

TOWARDS A LANGUAGE OF ARCHITECTURE

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MASTER OF ARCHITECTURE

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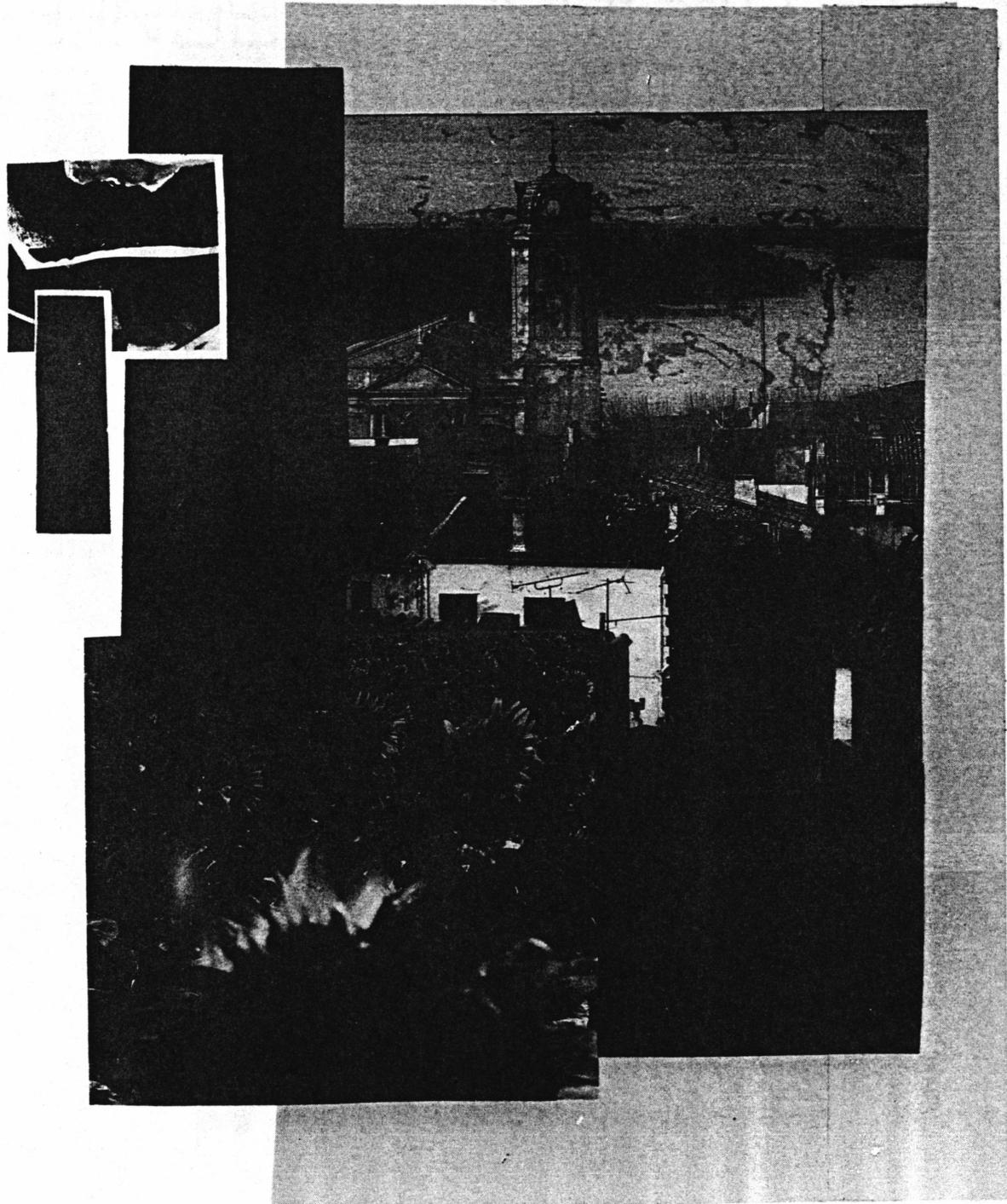
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(ABSTRACT)

Architecture is a language in that, through order, it gives expression to the meaning of what it is to be human (to live on the earth as man). As a language, it provides a way to see, to understand what is seen, and to present what is seen and understood.



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Sources
Inspirations
Dedications
Thanks

_____, who helped me to open my eyes.

Olivio Ferrari, Hans Rott, Eugene Egger,
J.S. Bach, Alberto Giacometti, Le Corbusier (for
Ronchamp), Robert Maillart, Pierre Matisse,
Michelangelo (for David), Henry Moore (for King
and Queen, and Knife-Edge), Ezra Pound, David
Smith, Paul Valéry, Vincent Van Gogh (for Starry
Night).

"But for me reality is just as virginal and
unknown as the first time somebody tried to
represent it. That means for me, all the images
that have ever been made of it were incomplete...I
see reality, the external world, be it a head or
tree, differently than the representations of it that
have been painted up to now. Partially yes, but I
see something else that's not there in the
sculptures and paintings of the past. And that
from the day I began to see."

Alberto Giacometti

"My aim is to borrow from the (visible) world nothing but forces — not forms, but the means of making forms.

Not history. Not decor, but the feeling of matter itself, rock, air, water, vegetable matter — and their elementary properties.

And acts and phases — not persons and their memory."

Paul Valéry
Monsieur Teste

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Language

When we first think of language, it is usually in relation to speaking. In this context, we use it every day to communicate with people. We talk about such things as politics or cultural and social events. We speak in order to express ourselves about things that concern us in our lives. In these cases, we use language as a tool which enables us to function in a social world. However, language can do much more.

As we start to look around us, we see that language is not restricted to phonetic expression but that it can exist in many other forms. We realize that for each different way there is to see the world, there is also a unique language. "Every language is also a special way of looking at the world and interpreting experience.

Concealed in the structure of each different language are a whole set of unconscious assumptions about the world and life in it....One sees and hears what the grammatical system of one's language has made one sensitive to, has trained one to look for in experience." (Kluckhohn, p. 159)

Every form of human activity has a different means of comprehension and expression: How we view the world through the arts is different than if we view it through the sciences. For

instance, a mathematician looks at the world in terms of numbers and formulas, while a painter sees it in terms of painting - composition, values, and colors. The architect, likewise, uses a language that allows him to understand the world in a unique way through built form. These different ways of looking at the world lead to the first part of a definition of any language: A language is a way to see. If we cannot see, we cannot speak.

No two people see the world in exactly the same way. Each has his own conception of reality. An individual's reality is a result of the particular experiences he has encountered. What his childhood was like, where he lives, what he does, are all variables that shape him and determine his outlook. The language he uses, to some extent, tries to assimilate these differences and provide a common ground in which people can meet. Without a language, we would not have the shared understanding needed to group ourselves with others in order to define ourselves as human beings.

"Man is inevitably a member of a group, a member of a society, and the latter cannot exist without a common form of speech, a common affirmation of values. No one of us is able to develop a field of meaning entirely on his own, yet we experience a need for a world full of meaning. We cannot escape from being in the world of meaning pertaining to the society in which we belong." (Kwant, p. 123)

The ability to understand and find meaning in our life experiences is the

second component of a definition of language.

As individuals, we grow to understand ourselves and our world. This understanding, which comes through language, is then made manifest through it. At this point, it must be understood that the individual is not the direct source of the meaning he comes to understand, but that meaning exists apart from him and only slowly does he become conscious of it. Meaning is a result of man collectively trying to understand his existence. He seeks to define who, what, why, and how he is. As the individual becomes aware of this, he can choose to contribute to this changing definition. This contribution must be set forth through language: Language is a presentation of ideas.

Although presentation may be thought of as the third part of a definition of language, it is not simply the end result of a linear process which involves seeing and understanding. While it is an expression of what is discovered in these activities, it is also an integral part of them: One sees and understands through presentation. By putting something into a form that others can understand, by formulating an idea, we come to a greater understanding within ourselves. This is, in fact, the only way we can actually have a thought, because while we may understand something for what it is, we cannot express it except through abstraction into language. Every language reveals what it needs to reveal in a way that is unique to that language.

"None of them (languages) can develop its appropriate and peculiar type of comprehension and configuration without, as it

were, creating a definite sensuous substratum for itself. This substratum is so essential that it sometimes seems to constitute the entire content, the true 'meaning' of these forms. Language *seems* fully definable as a system of phonetic symbols — the worlds of art and myth *seem* to consist entirely in the particular, sensuously tangible forms that they set before us...The content of the spirit is disclosed only in manifestations; the ideal form is known only by and in the aggregate of the sensible signs which it uses for its expression." (Cassirer, p. 86)

Through presentation, the way in which we express ideas (such as speech, painting or building), we become aware of meaning, so there is a tendency to think that this is all language is. I have tried to show, however, that language is more than this, that language, in the service of man, helps to create meaning. It is an attitude or way of thinking that allows us to comprehend reality in a certain way. Language, in whatever form, is man's search for an understanding of himself. It allows man to see, understand, and present this search by making known the order that signifies the meaning of his life.

Towards a Language of Architecture

Order makes meaning known through language. This is necessary because meaning does not have a particular form which is ideally suited to expressing it, but instead must depend on the means of each language to make it visible. Architecture relies on ideas and concepts that are not found in any other language. It shapes the space that surrounds us and encloses us. We can move through a piece of architecture and experience the passage of time and the movement of light in a way not possible through any other language. As with all languages, however, the language of architecture demands that the user possess a certain ability to see.

To be able to see the world requires being able to find the true character or essence of a thing. It involves being able to look without bias or preconception. Everything in the world has a life of its own that exists apart from any other thing. Being able to recognize this inner life is what seeing is about. In architecture, we must be able to see a brick as a brick or a wall as a wall. We must recognize each and know it possesses certain qualities that

transcend the actual object itself.

"The Chinese artist may paint a view of Mount Lu, but the actual shape of Mount Lu is of little interest to him in itself; the mountain is significant only if, in contemplating it, wandering through it, painting it, he is made aware of those things that for him make Mount Lu, for the moment the very embodiment of mountainness." (Michael Sullivan, p. 156)

In this example about the language of painting, a way of seeing is talked about that reveals the search for the essence of the mountain, the search for its "mountainness." This is the same capacity to see that the architect must possess. That which is seen, however, at this first stage of seeing, remains incorporeal. It is not yet an idea. In order to become something, to gain meaning, the mind must be engaged actively to understand that thing.

Understanding is the conscious formulation of an idea. Man gives meaning through language by ordering what he sees around him into a form capable of being comprehended by the thinking mind (as opposed to the less-

structured intuitive mind). An idea that has been formulated can then be presented - put into the form of a building in architecture. This is the abstraction. What we think of as the idea is not the essence of the thing itself but only our conception of the essence put into a form we can better understand and share with others. At the stage of seeing, our conception of the world is personal, but by transforming what is seen through language, it acquires a meaning that goes beyond the individual. In this way the individual contributes to an overall understanding of what the world means to man.

As an example of this, think of a tree as a tree. It has an intrinsic reality as a tree but no real meaning where man is concerned. However, through the language of architecture, we can understand that tree as a source of wood that can be used for building. Understanding the tree as wood, we give it a purpose, we can see how to use it - how to cut it, shape it, connect it with other materials. With this new understanding, we can then seek a suitable form of expression for other

kinds of meanings that concern us.

In his philosophy of language, Heidegger suggests that the word is the basic unit of meaning. By tracing the roots of words, we can come closer to what they actually signify. A word puts something that is intrinsically inexpressible into a physical form which then acts as a sign of reality. In the same way, a building can be a sign for different meanings that pertain to an understanding of the world. It can present natural and manmade materials for what they are in themselves and what they are to man. It can reveal the relationship of things, of objects to themselves, and of man to his environment. Finally, a building can make manifest an understanding of how man thinks of himself. It can reveal man to himself by presenting how he lives in this world, or in Heidegger's words, "on the earth, under the sky, before the divinities." (Poetry, Language, Thought, p. 150) Architecture is a proof of man's existence. By understanding his world, he is able to order it, to give it meaning.

This interaction of the individual and society, of part and whole, is also to be found in other aspects of man's world of meaning. In his relationship to his surroundings, he is a solitary creature moving across the earth. He is a part of the world, and, through his work, he is able to play a role in shaping it. Architecture makes this relationship apparent in built form.

Through building, man marks the boundaries of his domain; this is where he makes his life, between the earth and the sky. This man-made place is a part of both earth and sky, yet it also shapes them. The boundaries of both are altered when man builds. How a building circumscribes these edges becomes crucial.

How man builds, how a building is formed through the manipulation of physical elements to shape space, is also a result of this relationship of part and whole. Masses and volumes are ordered in such a way that they become a concrete manifestation of a larger idea of how things go together. This understanding can be used in every aspect of the building down to the smallest detail; it is an understanding inherent in the language. Frank Lloyd Wright talks about this basic understanding as grammar:

"Every house worth considering as a work of art must have a grammar of its own. 'Grammar' in this sense, means the same thing in any construction - whether it be of words or of stone or of wood. It is the shape-relationship between the various

elements that enter into the construction of a thing. The grammar of the house is its manifest articulation of all its parts. This will be the 'speech' it uses. To be achieved, construction must be grammatical....When the chosen grammar is finally adopted (you go almost indefinitely with it into everything you do) walls, ceilings, furniture, etc., become inspired by it. Everything has a related articulation to the whole and all belongs together...because all are speaking the same language." (The Natural House, p. 296)

This understanding of language is made visible in all ways of giving meaning to a work of architecture. I will present five orders and talk about each separately; this is a simplification necessary to present each idea clearly. In use, each has an influence over the other and one order does not exist completely by itself.

The first order is the order of man. It is the way a building exists in the world as a manifestation of how man lives. The second order is that of form. This order makes it possible to make a building; it determines how space is shaped into a coherent whole. The third order is of the site; it finds meaning in that which is given. This includes the physical site as well as local and world history (context and type). The fourth order is the order of proportion. This is an intellectual order that is a result of man's search for simple mathematical and geometrical

relationships. The final order is the order of assembly. This is how the building physically comes together through connections between materials.

All of these orders are based on the same premise set forth by the language I use. A building can be made without using all of these orders but, when used together, they create a richer and more meaningful whole. In presenting these orders, I will use as examples two buildings designed using the same language. In this way I hope to show that, although the rules are the same, the language can generate many different solutions.

The first project was designed for a specific site in Virginia. It is located on a hillside overlooking a valley in the Appalachian Mountains. Its program is derived from the existing farms in the area which consist of a group of farm buildings and a house which is set apart from them. In this project, for a residential house, the farm buildings become a garage, greenhouse, and workshop. The house is an example of the type found in the area in both size and organization.

The second project is for an urban townhouse. It is a result of a dense urban fabric which forces the building to grow vertically. The program evolved into a simple one-bedroom dwelling with garage, living area, kitchen, and bath. While no specific site was given, certain dimensions were assumed.

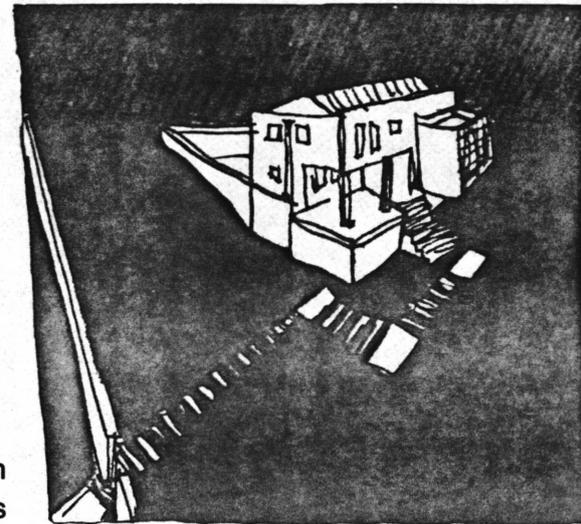
Order of Man

The order of man is the meaning of how man lives set forth through architecture. Man lives in a certain way on the earth as an individual and as a member of a group. Each way of living has many different aspects that can be embodied in architecture.

