. G. Naylor, The Bauhaus
2. Unknown Author
3. Encyclopedia Britanica (Ouroborous)
4. Morgan, Individuality in a Collective World, p 221
5. Calvin Shall, Theories of Personality, p. 83-85
6. Cohen, Man in Adaptation - The Cultural Present, p. 7
7. B. Morgan, p. 230
8. Ernest Hilgrard, Introduction to Psychology, p. 158
9. B. Morgan, p. 97
10. E. Hilgrard, p. 159-160
11. Quote from conversation with Dean
12. B. Morgan, p. 46
13. Calvin Shall, p. 32-34
14. Perry and Perry, The Social Web, p. 105

15. Ibid, p. 26

16. Smithsonian, The New Alchemcy, p. 82

17. C. Churchman, The System Approach, p. 42

18. Cohen, Man in Adaptation - The Cultural Present, p. 15

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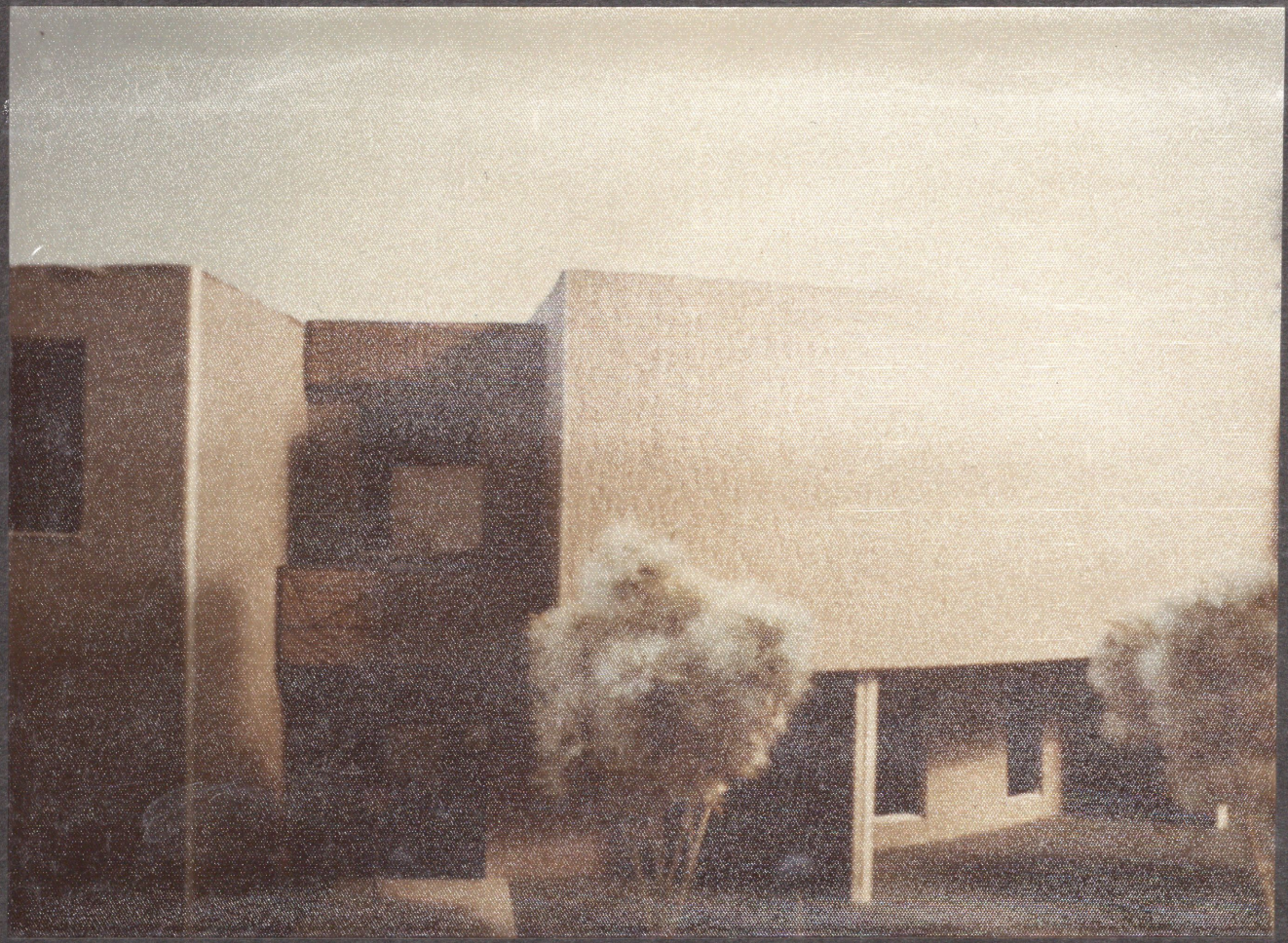
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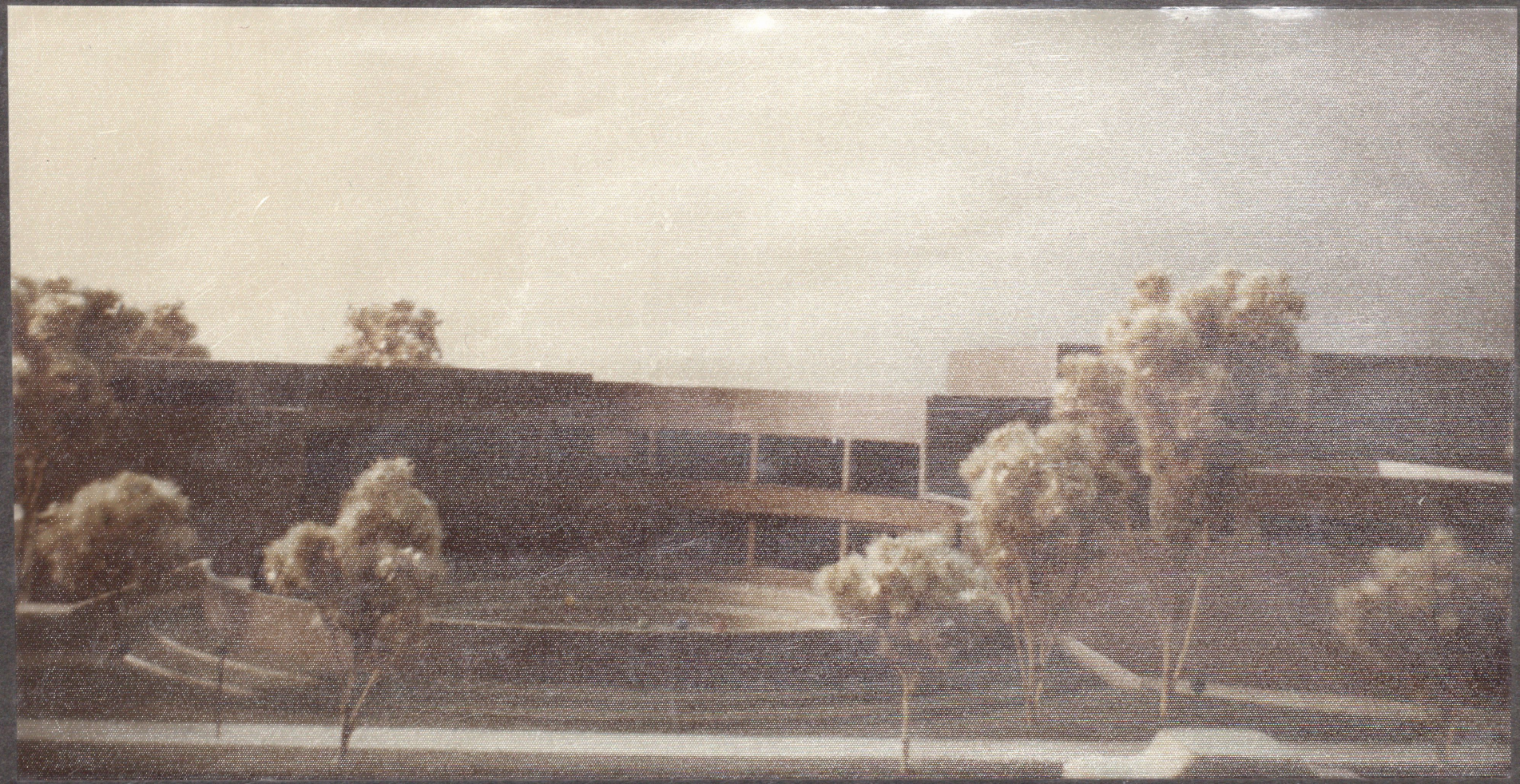
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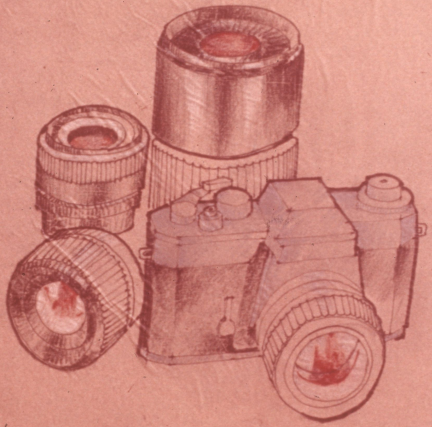
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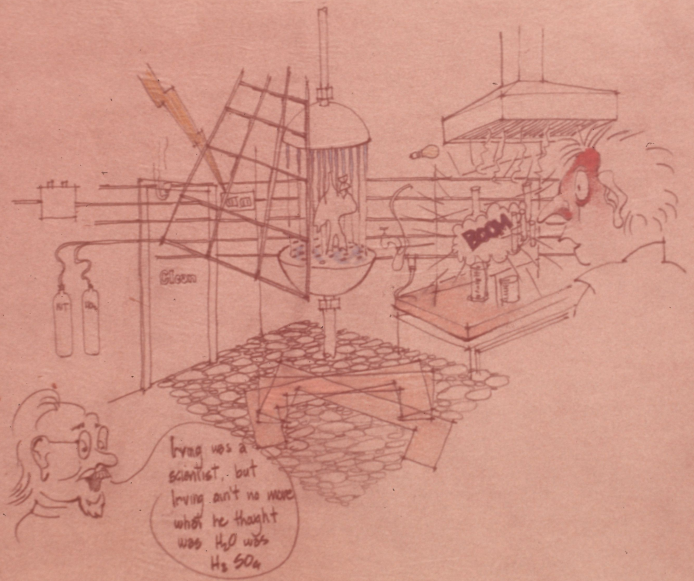