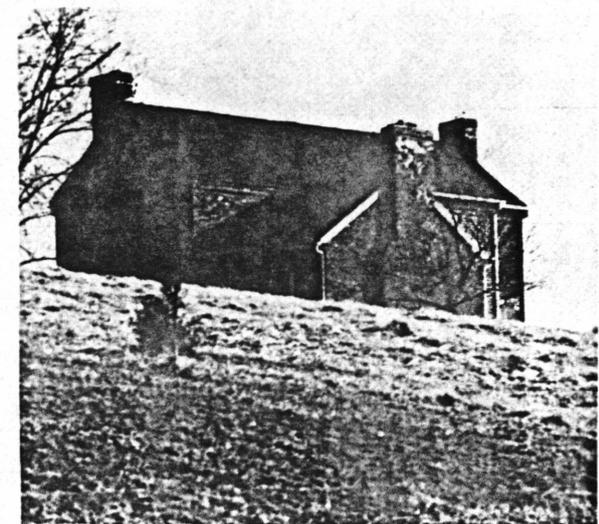
As an individual, man lives alone with himself in the world. He remains apart from all others and he is the center of his universe. The rural project is based on this understanding of man both as an individual and of the species of man. Like other animals, when man first built, he built to shield himself from the weather and protect himself from other animals. However, by making tools to manipulate his environment, he set himself apart from the rest of the world. He could now do what his hands alone were incapable of. He was able to change the earth and alter the skyline on a scale inconceivable to any other animal. He separated himself from other animals and started to think of himself as a human being. The first project tries to show this separateness. The house is first thought of as a solid mass, an object set apart from other buildings and from nature. It is a center, strong and solitary, defiant of the world around it. This same attitude can be found in the buildings already built in

this area. The farmers who built them were self-reliant, their houses and barns rise alone into the sky.

The urban project presents a way of living as a member of a group. The word urban, in fact is derived from “-an” meaning of, or belonging to. (Oxford Dictionary of English Etymology) The city is an urban place and so, by its nature, the project must concern itself with what is around it. In order to live

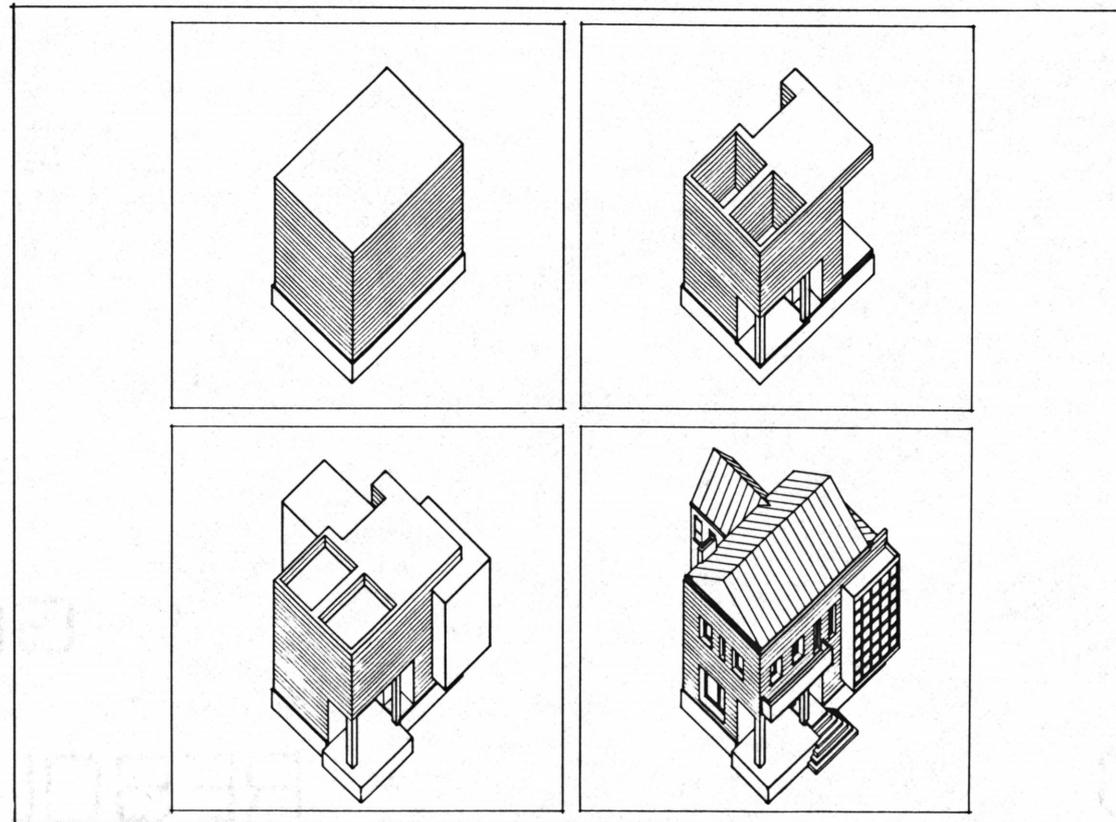


House design for Ellett valley



House in valley

Derivation of building from solid form.
 (1) mass, the initial order, (2) parts of mass removed,
 (3) elements inserted into voids,
 (4) final form of building.



together as a group, there must be certain values, rules, and customs that serve as guidelines. Without some common form of agreement, each individual would go his own way and anarchy would result. This agreement as to what is of value--the family, education, justice, and the proper role of the individual--is set forth through the institutions of a society and can be presented in a building. "A building may be said to be a work of architectural art, then, insofar as it serves as a visual metaphor, declaring in its own form something (though never everything) about the size, permanence, strength, protectedness and organizational structure of the institution for which it stands for (but does not necessarily house)." (Smith, p. 22) The townhouse fits into an existing row of similar buildings. It must respect the existing order such as building heights, materials, and window openings. While retaining its own individuality, it must also observe the standards set by what is of value around it.

Both buildings, then reflect a certain condition of man, a way of being which is given a physical presence in each project. Also presented through the projects is the relationship of man to a more general order of things.

I have stated that man's domain is

between the earth and the sky and that the connections of each project at these points is of special importance. The base of the building, the foundation, is the connection of man to the earth to which he belongs. The building is a part of the earth just as man is; its elements comprise his body; he lives upon it and gains sustenance from it during his life; after his death he returns to it.

From the base rise the walls which shape space in order to make places for man. These walls have openings to allow him to see the world, to enter into it, and to enable him to be apart from it. This is the part of the building where man lives, works, and dies.

The roof of the building marks the upper limit of man's place on earth. The shape of the roof suggests man's relationship to the sky and what lies beyond him. The flat roofs of modernism suggest objects set on the earth while the spires of gothic cathedrals reach upward toward the heavens.

These relationships of how man lives among men and how he lives between the earth and sky reveal the very nature of that which we think of as mankind. They are the order of man which is presented through architecture as one way to give meaning to his existence.



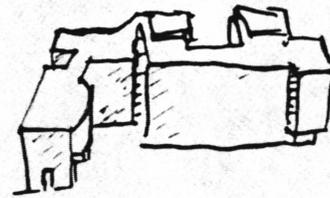
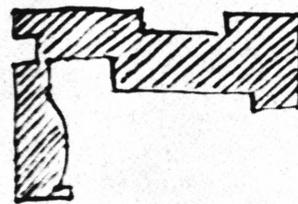
Chair sculptures, near Zurich, Switzerland, Weber.

Order of Form

Webster's dictionary defines form as an "orderly arrangement or method of arrangement." In the context of architecture, this becomes a way of making which encompasses all aspects of a building, from the largest ordering of spaces to the smallest details. I have talked about certain assumptions which are inherent in a language that comprise an understanding of how the world is; the order of form enables this understanding to be put into a physical form. Different architects and different periods of architecture have had different attitudes about how form is created.

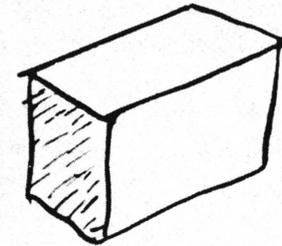
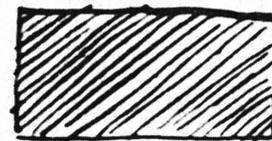
In the Renaissance, form was made through the arrangement of parts. Distinct elements were added together to create the whole; smaller volumes created larger volumes; small pieces created bigger ones. This is in sharp contrast to the Baroque attitude in which form was created through the subtraction of mass from a larger whole.

Although I am greatly simplifying, the Renaissance created form through an additive process while the Baroque can be thought of as using a subtractive process. "Renaissance space is static, its walls and vaults are planal - they form space. Renaissance unity is achieved through a cumulative addition of clearly

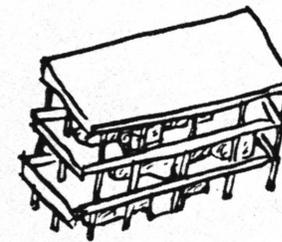
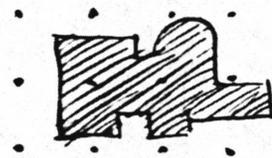


centric composition
programmable

genre plutôt facile,
pittoresque
mouvementé
on peut toujours le
discipliner plus classiquement
et hiérarchiser

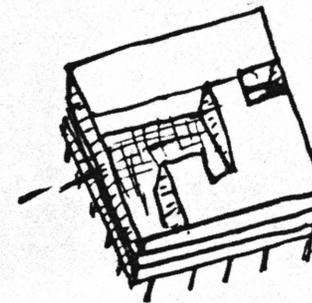
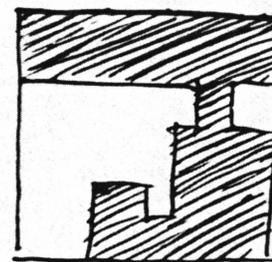


très difficile
(satisfaction de l'esprit)

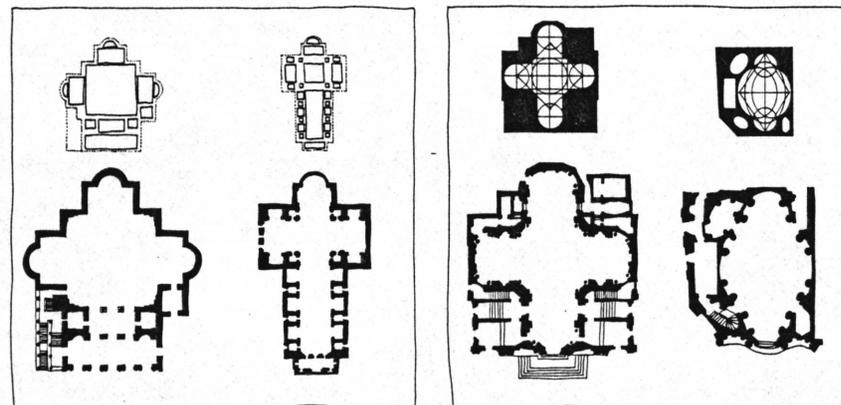


composition cubique
(forme pure)

très facile,
matériau
combinable



Le Corbusier. Four ways to create form.
Maison LaRoche-Jeanneret, Garches,
Stuttgart, Poissy.



Renaissance — Addition
Alberti. S. Sebastiano, 1460.
S. Andrea, 1470.

Baroque — Subtraction
Da Cortona. SS. Martina e Luca, 1635.
Borromini. S. Carlo alle Quattro Fontane, 1638.

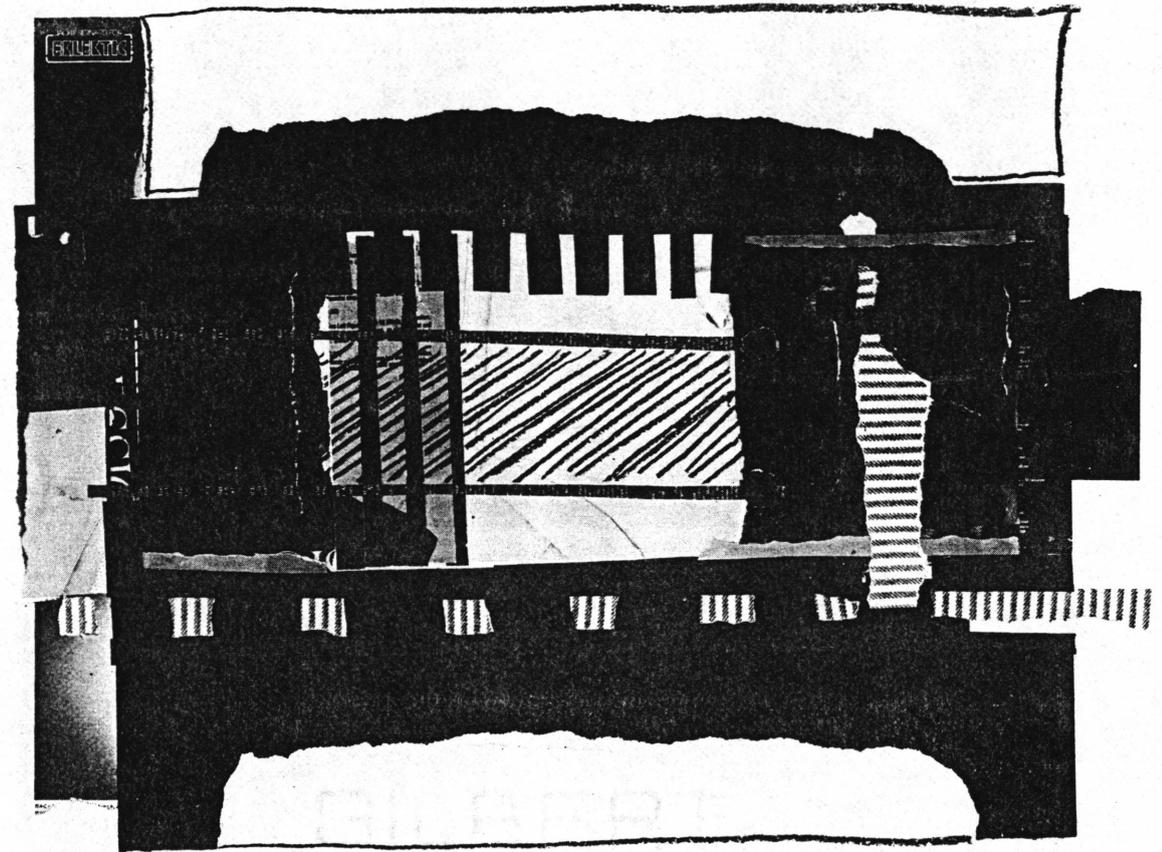
defined similar static elements, while Baroque unity is achieved - at the expense of the clearly defined elements - through the subordination of individual elements to invigorate the whole." (Millon, p. 10) An attitude toward how things are made, either consciously or unconsciously, is used throughout the design of a building. This attitude can also be found in the work of individual architects.

Le Corbusier states that there are four ways to make form and he gives an example of each. The first approach is cumulative, as in the Renaissance, form is created through the addition of parts. The second approach is to use a pure form, such as a cube, to determine the shape of the building. The third approach is to set down a grid of structural columns and to use any method to determine the actual

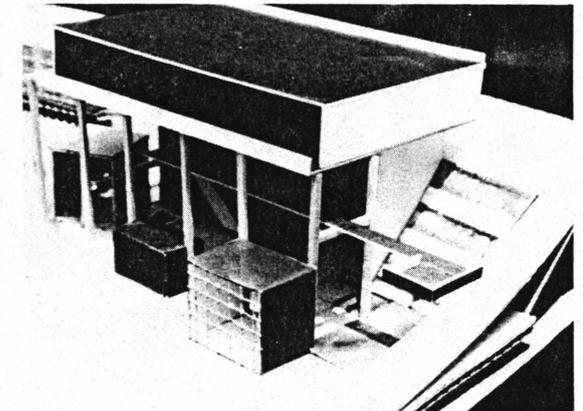
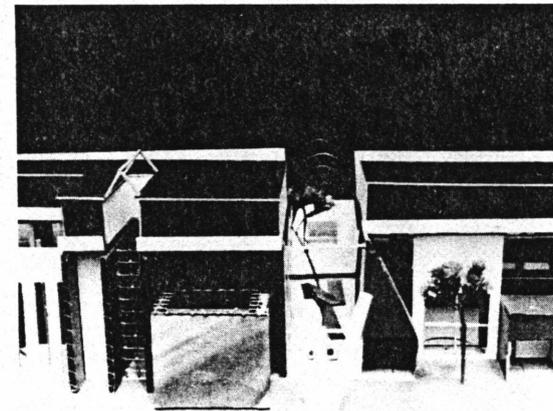
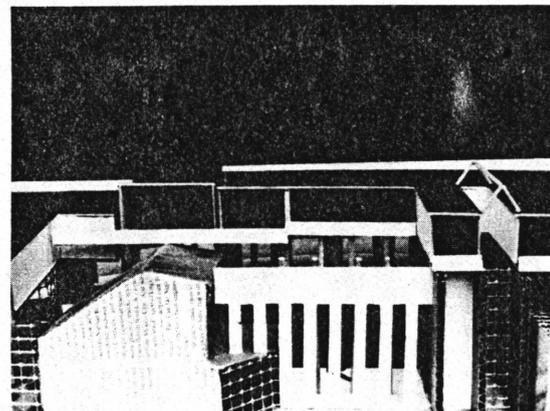
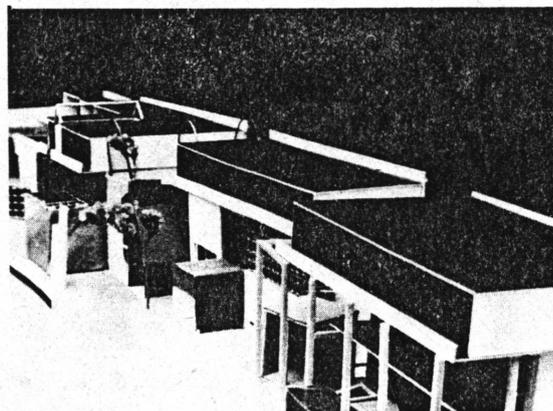
configuration of spaces. Since the actual enclosing form is not supporting any loads, he says that this is the easiest approach. The final approach is like the Baroque: It is a subtractive method in which he starts from a clearly defined form and removes what he does not need to arrive at the building. All of these approaches are possible ways of making architecture.