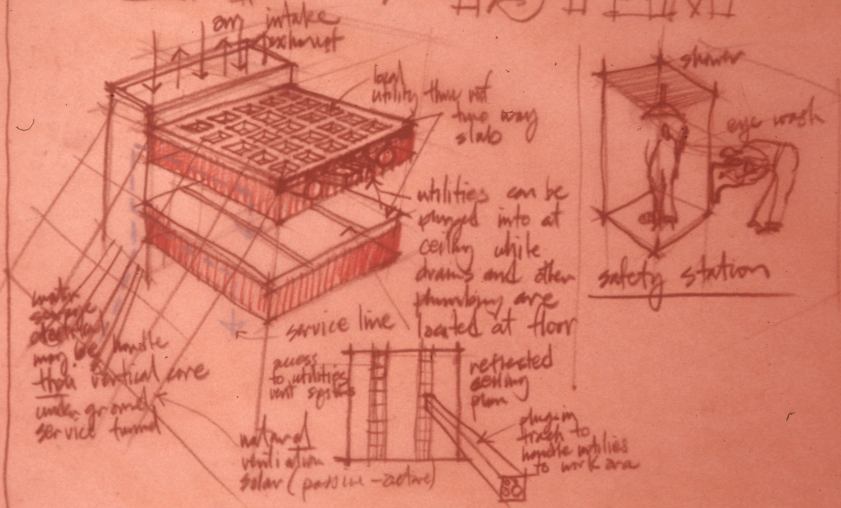
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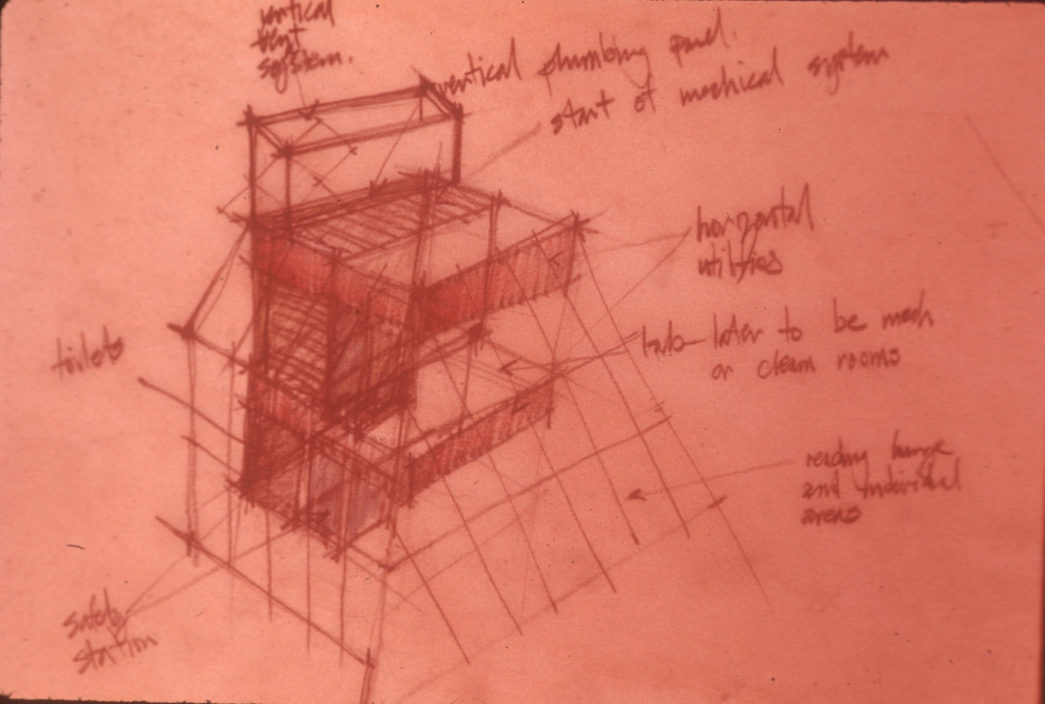
SCIENTIFIC

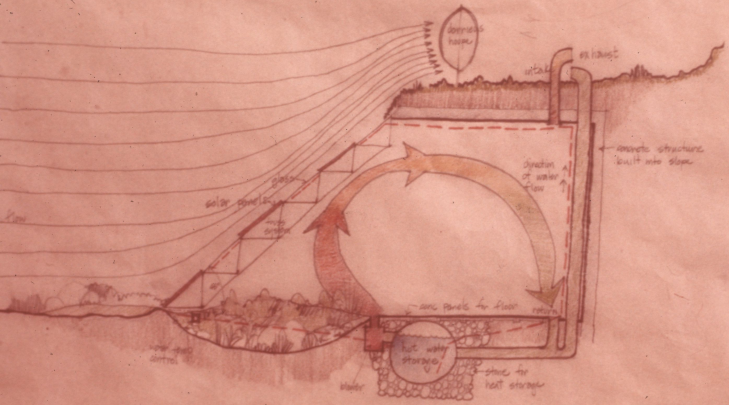
~~designing the modern research lab is not the solution today.~~
the modern research lab ~~is~~ requires a great deal of flexibility because of the continual changing of equipment and experimental techniques. ~~the~~ the mechanical system, which is the life line of the facility, must be readily accessible to all work areas and meet safety codes and common sense. to meet the variety of situations a vertical ~~service~~ and horizontal plenum system will be utilized. this system makes the building an organism and not just an answer to a check list of ~~our changing~~ needs.

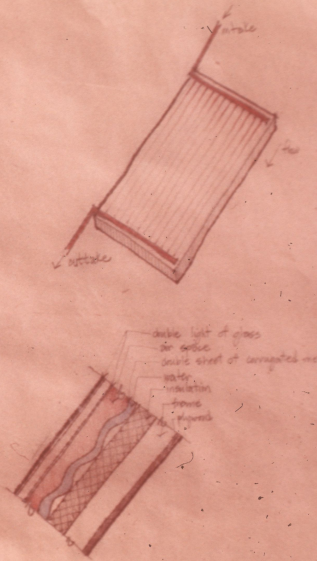

BOOM
Irving was a scientist, but Irving ain't no more what he thought was. H_2O was H_2SO_4

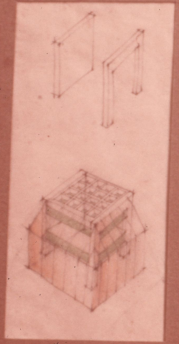
LAB SYSTEM


air intake
exhaust
laser utility thru ref type way slab
utilities can be plugged into at ceiling while drains and other plumbing are located at floor
shower
eye wash
safety station
service line
access to utilities vert system
reflected ceiling plan
natural ventilation solar (passive - active)
plug in trough to handle utilities to work area

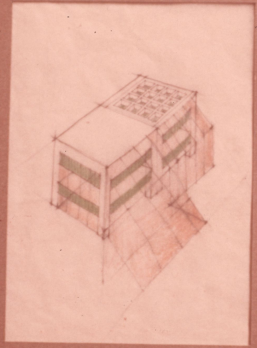

vertical plumbing panel.
start of mechical system
horizontal utilities
toilets
toilets later to be mech or clean rooms
reading lounge and individual areas
safety station


concrete structure built into slope
direction of water flow
solar panels to floor
water
HEATING DIAGRAM

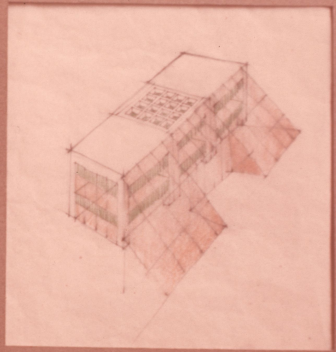

outside
inside
outside
water
insulation
SOLAR COLLECTOR



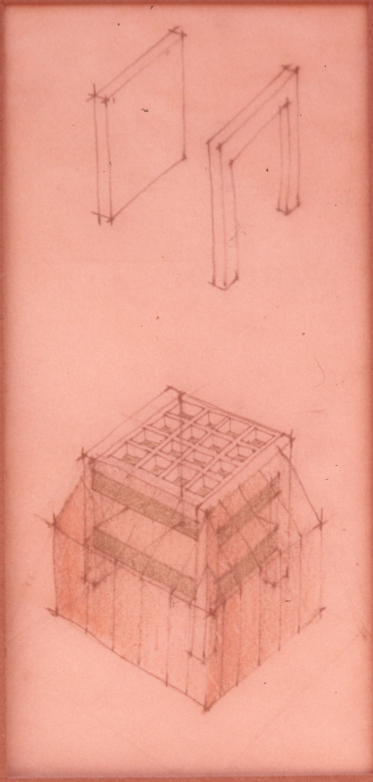
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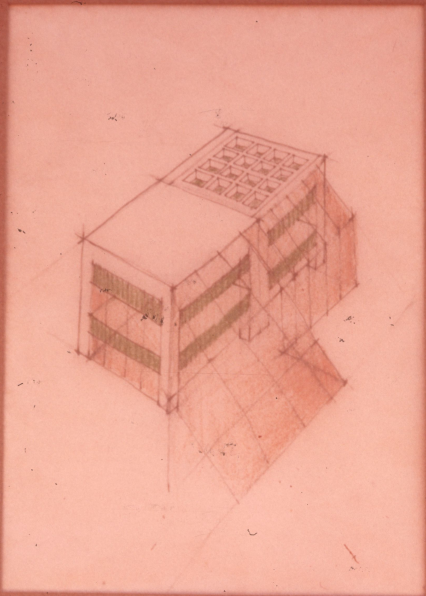
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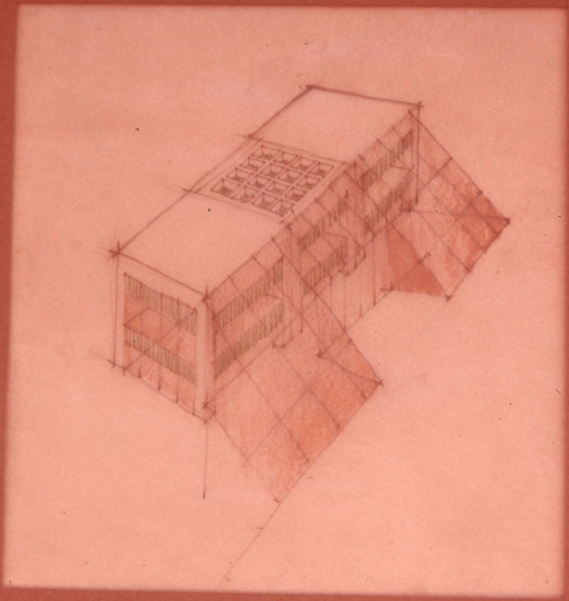


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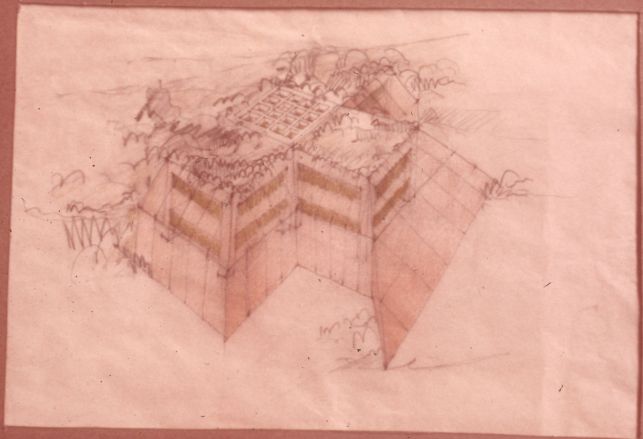


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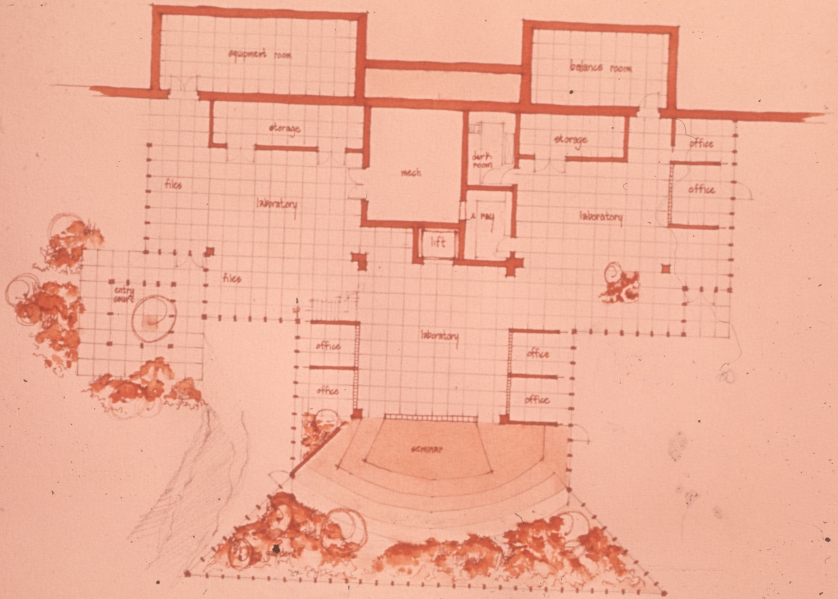