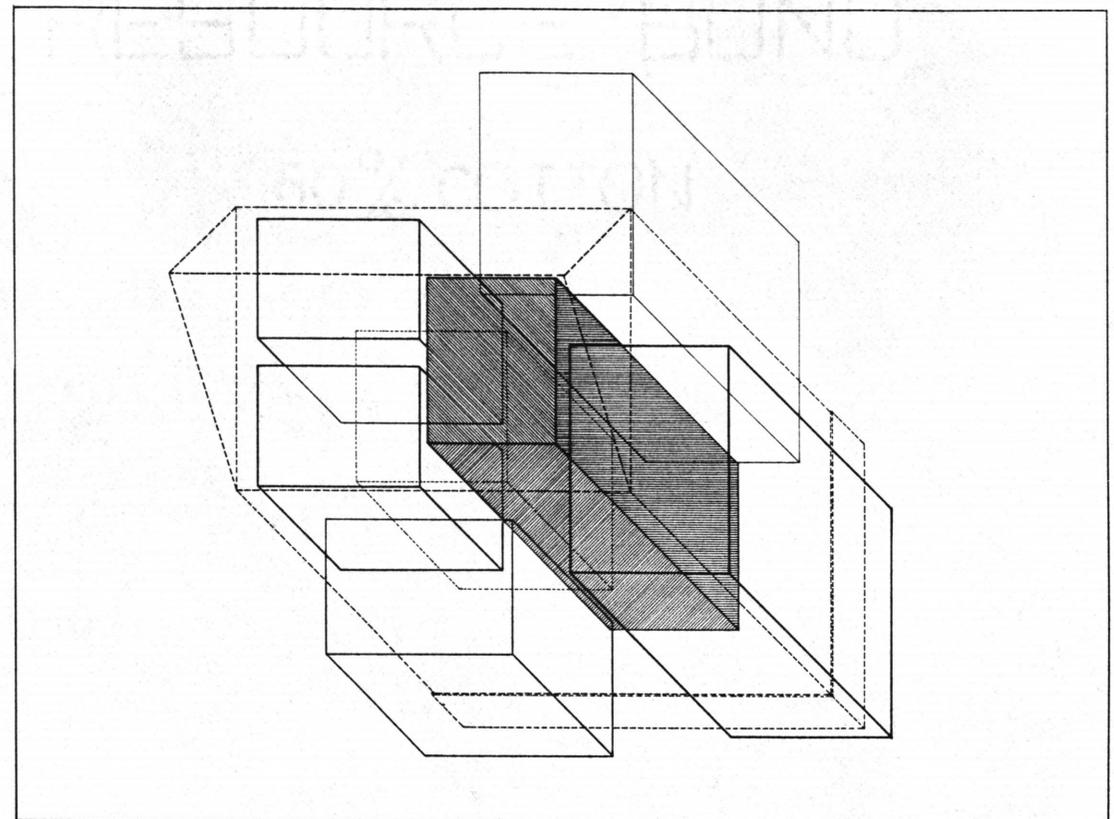
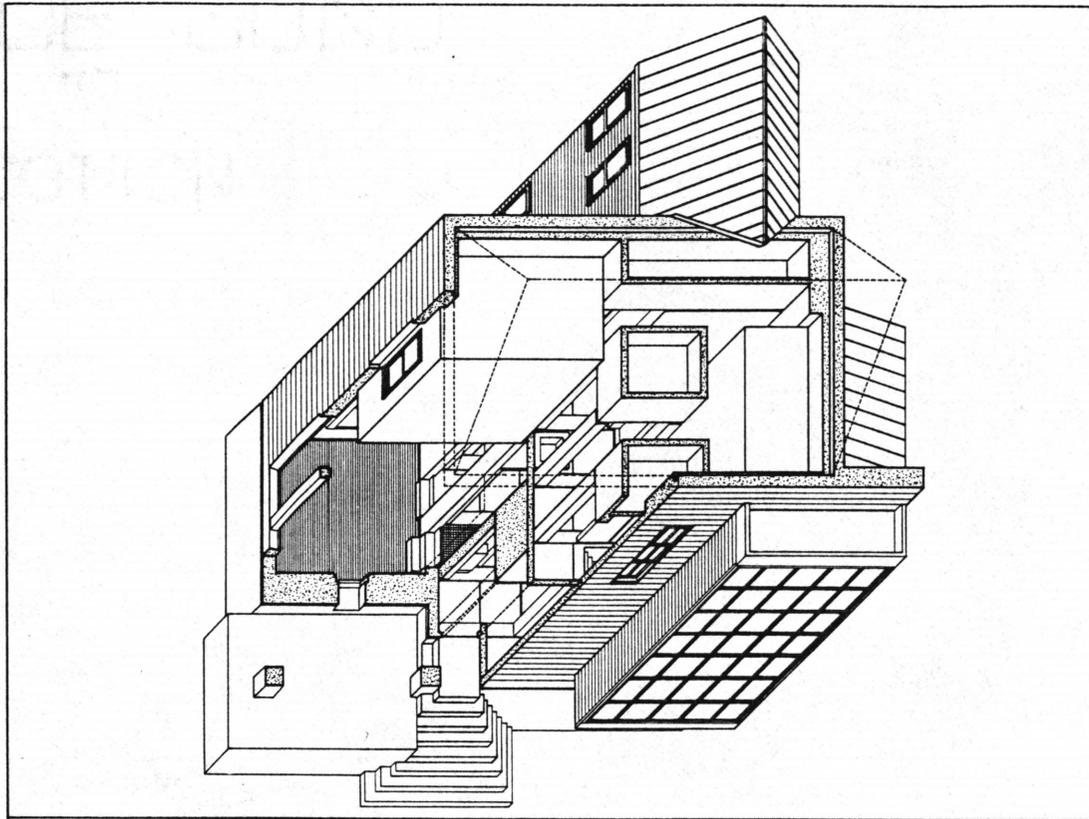
My approach uses these ideas, which have been used throughout history, but it also is derived from my own understanding of the world in which everything exists as part of a larger whole. This understanding assumes that man is shaped by the world around him but is also able to have an effect on its configuration.

Man is a member of a group; his family, his fellow citizens, those he works with, and so forth. He is



Collage as a means of recording initial intentions of a building. What will the experiences of the building be?

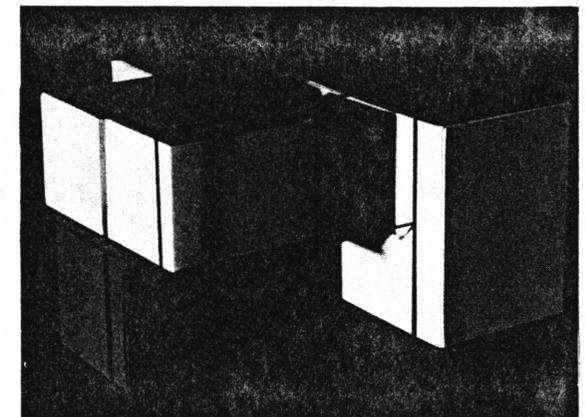
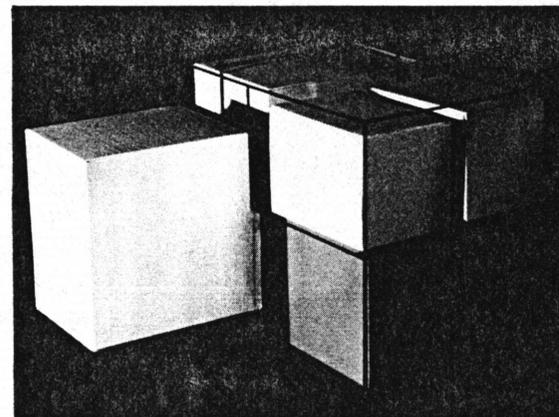


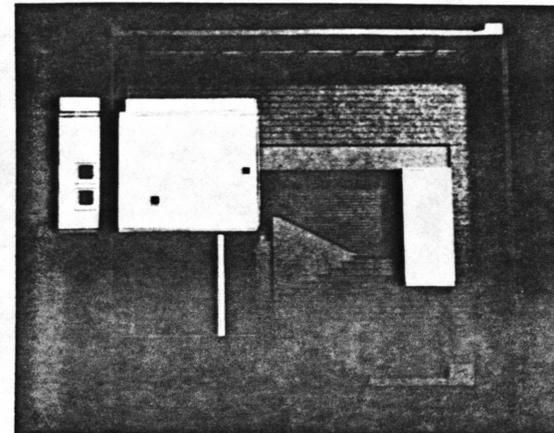
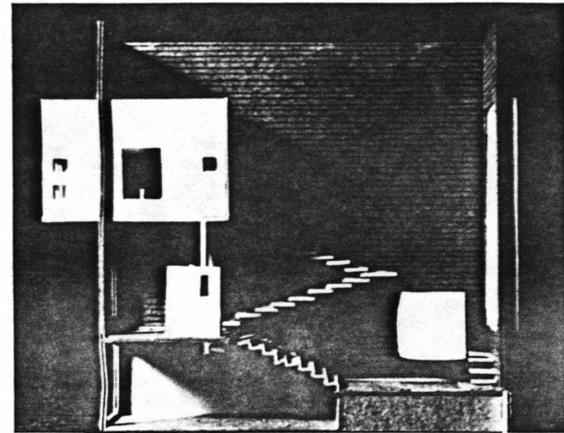
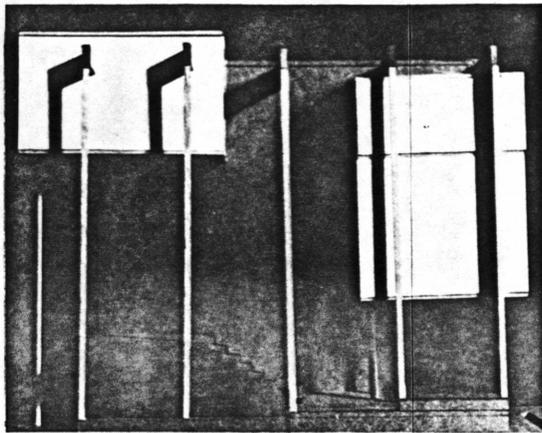


ultimately a part of society (the human world) and the natural world around him. This idea of interconnectedness, of always belonging to something larger than oneself, is a primary assumption of the order of form.

Every building has a different program or set of circumstances that defines it. What works formally for one building may not work for another. As a way of making architecture, I assume a large overall order which acts as the framework into which other elements can be inserted. This initial order comes out of the particular circumstances of the problem. In the rural project, this order becomes a solid cube derived from an understanding of a condition of man. Spaces are conceptually carved from this solid leaving voids into which masses or enclosed volumes are placed.

How do the parts of the building come together to create the whole? How do we order space? Space exists around us, it cannot be created. Through architecture we can order space, give it meaning. This is possible only through the use of physical materials — walls, floors and ceilings. In these models, in an attempt to think of space as something objective, space is portrayed by solid forms while the mass is defined by its edges.

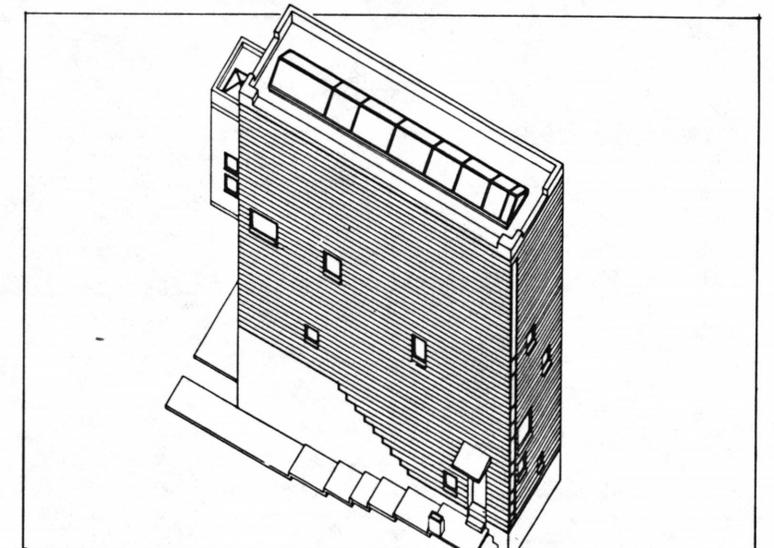
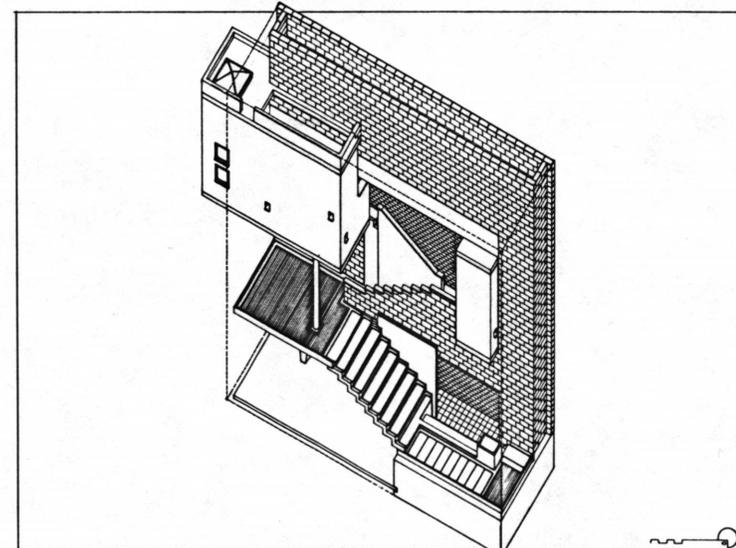
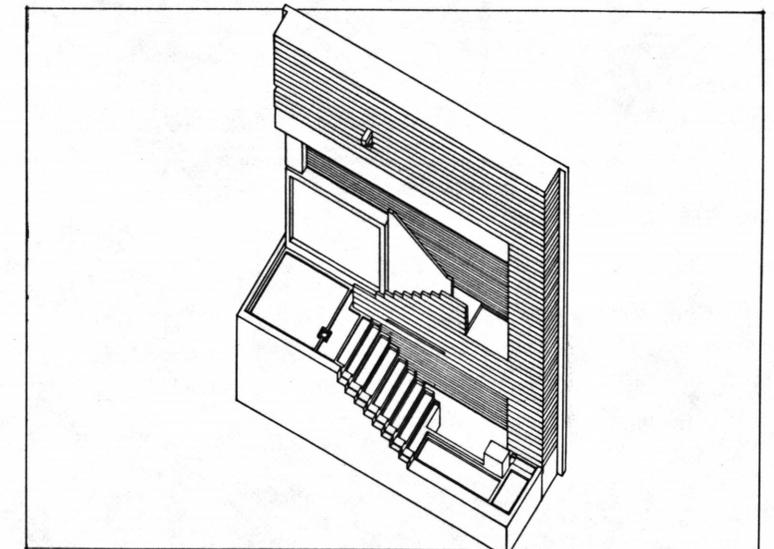
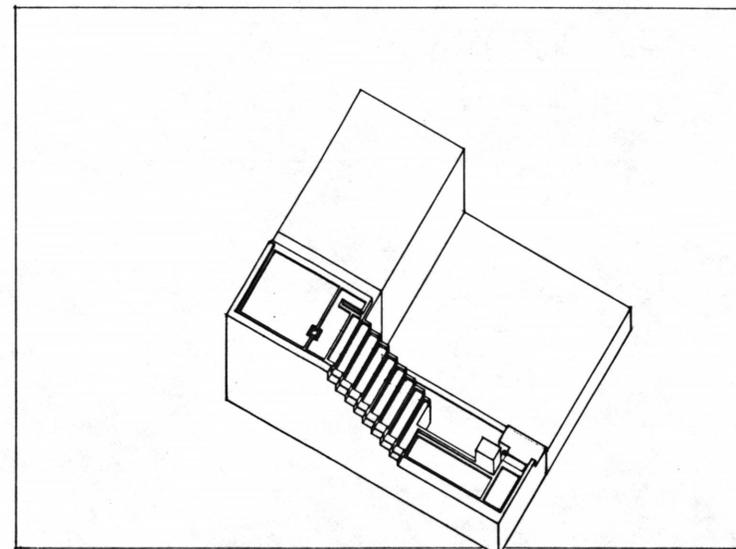




Models show project at different stages of development.

Axonometrics. Relationship of part and whole. In order to make a building, separate elements are added together. At all levels of connection, elements interlock to create new, larger elements. In this language, pieces must fit together so that one part includes the other; flush connections, where two pieces are simply put flat against each other, are not allowed.

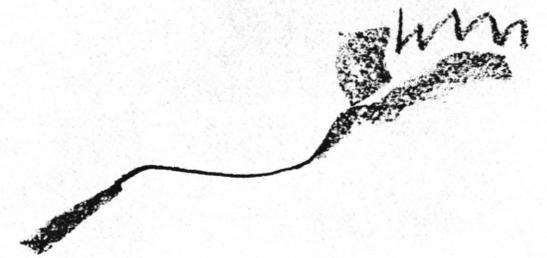
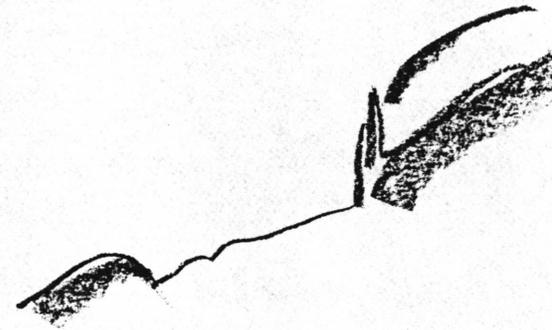
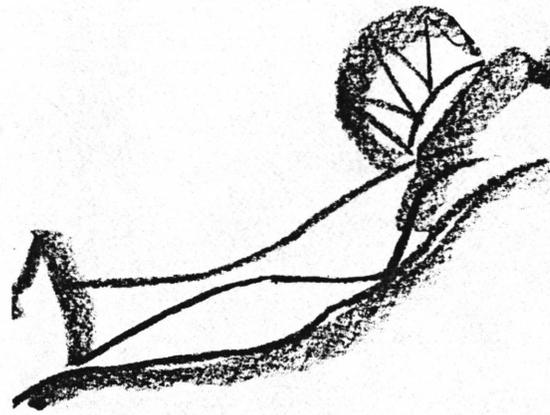
The urban project is different from the rural one in that its original framework is derived from the nature of the site. This suggests two kinds of order: The first sees the existing block as a mass from which pieces are removed to reveal the final form. The second regards the site as a volume into which objects are placed. In both projects, what is conceived of as the framework is altered to allow other elements to become a part of it and create a new whole. This is true at all levels of the building. The different orders all make this relationship of part and whole visible throughout the building. It is an understanding to the creation of form that provides a meaningful way of making decisions which extends beyond the simple physical necessity of making connections.



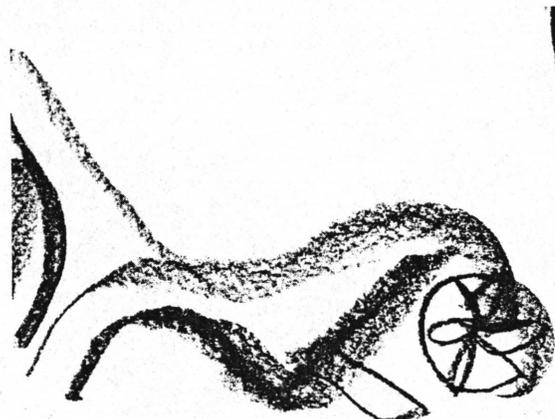
Order of the Site

The order of the site is found through what is given. It is not an order that is brought to the problem, rather it is the problem itself. To be able to find the order in what is given, it is necessary to see and understand the problem. "Order is established without reference to an exterior unit; one cannot know the order of things...but by discovering that which is the simplest, then that which is the next simplest, one can progress inevitably to the most complex of all." (Foucault) The order of the site is found through the most basic understanding of what is given. Ideas and preconceptions as to how the site will eventually be used cannot be thought of at this point. The order that is discovered in the given will suggest how the site is to be used. What then, is a site?

"Originally the word site suggests a place in which everything comes together, is concentrated. The site gathers into itself, supremely and in the extreme. Its gathering power penetrates and pervades everything. The site, the gathering power, gathers in and preserves all it has gathered not like an encapsulating shell but rather by penetrating with its light all it has gathered, and only



Site in Ellett Valley looking south. Drawing is a way to see. It helps to discover how the site is, how it "gathers" the forces that create it.



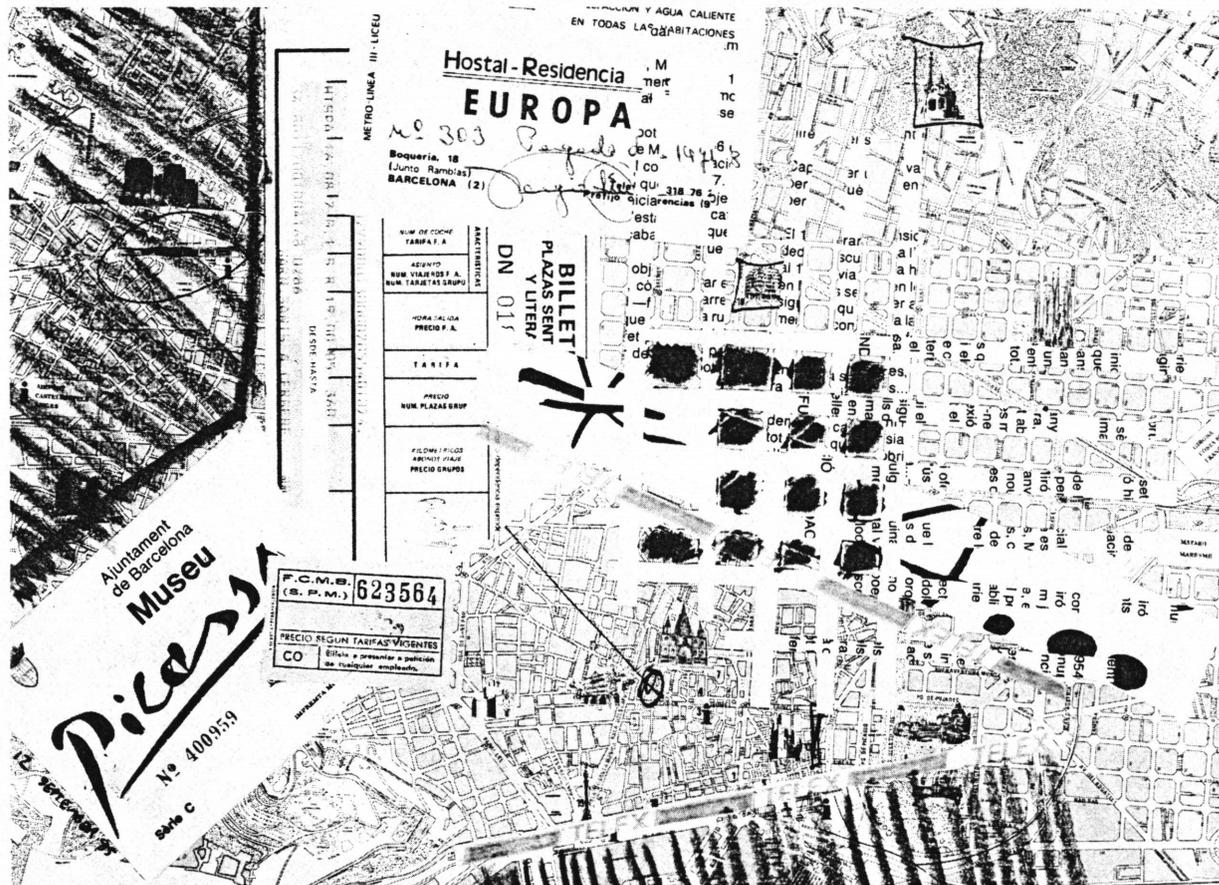
Barcelona, collage. This is an attempt to record the essence of a place through experience. Barcelona was perceived through movement, smells, sounds, colors, textures, light, and so forth.

“When one travels and is a practitioner of visual things, architecture, painting, or sculpture, one sees with one’s eyes, and one draws in order to take inside, into one’s own history, the things that one sees.

Once things have been interiorised through the work of the pencil, they remain within for the rest of one’s life; they are written there, inscribed.

To draw oneself, to follow outlines, to fill up spaces, to explore volumes, etc., is first of all to see; it is being perhaps qualified to observe, perhaps qualified to discover....at this moment, the phenomenon of invention may arise. One invents, and one even creates; one’s whole being is brought into action; this action is the central issue.”

Le Corbusier



The search for the understanding of a place. How does a town or natural site belong to the landscape? How is the town/site organized? What is it that makes a particular place unique?

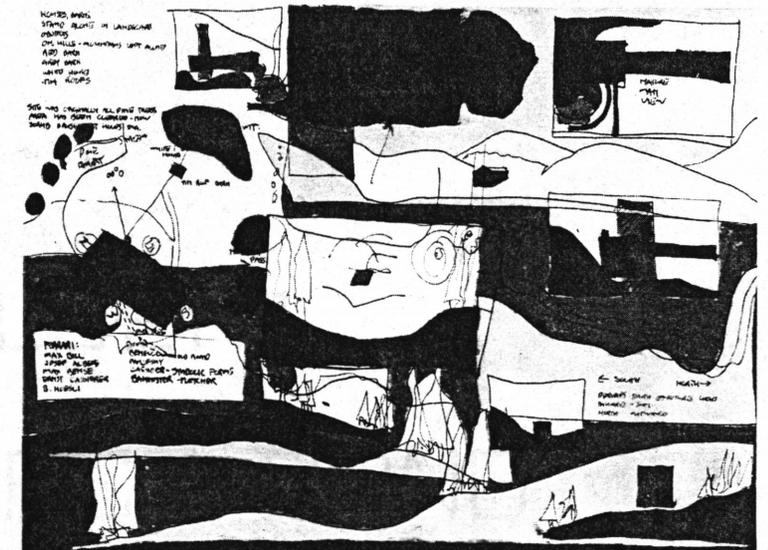
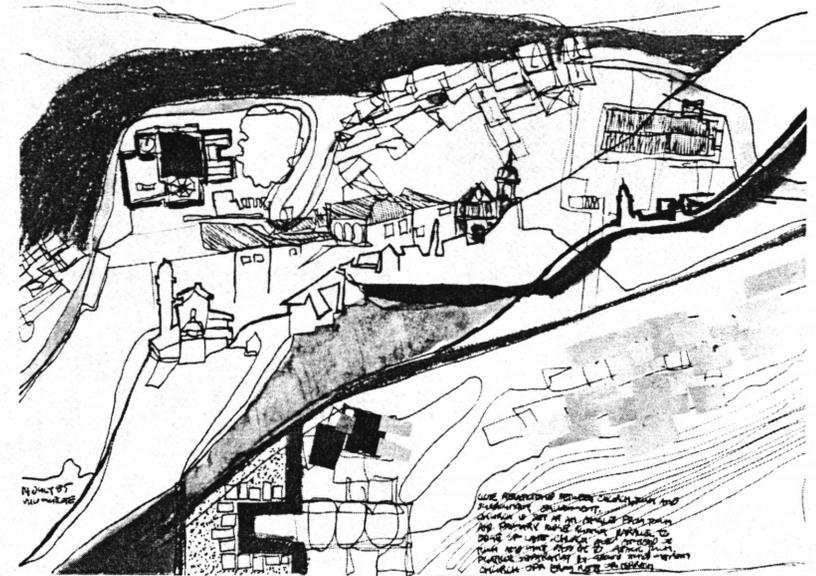
thus releasing it into its own nature." (Heidegger, *On the way to language*, p. 159)

A piece of land or a city lot become a site when we turn our attention to it. When we see something as a site we see all the diverse forces of the landscape concentrated in one place. All that is to be found in the surroundings is also contained in the site. When we can see this, we can order it and give it a presence through architecture. This way of "reading" a site suggests that there exists a language of the site which gives meaning to it. Once again, a language allows us to see, to understand, and to present.

To see a site is to discover the order that exists or is "gathered" within it. One of the ways of finding this order is through drawing.

"There is a tremendous difference between seeing a thing without a pencil in your hand and seeing it while *drawing* it.

Or rather, you see two quite different things. Even the most familiar object changes altogether if you set about drawing it. You realize that you did not know it, that you had never actually *seen* it. Up till then the eye has only been an agent; prompting speech, thought, guiding our steps, our casual movements, sometimes awaken-



Vico Morcote, Switzerland.
Ellett Valley site.

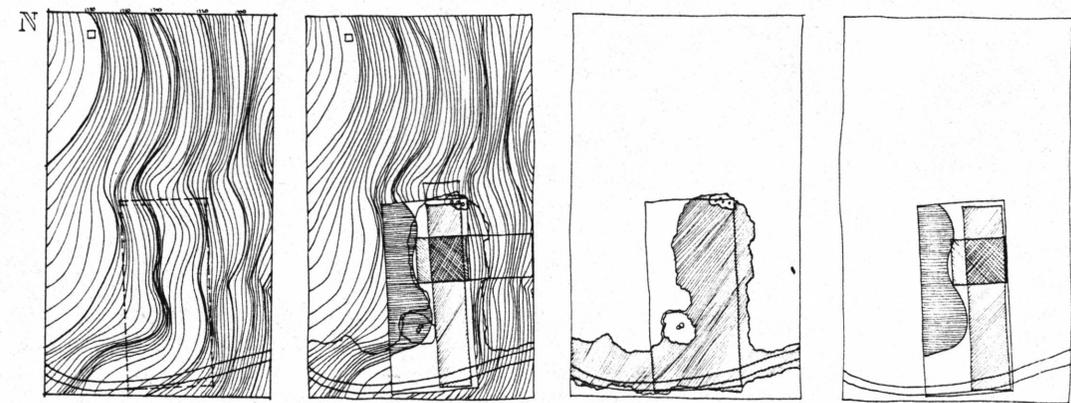
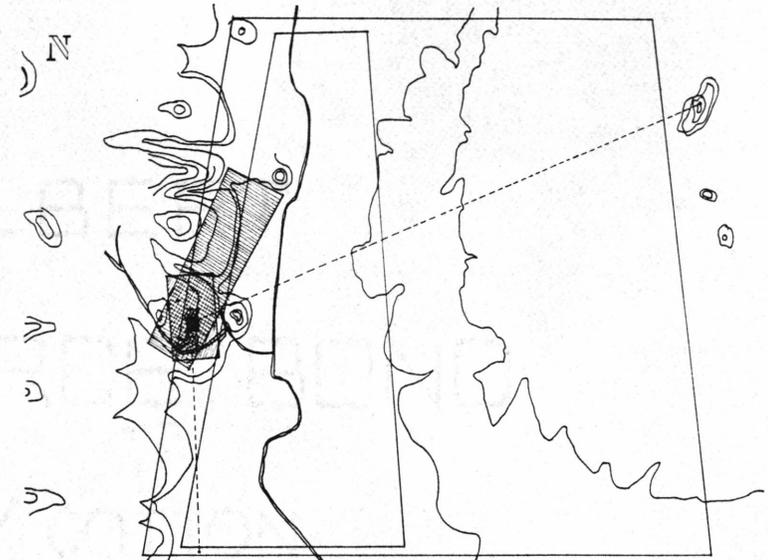
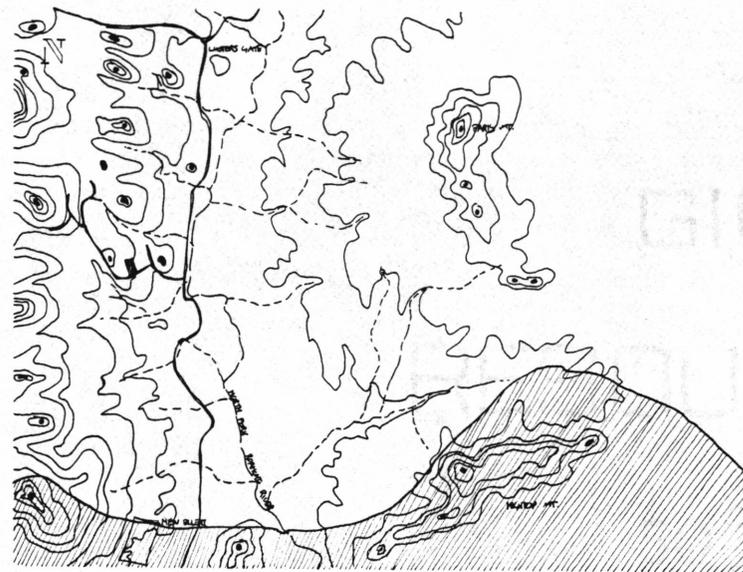
"The city was an artificial organism inserted into the natural environment, to which it was attached by a very tenuous link. It respected the natural lines of the countryside, which, in many respects, it made little effort to change. This was interpreted and complemented architecturally, with the perfect symmetry of the temples, enhanced by the serried rows of columns, and balanced by the irregularity of the surrounding complex of buildings that in turn gradually melted into the natural disorder of the countryside. The extent of this balance between art and nature gives every city its own highly individual character." (Benevolo, p. 60, on ancient greek cities.)

ing our feeling. It can even charm and delight us, but always by means of efforts, consequences, harmonies of vision which replace and so anul the seeing by the very act of enjoyment.