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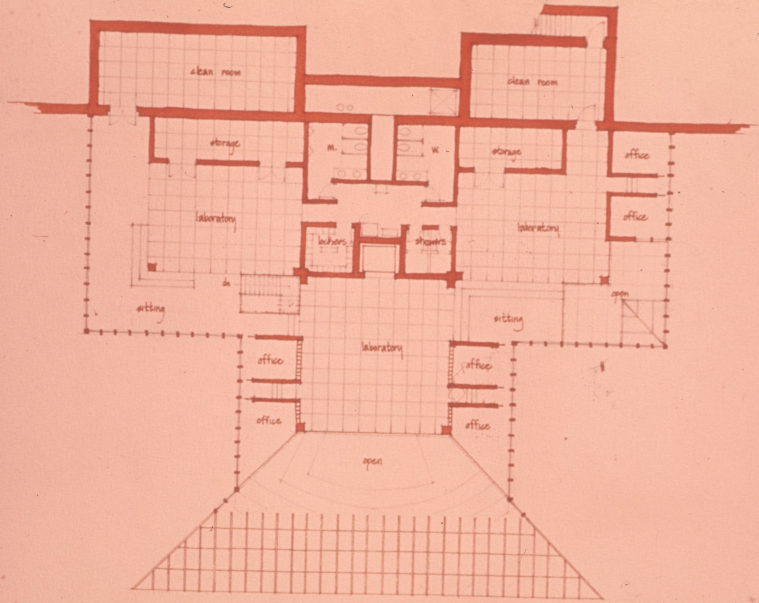


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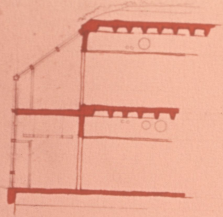
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FIRST FLOOR PLAN

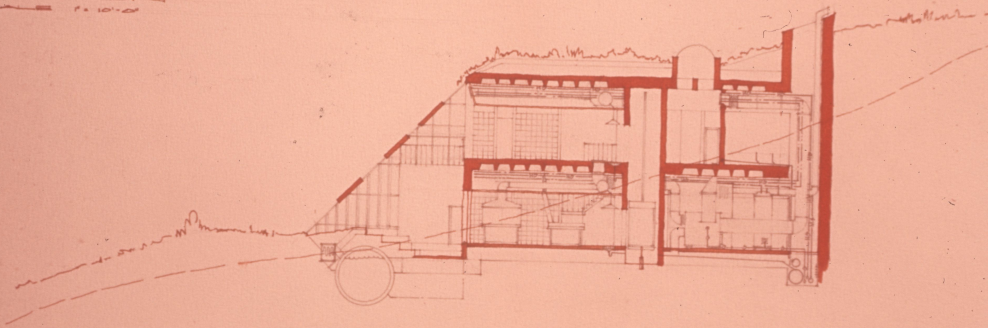


SECOND FLOOR PLAN



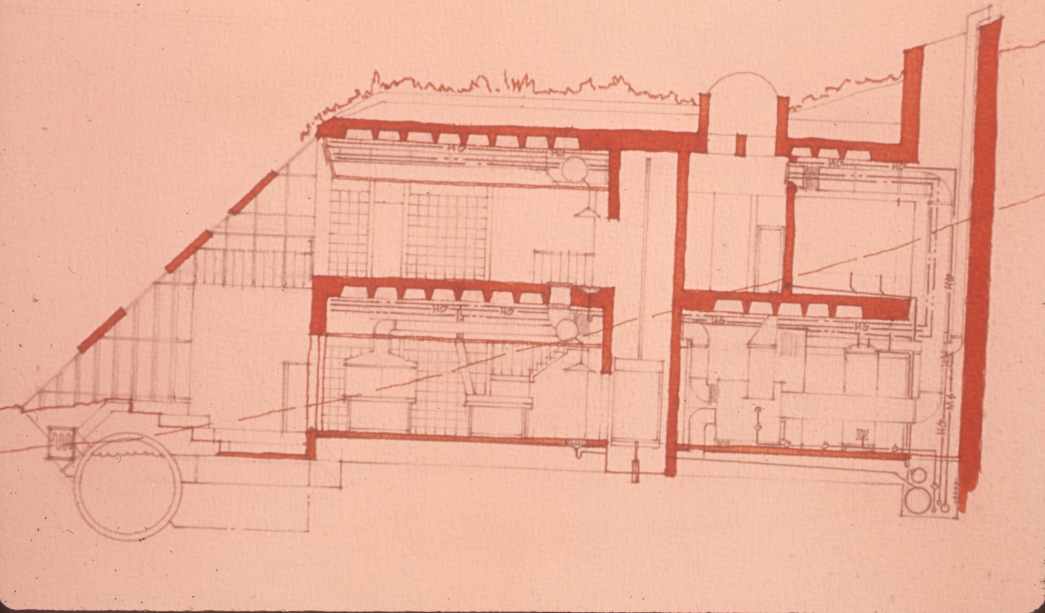
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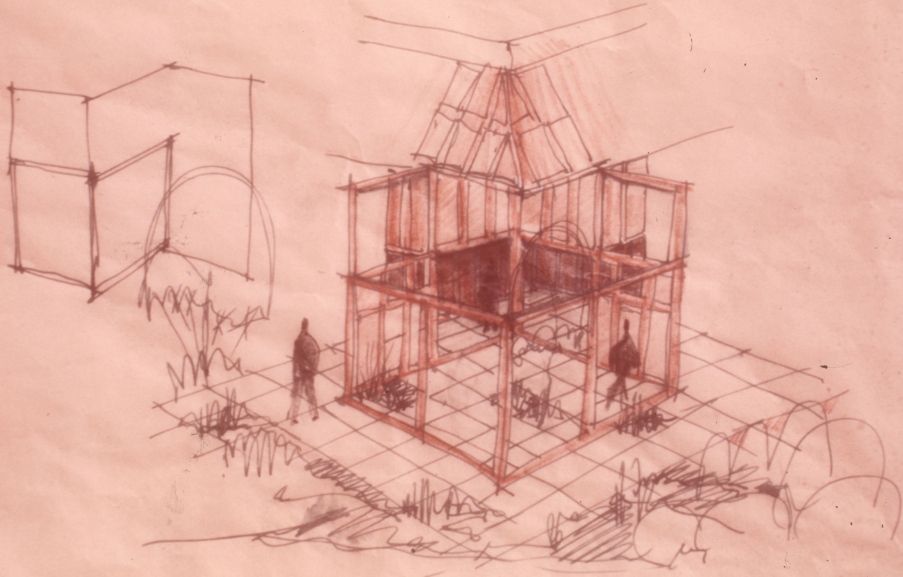
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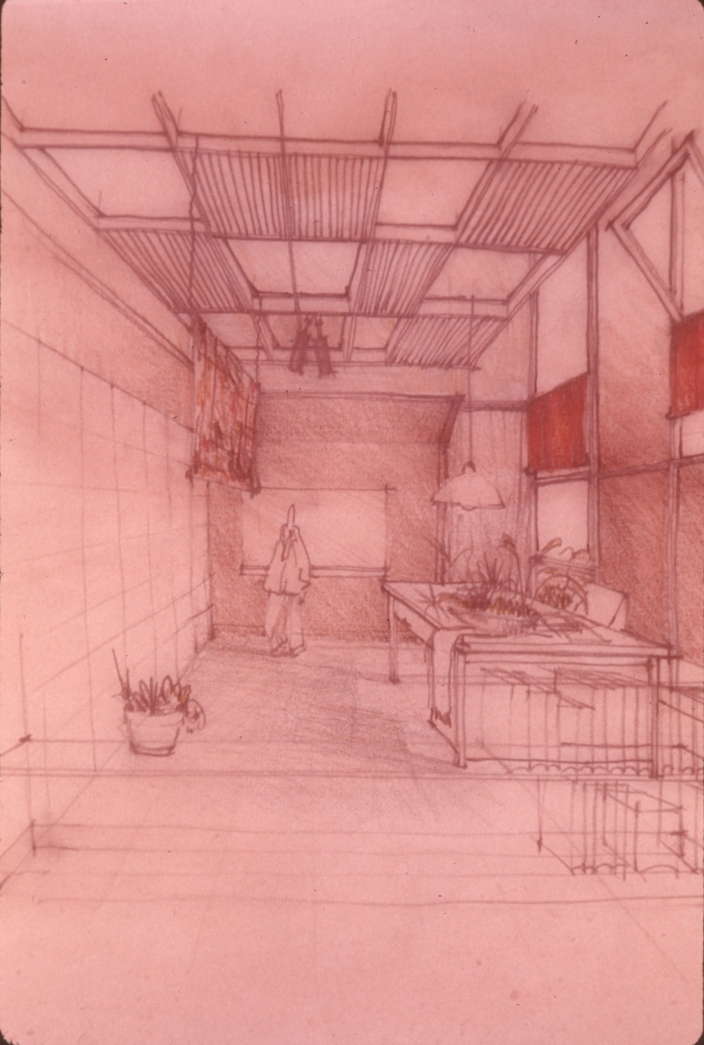


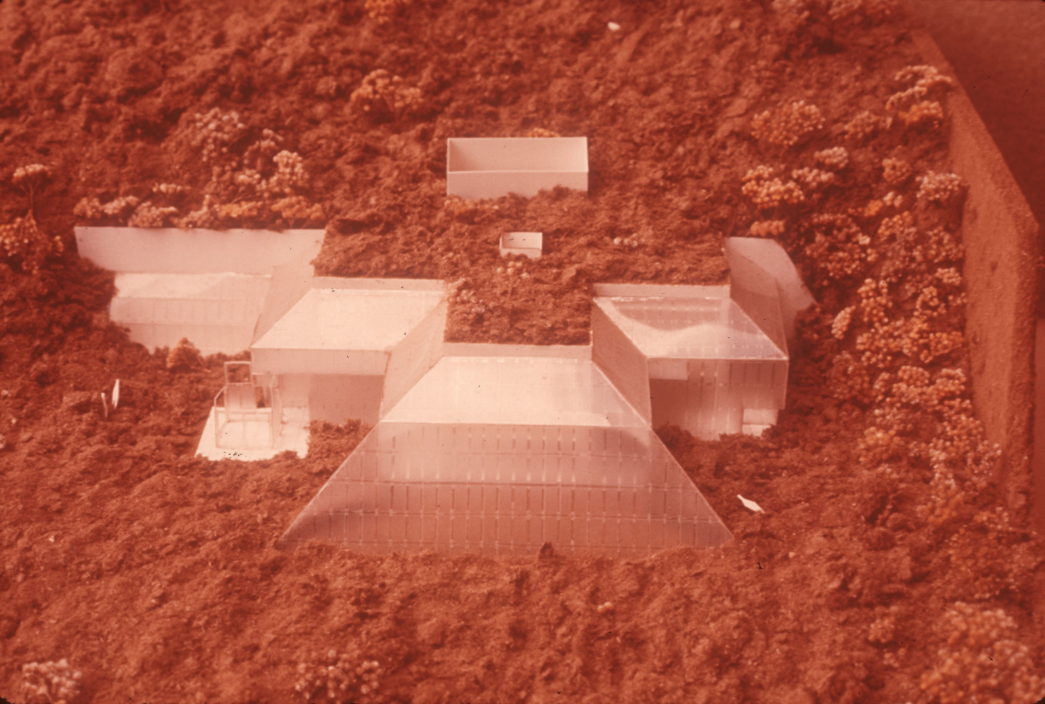
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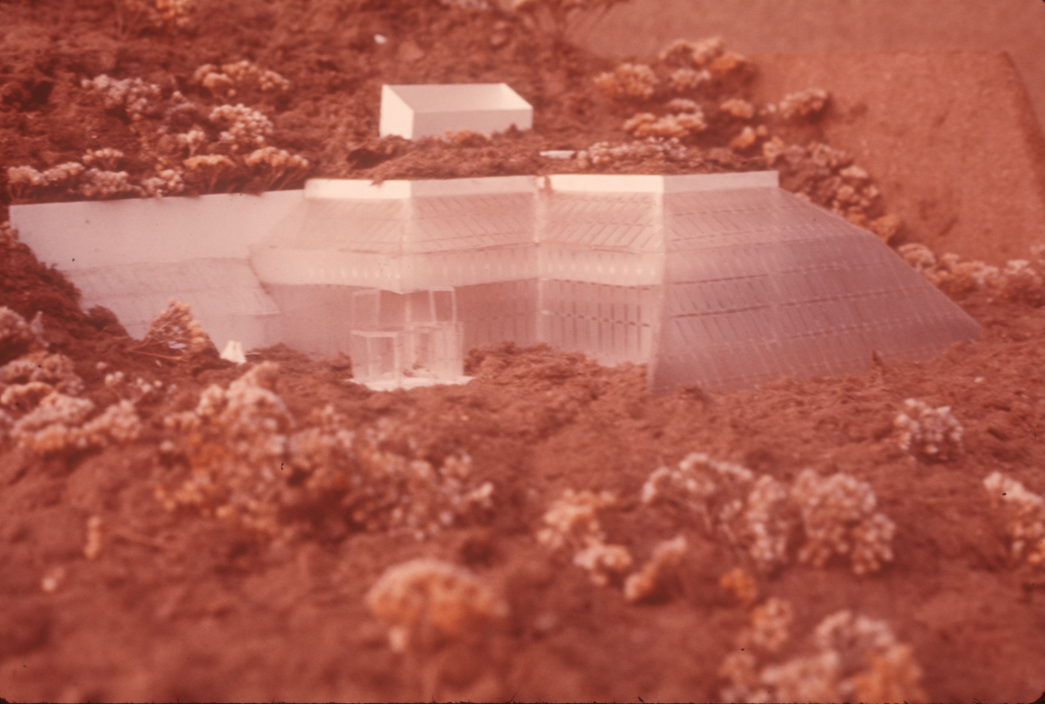
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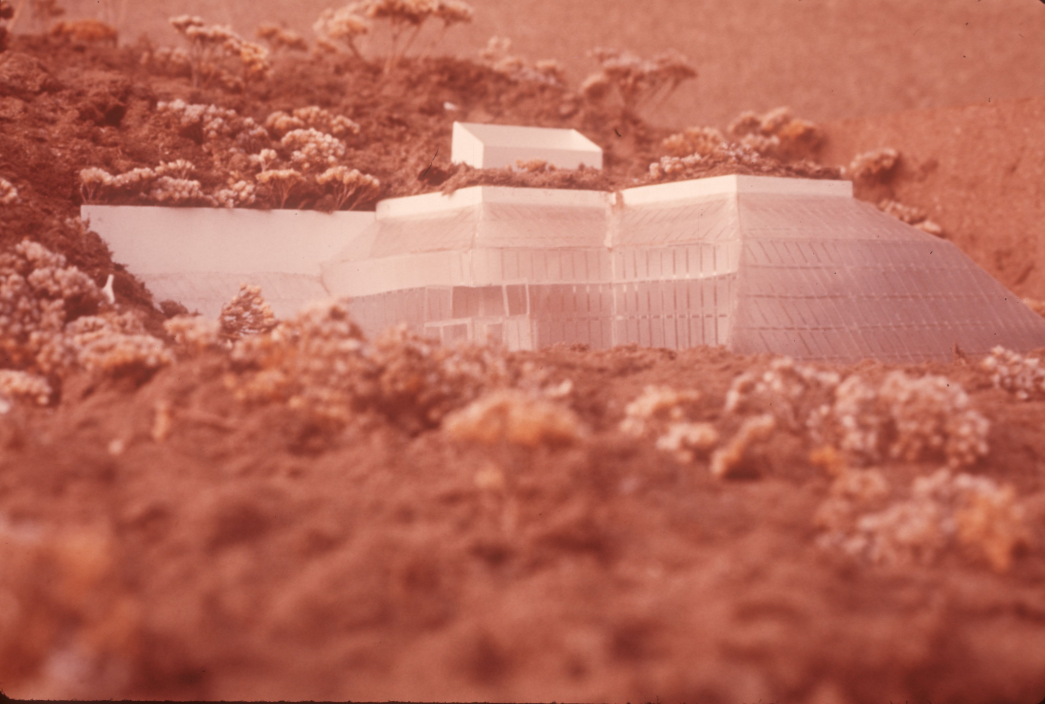