But the act of drawing a given object endows the eye with a power of command which must be sustained by the will. In this case the *will* is necessary to seeing; and both the *end* and the *means* of this *willed seeing* is the drawing itself." (Valery, Dega's, Manet, Morisot, p. 36).

It is possible to see a site without drawing it, but drawing helps to focus our attention. It forces us to notice things we might ordinarily pass over. As we begin to see what is given, we also start to understand it.

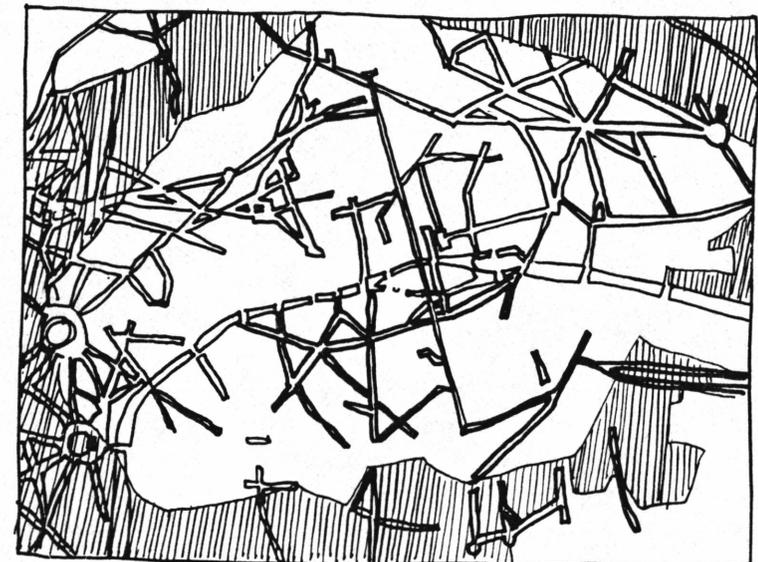
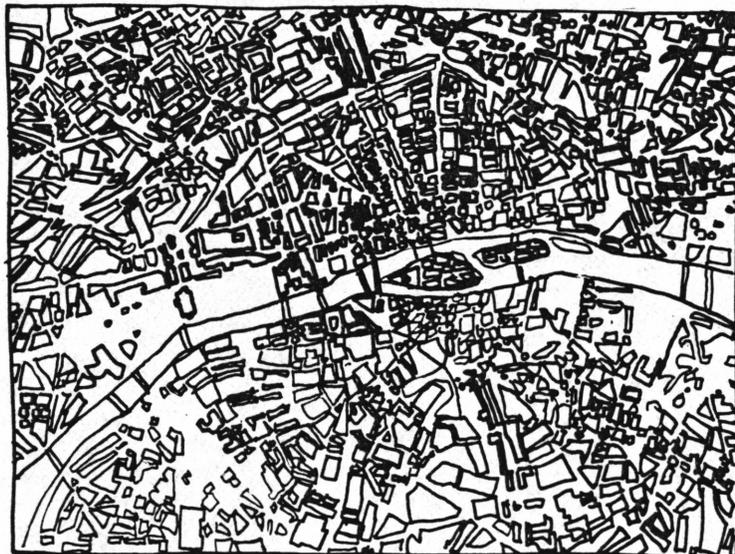
Through drawing we recognize the forces that create the site. A natural site, a piece of land, has certain features that are given and must be respected. How is the site situated in relation to the rest of the landscape and what are the physical features that make it unique? These are aspects of any site that must be known.



Ellett Valley site.
Drawings of Paris (from Benevolo).

Analytic understanding of the site.

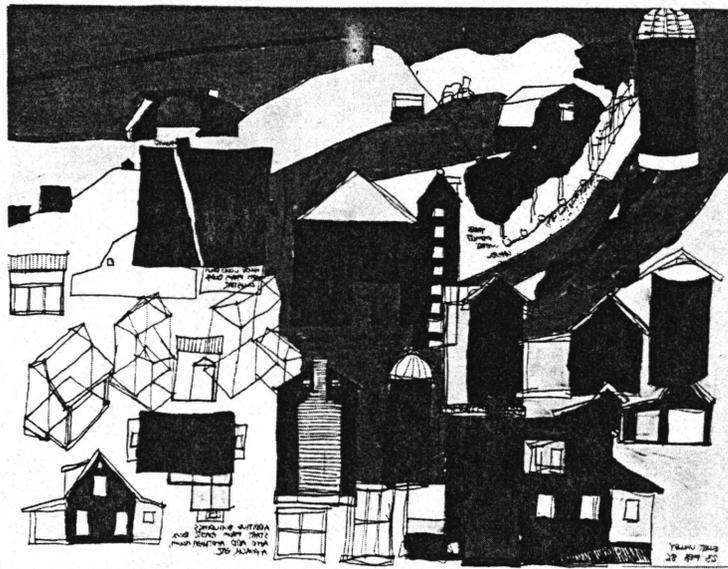
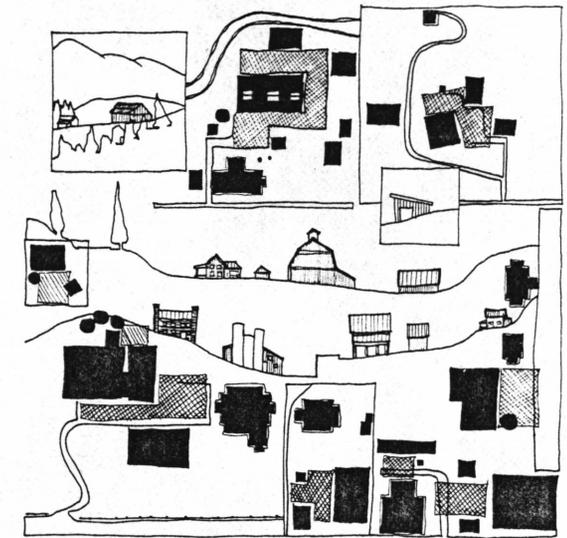
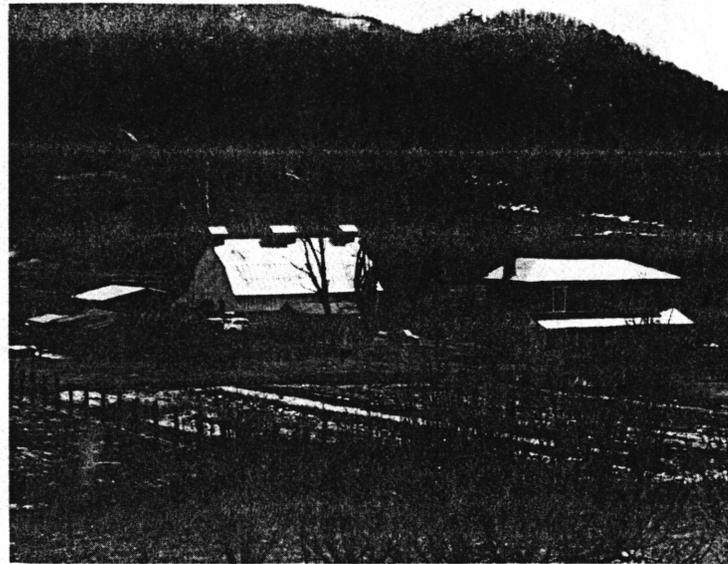
Understanding the site through quantitative instead of qualitative means: the slope of the land, location of physical features, landmarks, monuments, street organization, building density, etc.



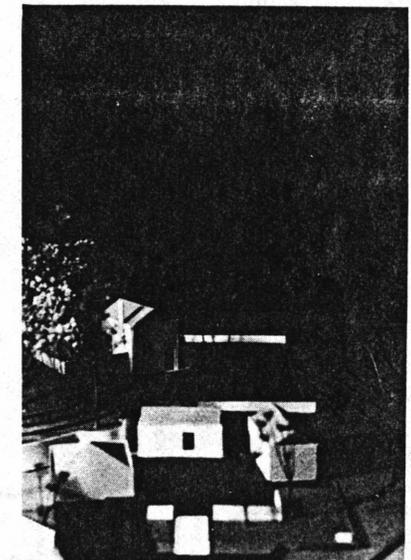
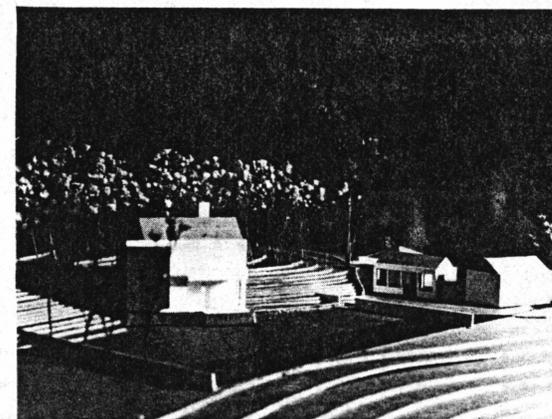
A man-made site such as a city also has particular characteristics.

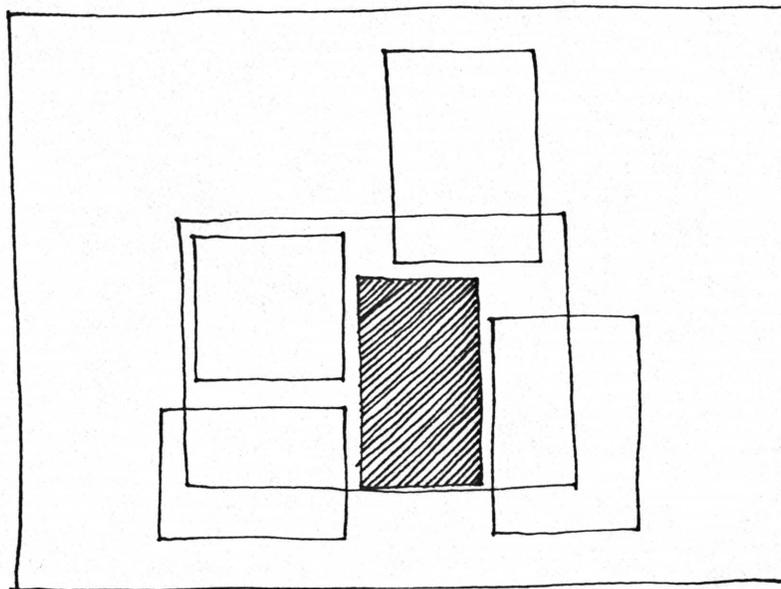
A city sits in a landscape in a certain way. Does it follow the features of the natural terrain? What physical features does the city itself possess? How are its buildings distributed? Where do people live and where do they work? How is the city organized? What are its road systems like? In addition to these physical attributes of the city, other things, such as its history, traditions and customs, must be understood. Through observation and experience, we can eventually arrive at a personal understanding of the site. Through drawings and other graphic means, we clarify our understanding and attempt to make it clear to others.

Another way to understand the site is to look at other similar sites and the solutions that resulted. At one level, we can look at the local context. In the immediate vicinity of the site, we can often find examples of a solution to a particular problem. In the rural project, I could look at farms and farmhouses in the area and see how the problem of a house in the country, in rural Virginia, was built. I was able to use the ideas behind these buildings in my own design.



Understanding the site through observing the local context. The farms in Ellett Valley can be seen as solutions to a similar problem. The organization and relationships of these buildings is respected and reinterpreted in the project.





House organization. Rooms are assembled off a central circulation space. Extra rooms added at the rear of the house (usually the kitchen).

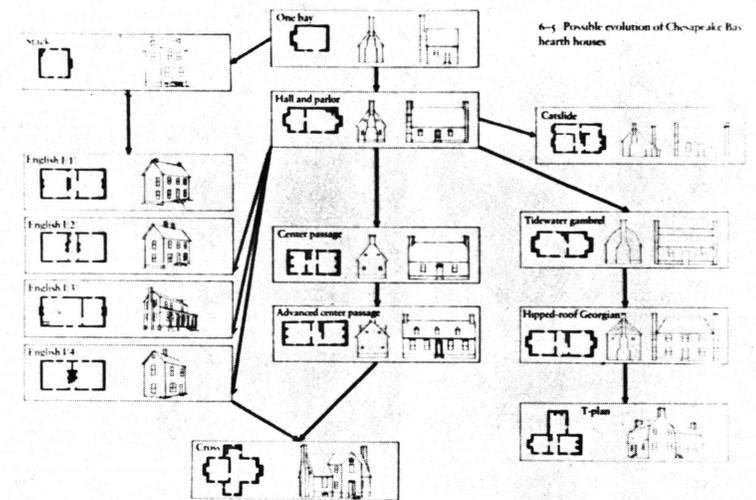
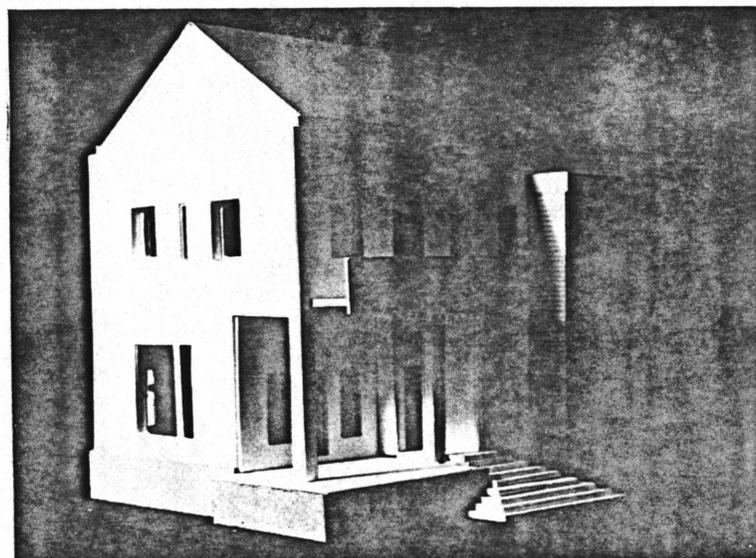
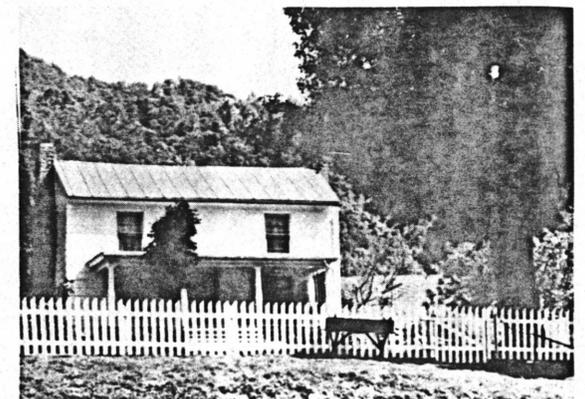


Diagram shows possible evolution of Chesapeake Bay Hearth Houses. (Noble, pg. 50)