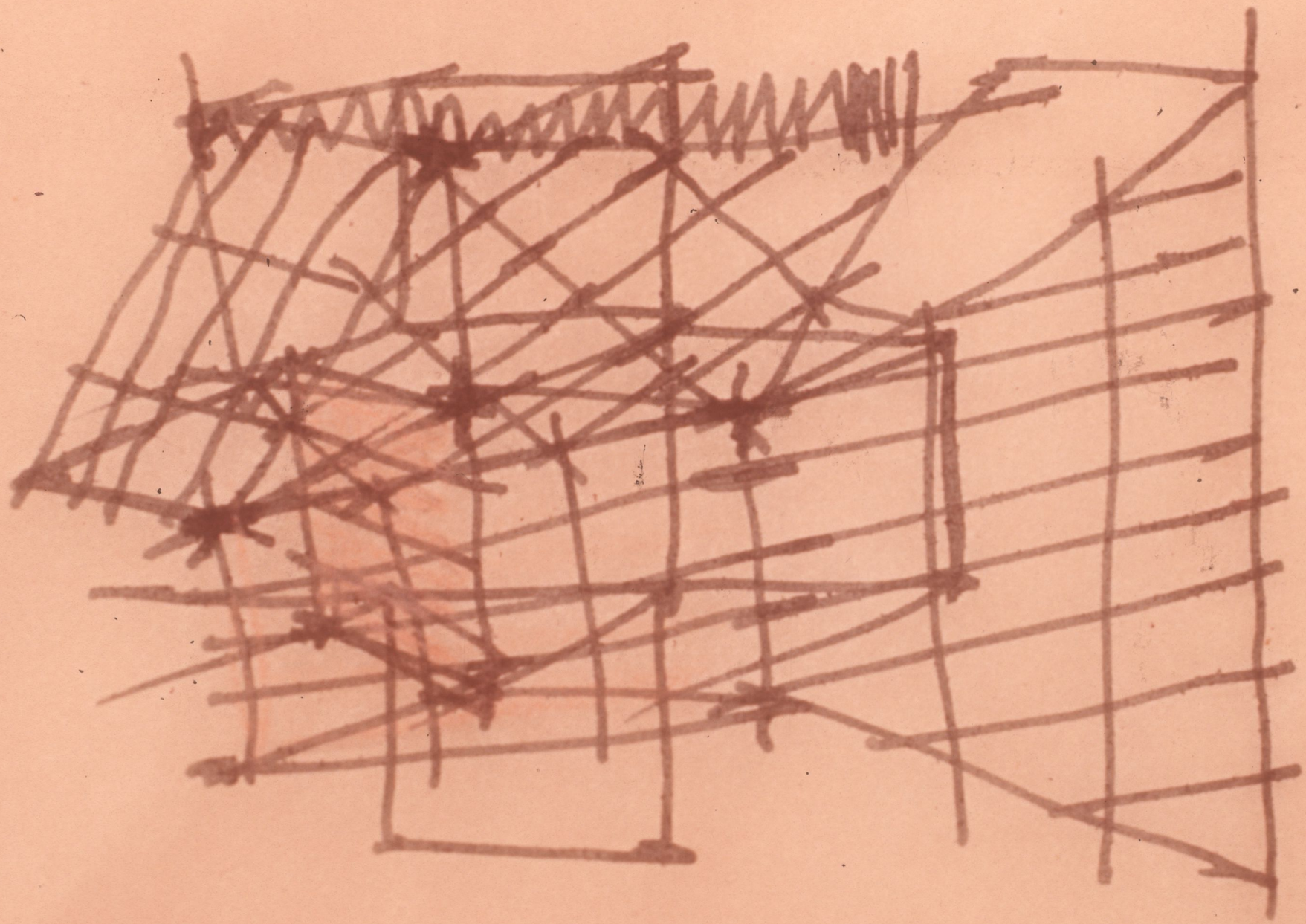


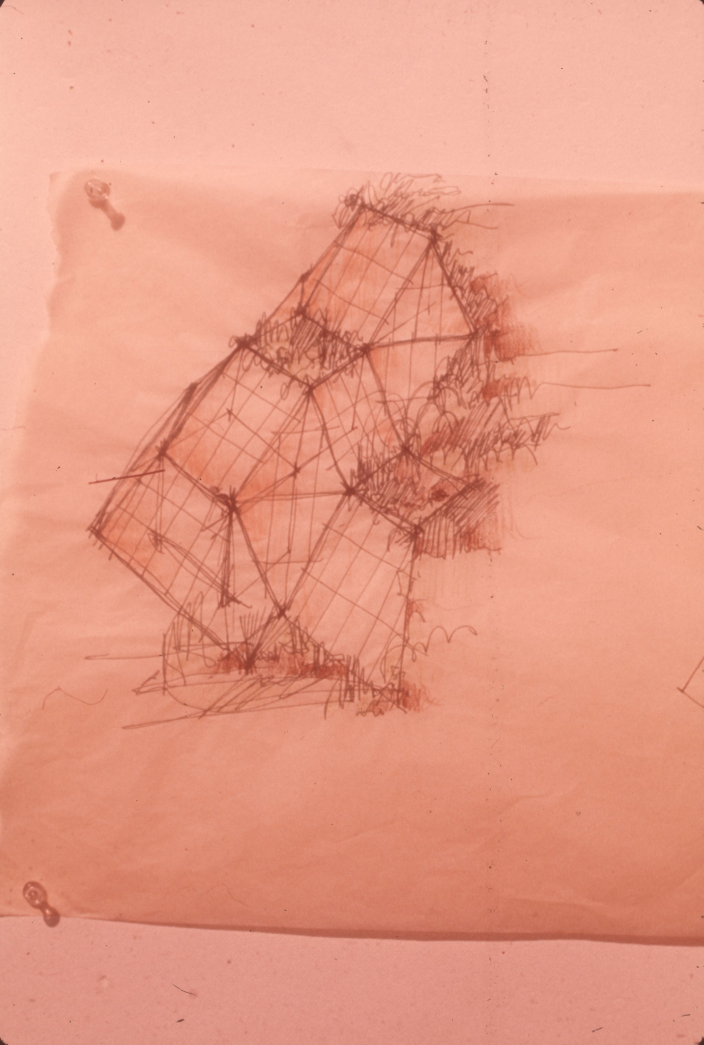




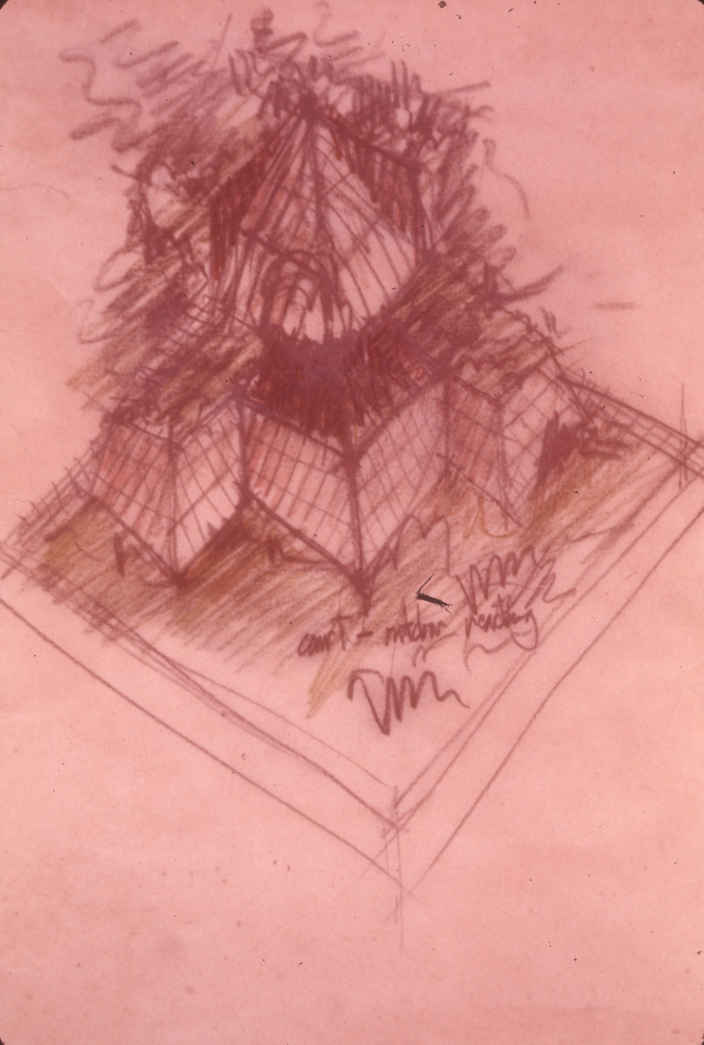


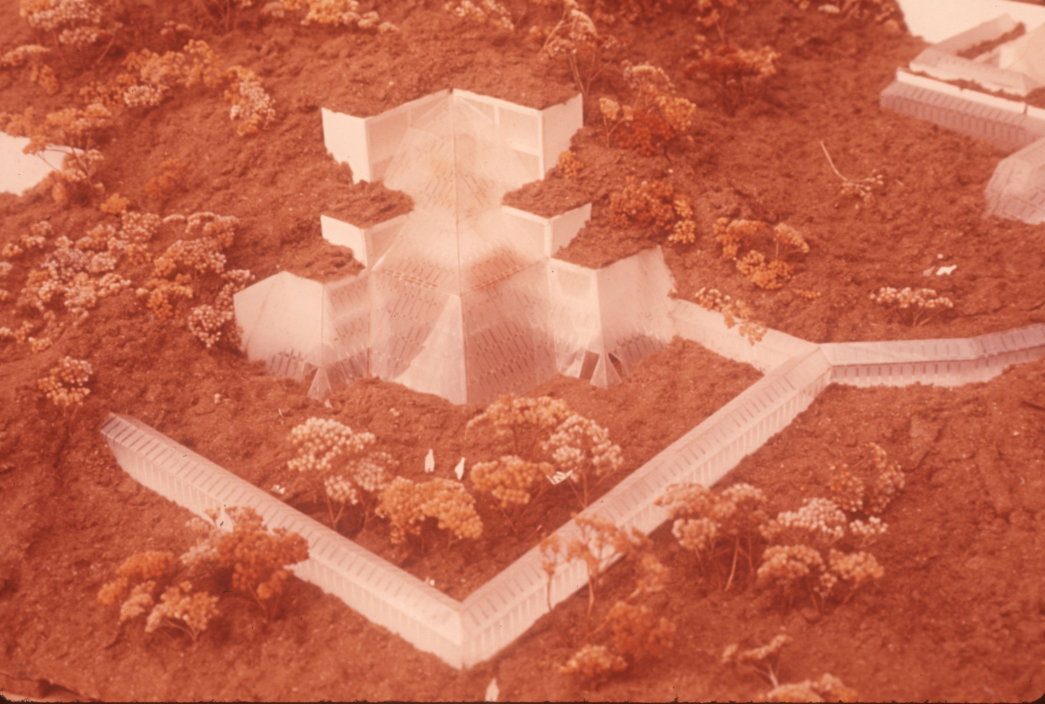




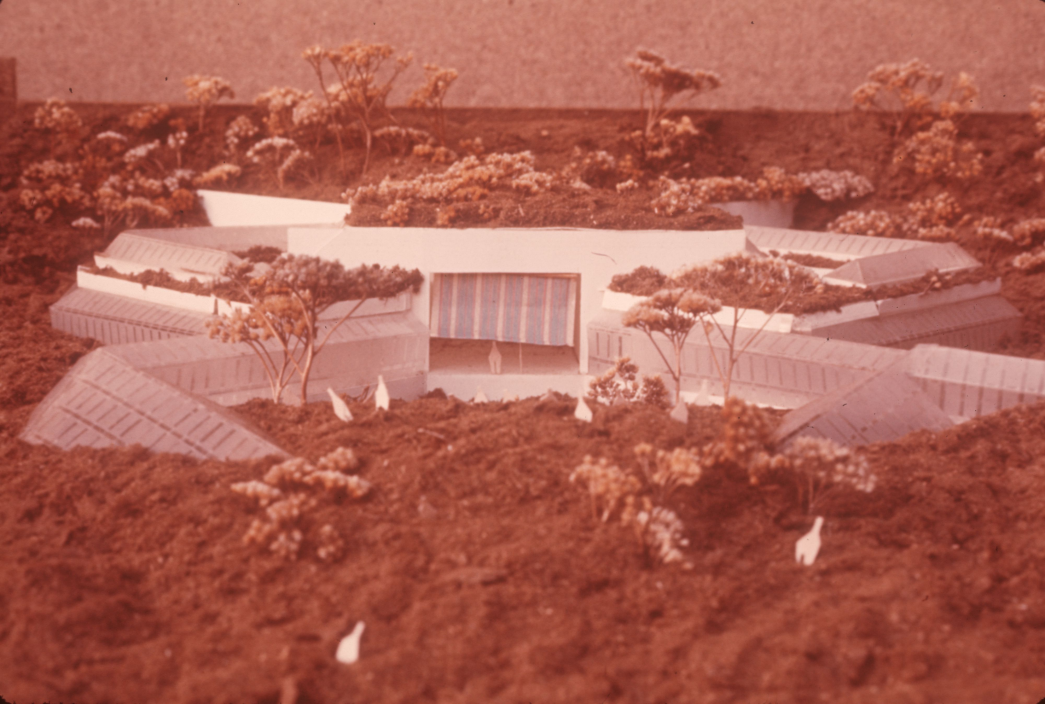


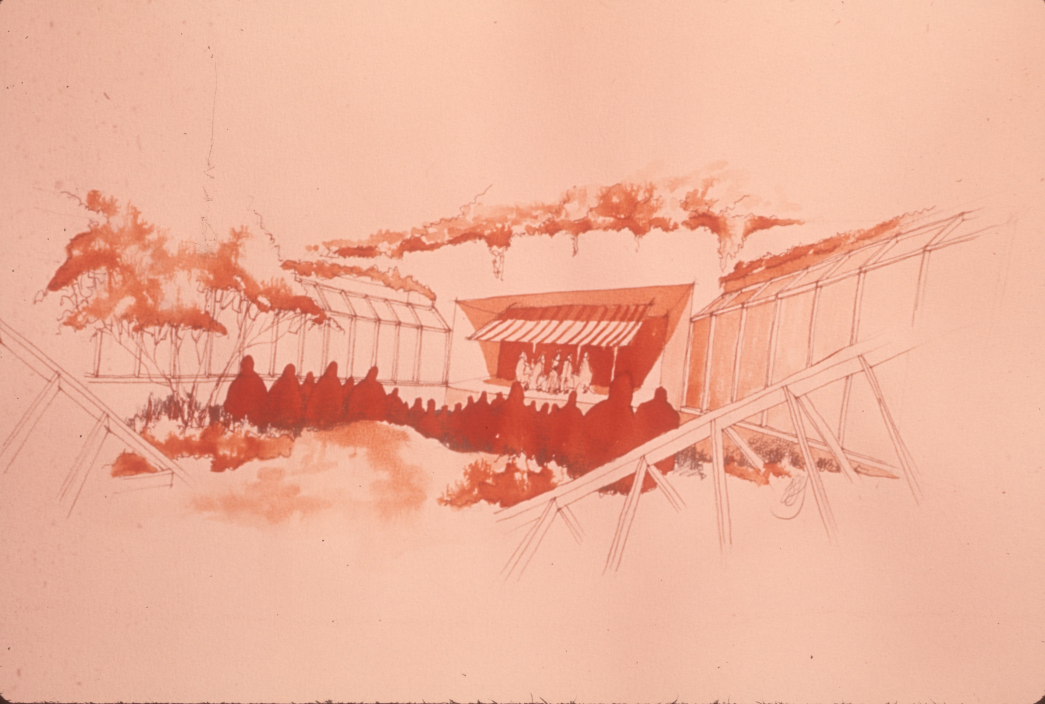


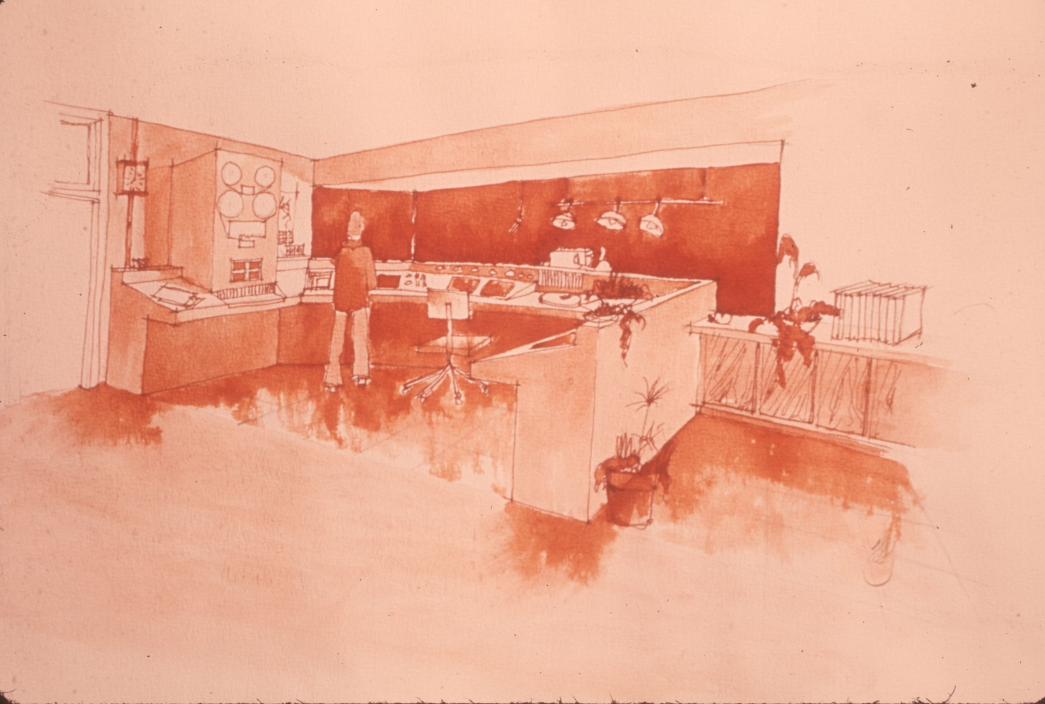

court – modern reading