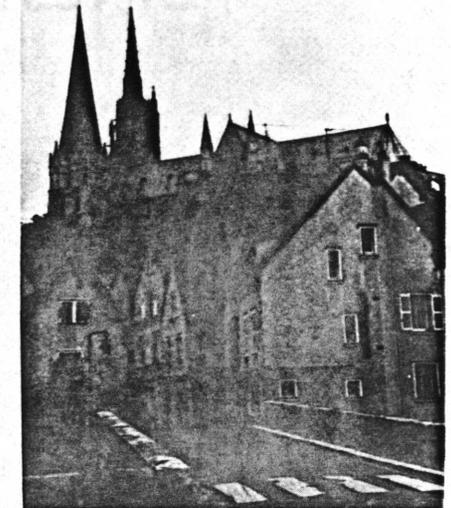
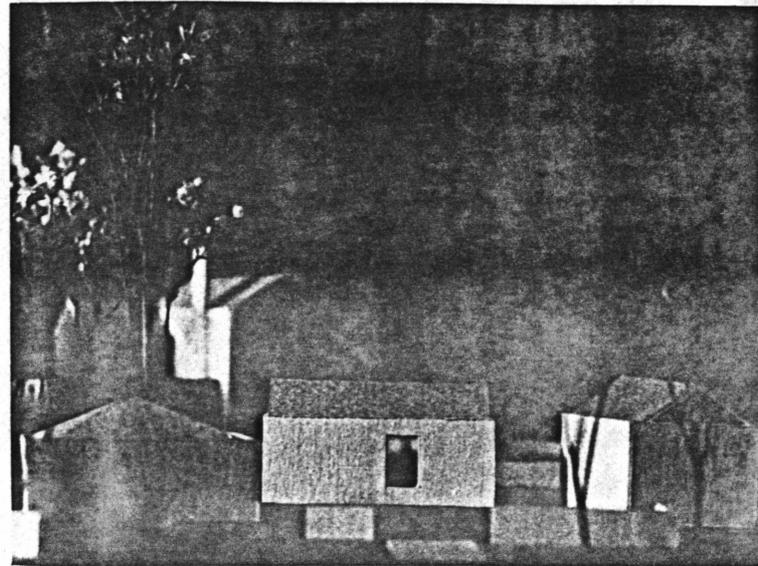
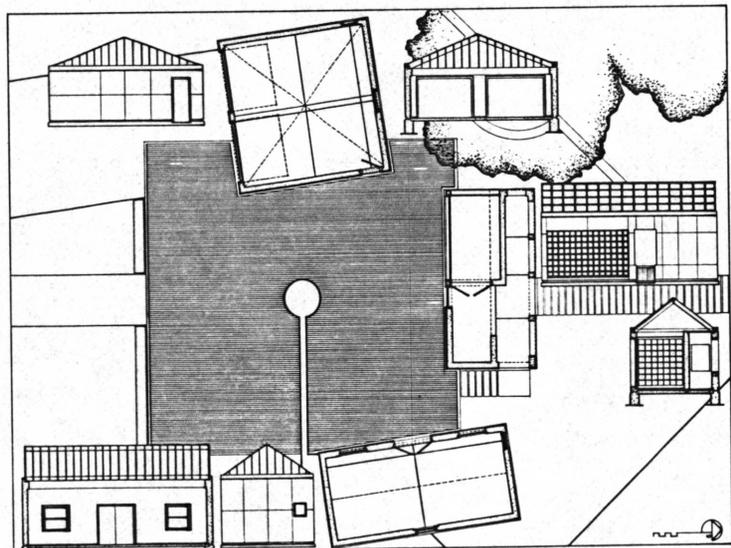
By looking at existing solutions of houses in the valley and understanding the reasons behind their development, a better understanding of the project can result. Organization of spaces and functions, size, and materials are all given criteria from which to work from.



At another level of looking at similar solutions, we can look at historical types. This understanding involves looking at the past as a repetition of a few basic kinds of buildings. Examples in the history of building show how these types were given form by earlier architects. Rafael Moneo suggests that this is the way in which architecture is produced:

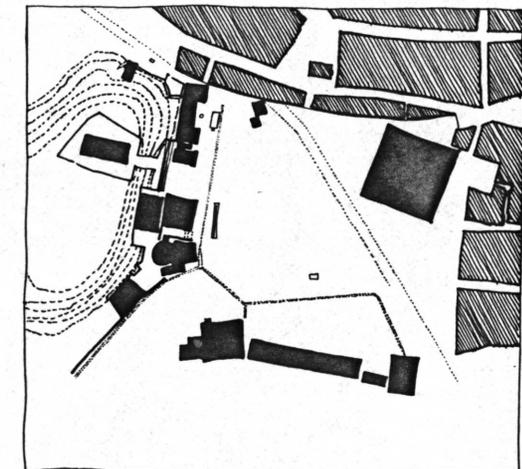
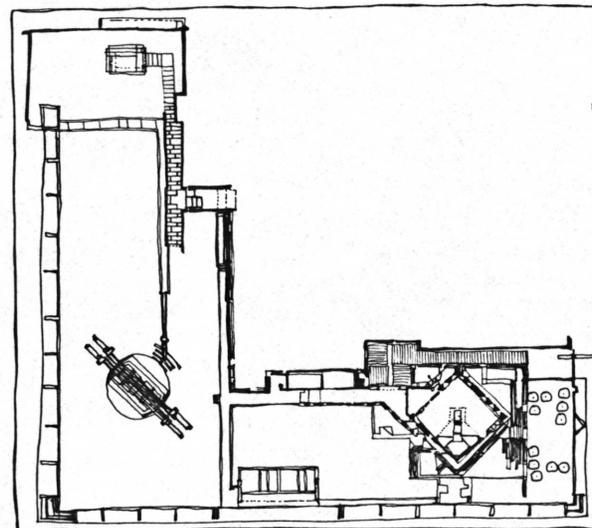
"Architecture is not only *described* by types, it is also *produced* through them. If this notion can be accepted, it can understand why and how the architect identifies his work with a precise type. He is initially trapped by the type because it is the way he knows. Later he can act on it, he can destroy it, transform it, respect it. But he starts from the type. The design process is a way of bringing elements of a typology - the idea of a formal structure - into the precise state that characterizes the single work." (p. 23)

These "formal structures" are the existing, accepted ideas that make it



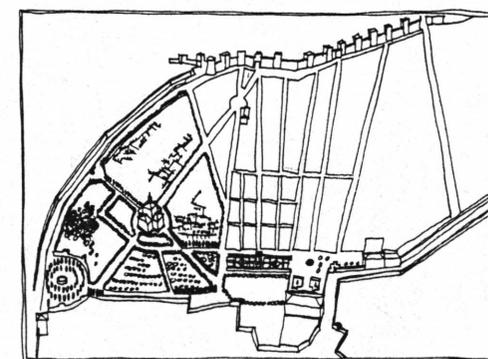
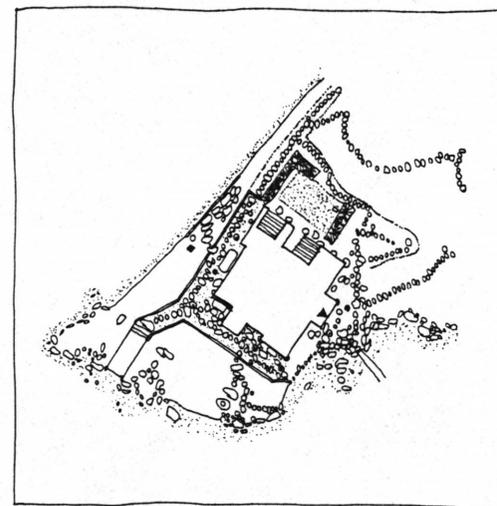
In the elevation view of the model and of Chartrés, a hierarchial relationship is established between one important building and its surroundings. What the house is to the outer buildings, the cathedral is to the town.

Brion Tomb, Carlo Scarpa (from Portoghesi, GA 50)
Athenian Agora about 300 B.C. (Benevolo, p. 90)

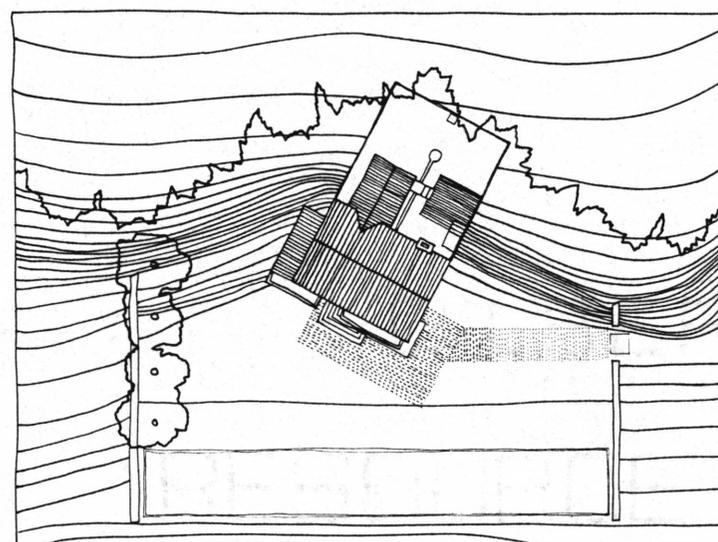


Understanding the site from an historical context. Looking at the past as a source of ideas related to the current project. The plan of the Brion Tomb shows the relationship of buildings as objects in a garden setting. The Agora plan is an example of a certain kind of urban space that can be created through the ordering of buildings around a central space.

possible to create architecture. We do not have to follow them, although it is difficult not to. Once we understand the ideas that created a type and are made manifest through a building, we can use these ideas for the project at hand, which then becomes another example of the type.

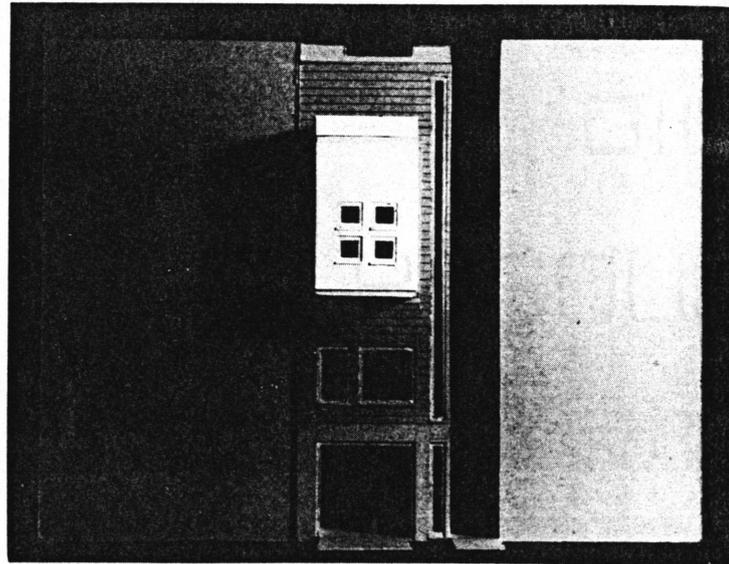


Villa Ludovisi, Rome, 1577 (Coffin).
Shokintei, Japanese tearoom (Tange).
Detail of Ellett Valley site plan.



Searching for an understanding of the house through examples of historical types. In this instance, the type is a house in the country which is seen as an object inserted into the landscape.

Historical type of the urban townhouse.



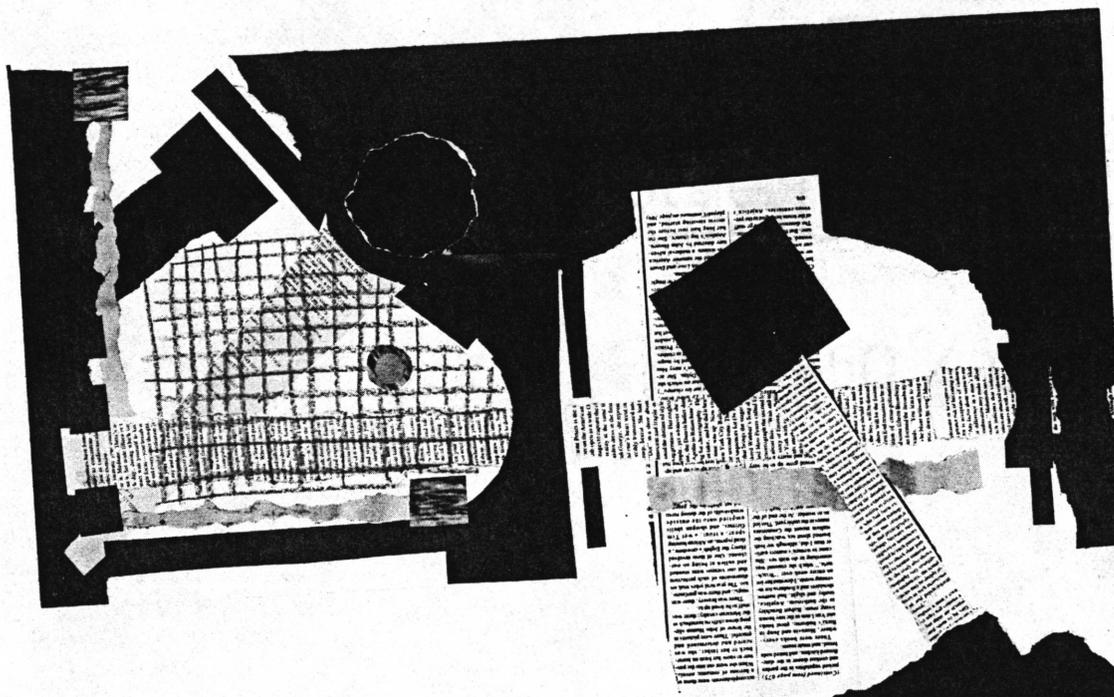
Begijnhof, Amsterdam.
Urban project elevation

Drawing of the elevation of a canal (after Benevolo, p. 714).

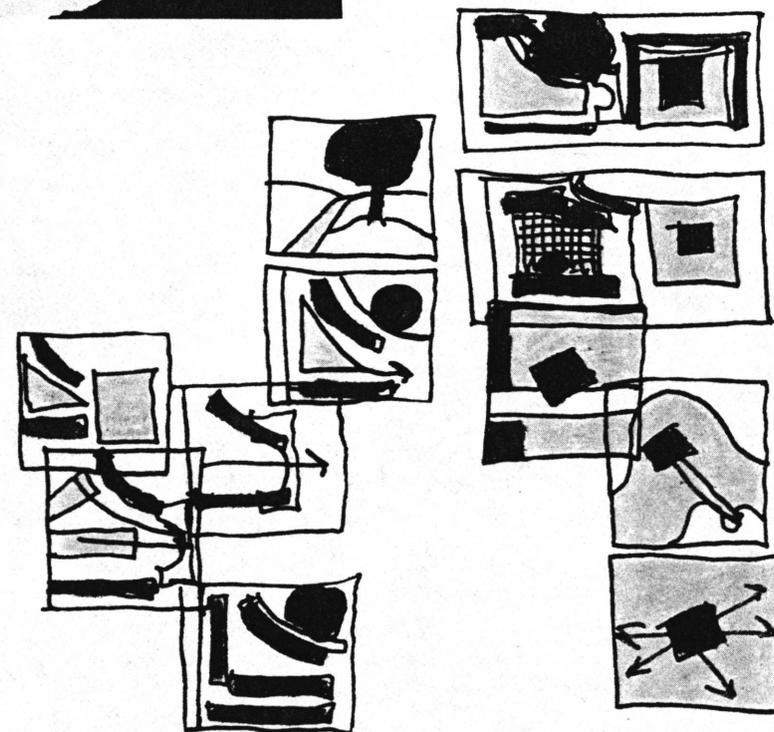
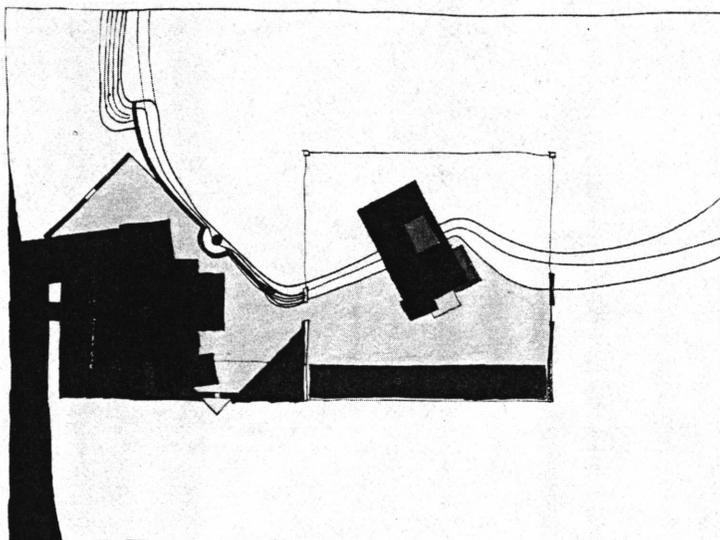


As our understanding of the site grows, we can begin to present the orders we have discovered. We take the forces of the site and start to reinforce and clarify them through built form.

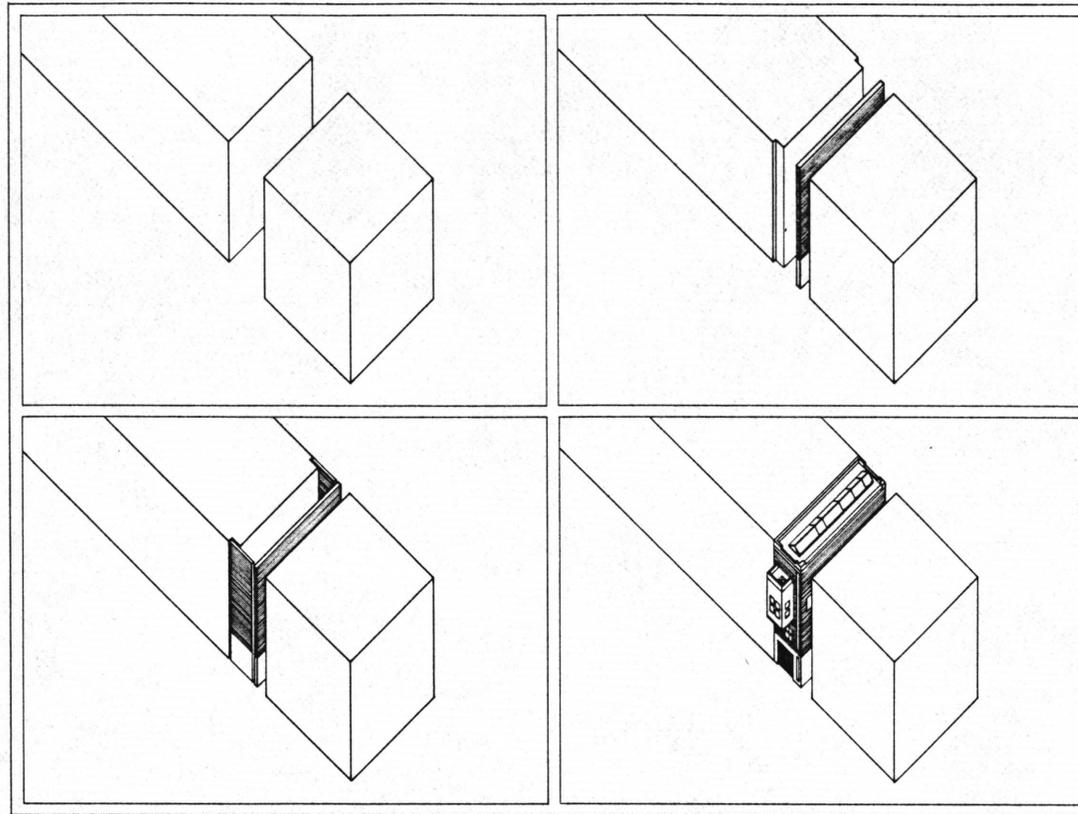
In the rural project, the forces of the site naturally come together at one point; this is where the house is placed. The reality of views, hills, and trees is strengthened through the tools of architecture; walls, windows, doors, floors, roofs, and landscaping clarify what is given. Architecture makes visible the given order and so gives meaning to the site. This is also true in the urban project.



The order of the site is discovered and through the tools of architecture, it is given meaning in relation to man's understanding of the world.

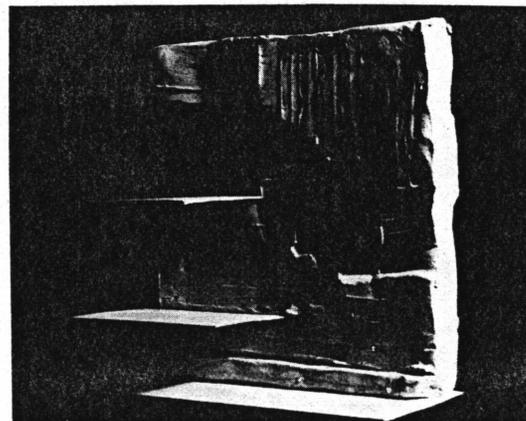


Although this second project has no particular site, certain characteristics can be assumed. A building is placed into a gap in an existing block of buildings. These existing buildings are seen as masses which border a narrow space. On one side of the space, parts of the mass are "removed" to create stairs, rooms and places where other pieces can be inserted. The space is then enclosed by walls and a roof, creating a volume which is the building. As in the first project, the natural qualities of the site are made clear through architecture.



In the urban project, the site is understood as an existing mass with a slot into which the building will be inserted.

(1) existing block of buildings (the mass), (2) extension of the mass into the area of the building, wall added to define the boundary of the building, (3) walls added to create a volume, (4) site enclosed and building becomes a part of the existing mass.



Order of Proportion

Proportion has been used throughout history as a way to give order to a work of architecture "...It would not be difficult to show that all higher civilizations believed in an order based on numbers and relations of numbers, and they sought and established a harmony, often a fanciful and mystical one, between universal and cosmic concepts and the life of man." (Wittkower, p. 109) From the earliest Greek temples simple proportional relationships have been used to provide meaning and visual clarity which the mind could comprehend. Pythagoras thought that the desire for order was inborn and was an expression of a higher order.

Vitruvius stated that "Proportion is a correspondence among the measures of the members of an entire work, and of the whole to a certain part selected as standard." (p. 72) How to achieve this relationship of parts and which is the most perfect relationship, has been suggested through many systems. The Golden Section, the Fibonacci series and Le Corbusier's Modular are all attempts to objectify something that is by nature subjective.

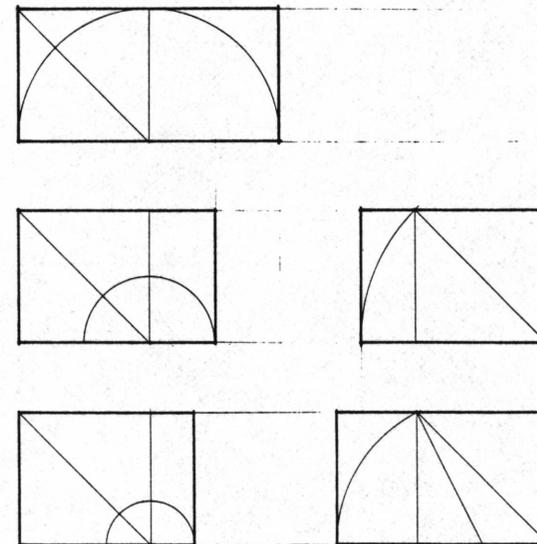
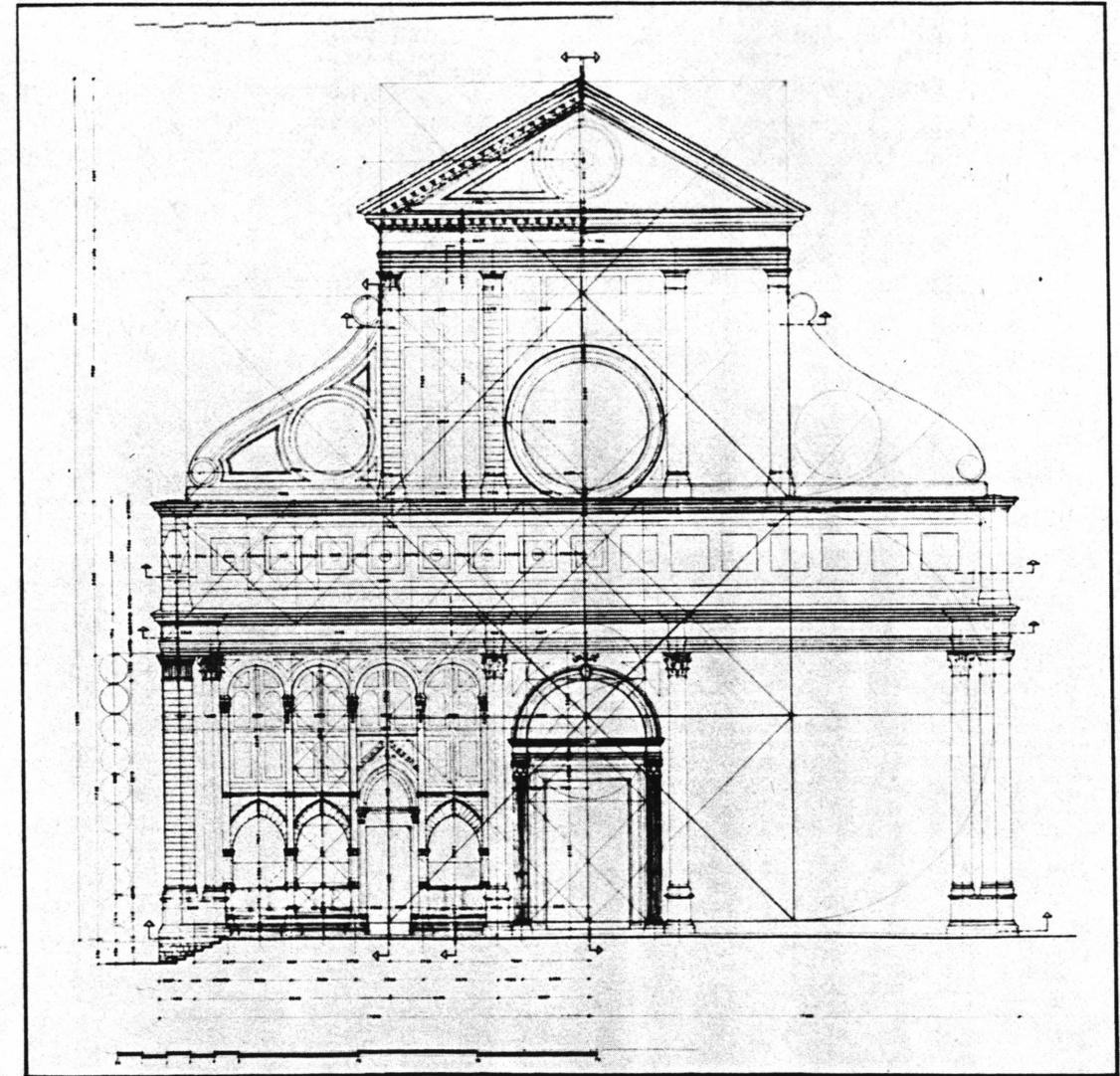
We say that something is beautiful yet we remain at a loss to explain why. As a justification we try to prove that one

system is naturally better than another. Many systems take as proof the fact that they are derived from the human body. The body is seen to be the most perfect form and from it are extracted certain proportions that are therefore perfect also. These proportions can then be used in the design of a building and, since they came from an ideal form, they are therefore the correct proportions to use. I cannot accept this. Proportions cannot be "proven" in this way. The decision to use the human body as the basis for all decisions about the proportions of a building is first of all a subjective decision. Who can say that the human body is the most perfect form? Also, a building is a building, it is not a human body, and, although it must accommodate the human body, the proportions of the body have little to do with the building itself. Proportion is necessary but which proportion and why is a matter of question.

It is generally accepted that simple proportions are better than more complex ones. They are easier for our mind to understand. I do not think it is possible, unless we learn to measure beauty, to find one proportion that is simply the best and most perfect. What a person finds beautiful remains a matter of choice although it can be influenced by outside pressure.

The proportion I use, I use because I like it. It is geometrically determined by taking the diagonal of a square as the long side of a rectangle. Mathematically it is based on the ratio of one to the square root of two.

This proportional relationship seems obvious and has been used throughout history. Palladio proposed that it was among the most beautiful forms. It

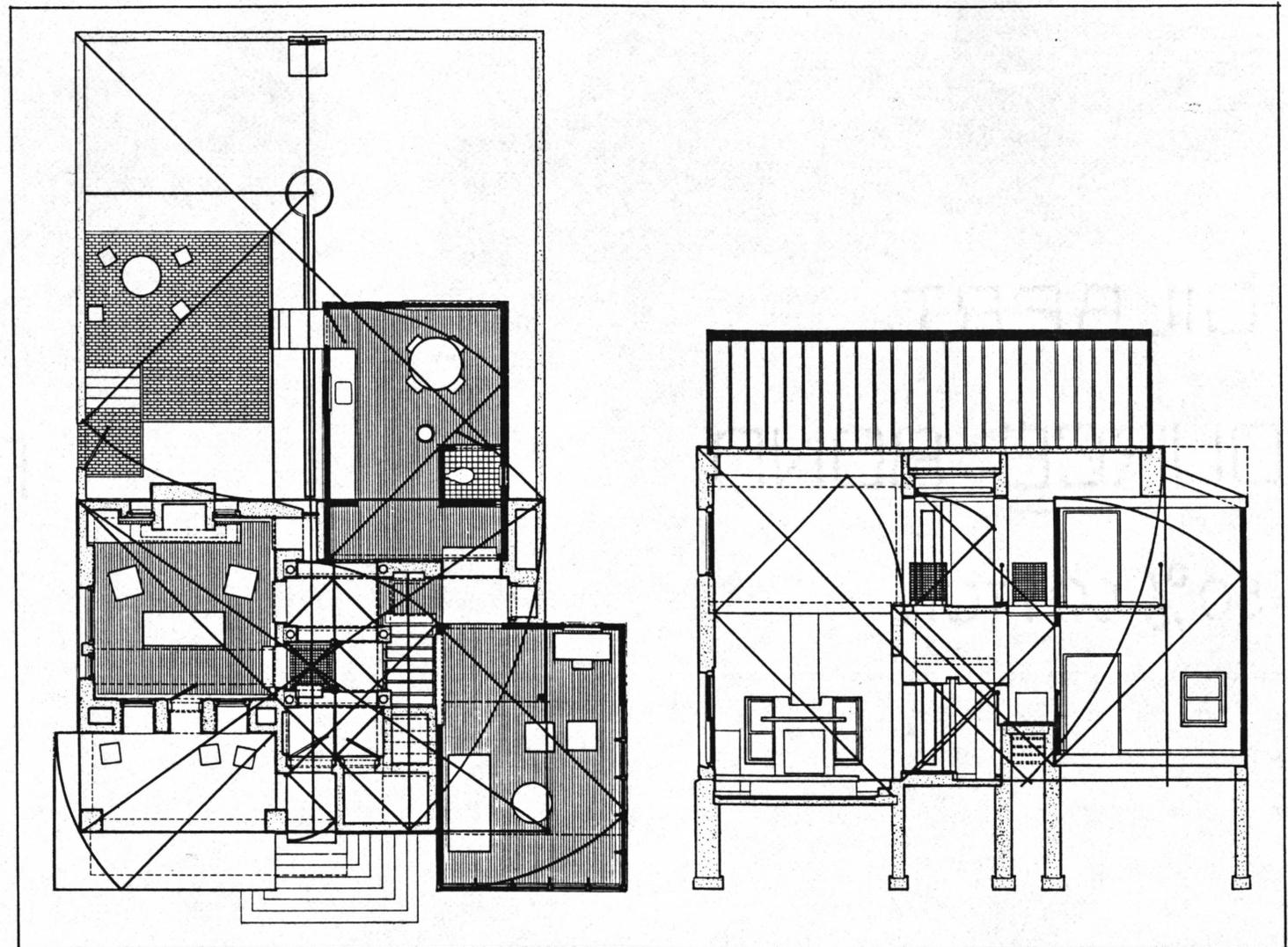


S. Maria Novella, Alberti (Borsi, p. 84)
Exploration of different proportions.

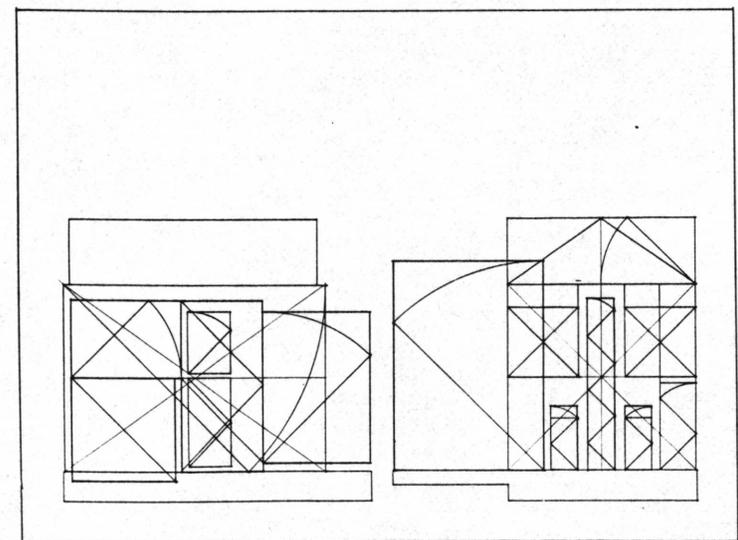
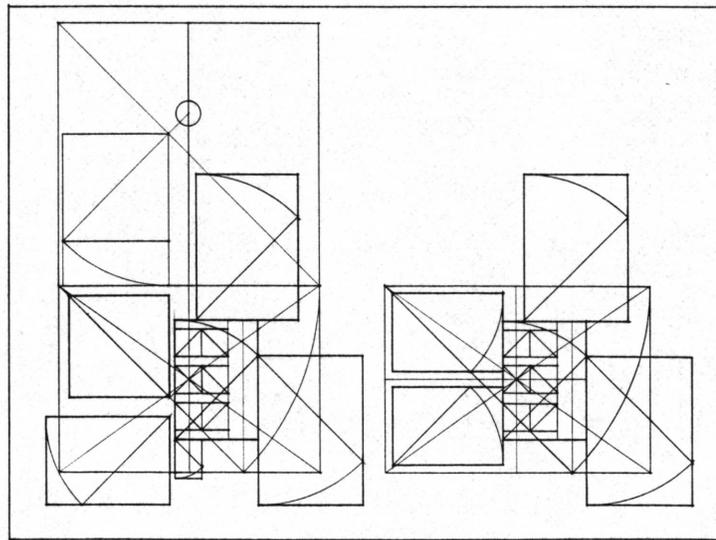
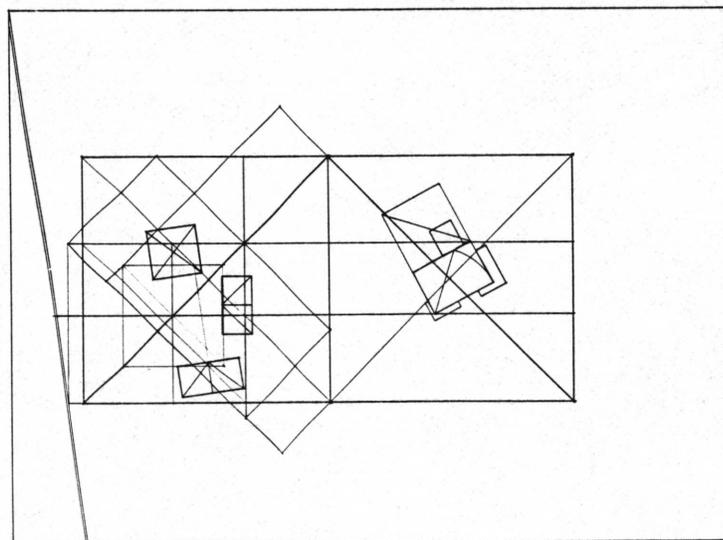
cannot be proven that it is the "ideal proportion," yet it is clear, simple to derive, easy to use, and pleasant to observe. In the two projects, this proportion is used to determine the relationship of parts to other parts and to the whole.