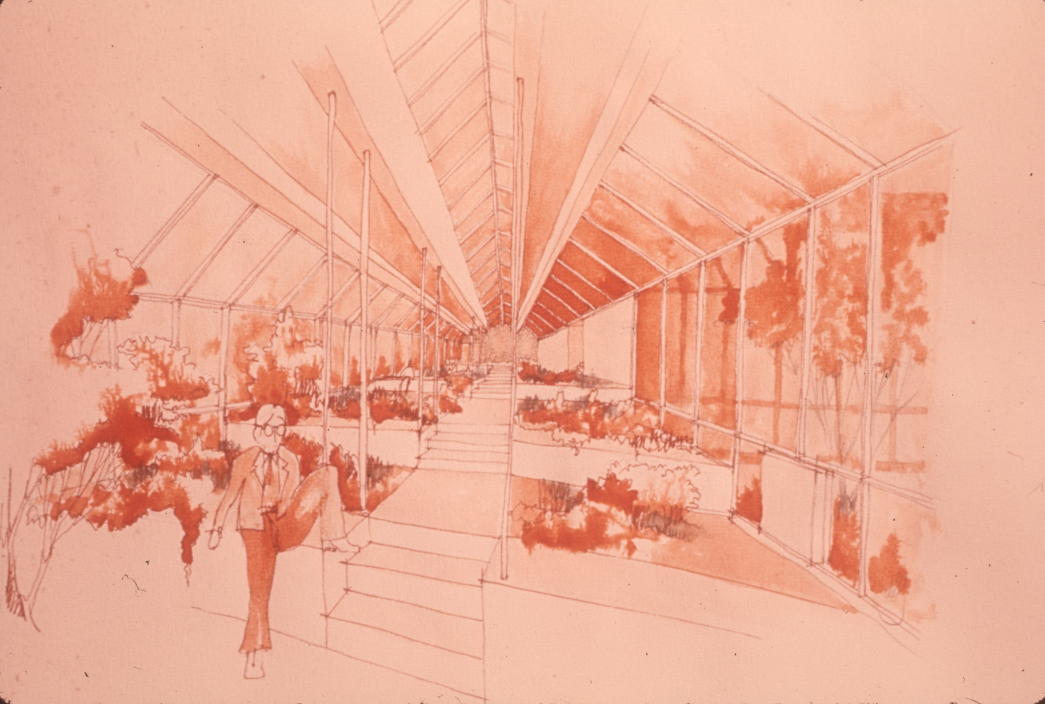


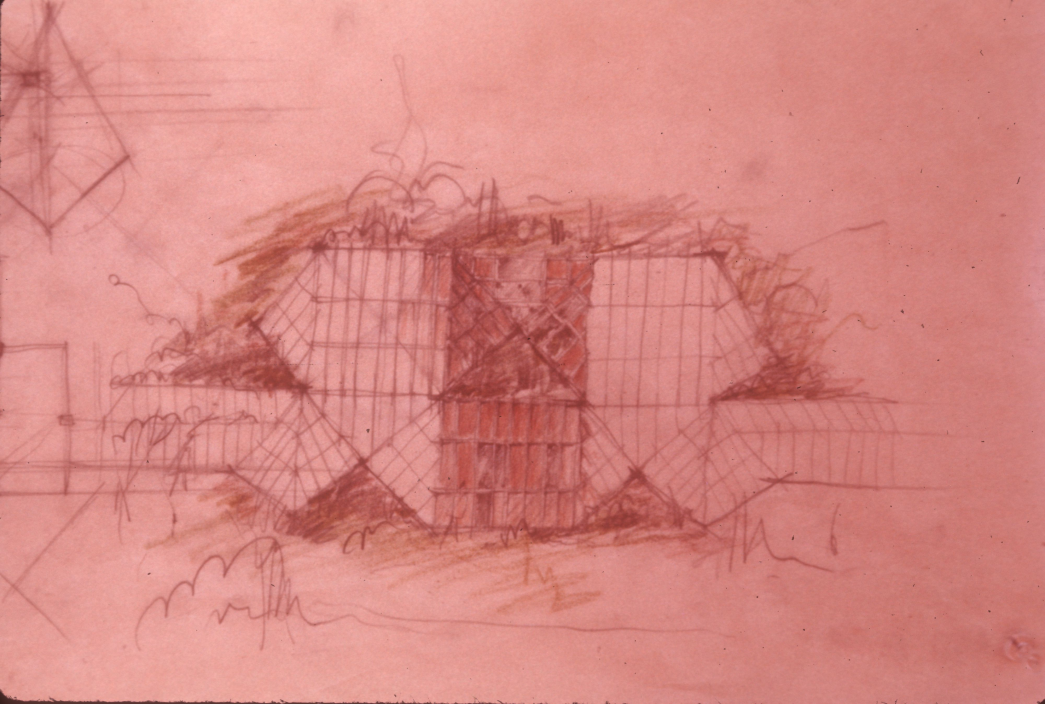














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