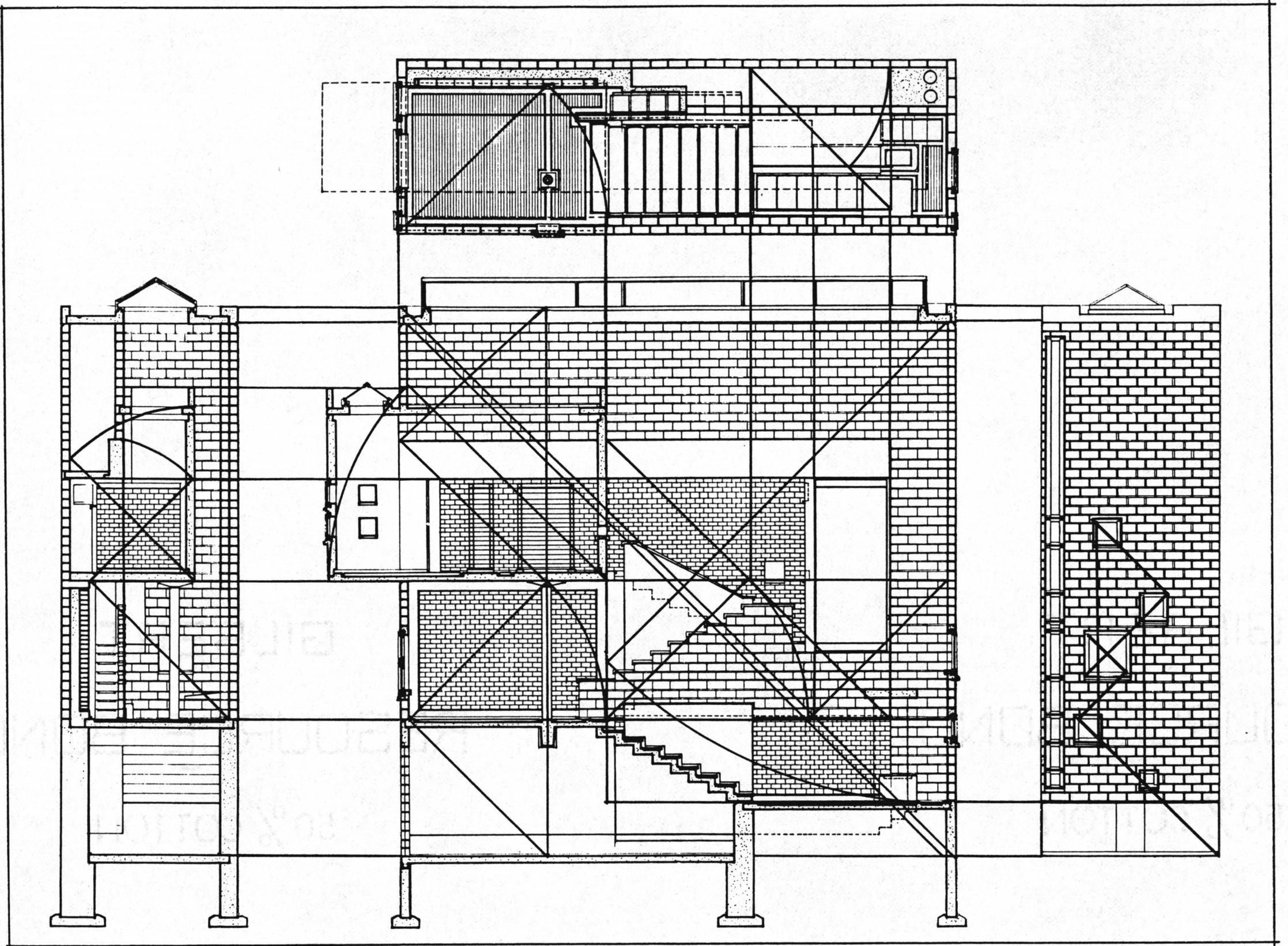
If something is conceived as a mass, it is proportioned as a mass. If it is conceived of as a volume, it is proportioned as a volume. Each problem is defined by different circumstances and so the actual dimensions of each project are necessarily different. It would be a mistake to blindly derive a certain set of dimensions and use them in all cases.

Although this is not used in this project to a large extent, proportions can also be derived from the dimensions of certain materials. Some materials used to construct a building are most easily available in standard sizes. A concrete block, for instance, is manufactured in the ratio of one to two. When designing for construction in concrete block, this ratio must be remembered.



Proportions of the Ellett Valley project.





Proportions of the urban project.

Order of Assembly

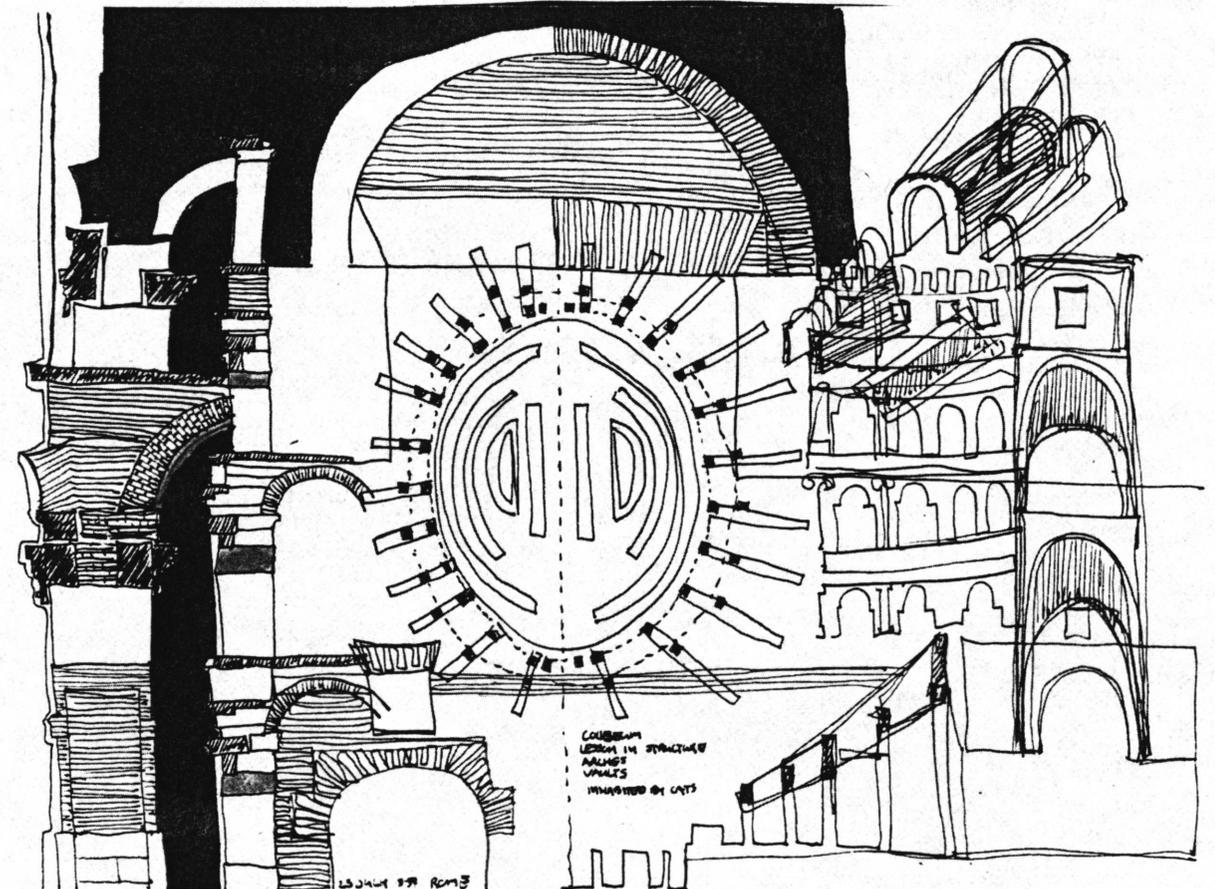
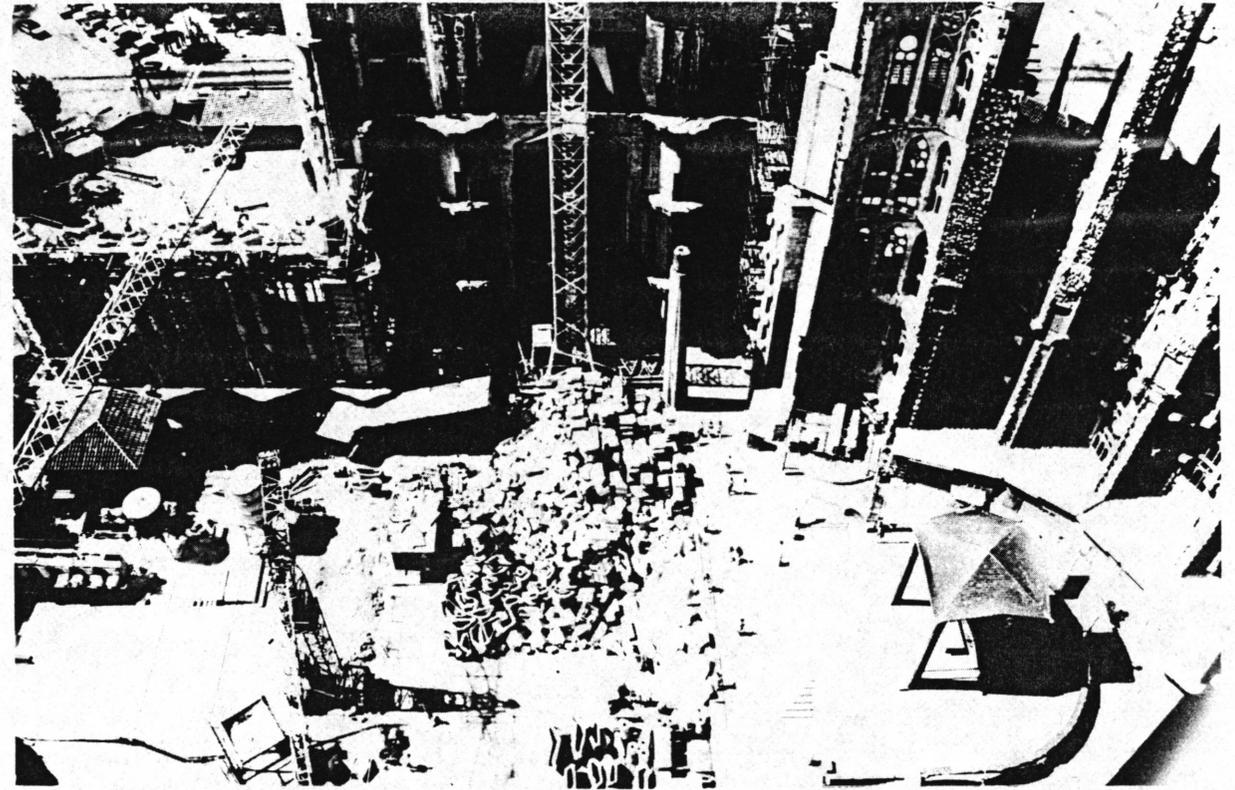
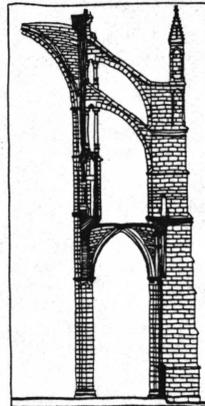
Construction of the Church of the Sagrada Familia, Antonio Gaudi, Barcelona.
Sketch page from the Collesium, Rome.

Amiens Cathedral, wall section (after Mark, p. 53).

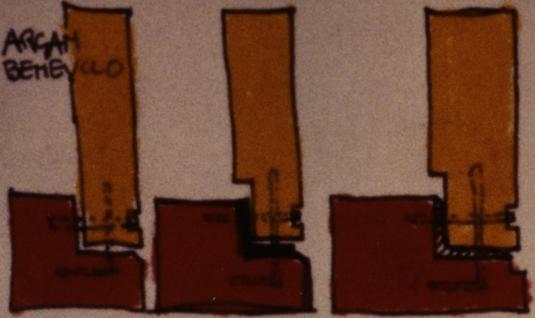
As with all languages, Architecture requires a certain technical knowledge to present what it wants to express. As I have stated earlier, the meaning of something must be presented in a way that is removed from the thing itself. "There is some evidence that the essential nature of language flatly refuses to express itself in words - in the language, that is, in which we make statements about language." (Heidegger, *On the Way to Language*, p. 81) In order to come as close as possible to expressing what we need to express, we must have control over the means of expression. The poet must be able to use words, the painter must be able to use paint and the architect must be able to use the various materials at his disposal. In architecture, a technical understanding of materials is shown in how they are used by themselves and in relation to other materials.

Each material has qualities that makes it different from any other material. The uniqueness of each material must be recognized, as it provides a key to how each material can be used.

"...I began to study the nature of materials, learning to see them. I now learned to see brick as brick, to see wood as wood,

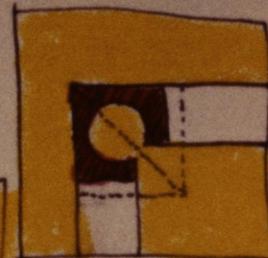


ARCAH BENEVOLO



MEMPHIS FURNITURE DESIGNER (DEFINED) THROUGH THE ELEMENTS THAT MAKE IT (VS. BEING DESIGNED THROUGH FUNCTION) SAME ELEMENT (NOTES) THAT MAKE WHOLE NEW IDEA OF OBJECT.

SAMUEL BECKETT
NICHUNG POETRY
EUGEN IONESCO
WITGENSTEIN - USE OF WORD VS. MEANING OF WORD



DOES COLUMN SUPPORT FLOOR OR IS FLOOR SUPPORTED BY COLUMN?

HUGO HÄRING
LE CONDOR

HOW IS A WINDOW DESIGNED?
VIEW
LIGHT
ETC.



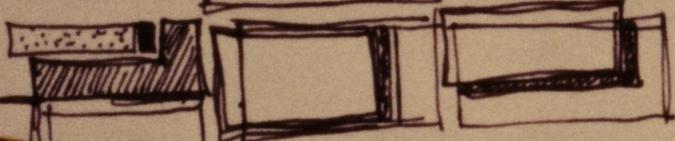
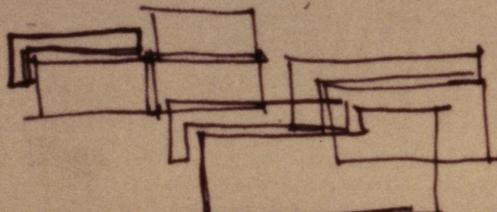
WHAT IS THE SMALLEST UNIT?
PROPORTION
NEATLY SHAPED RECT OR BLK?



LINGUISTIC THEORY
CHOMSKY
CASSINOR



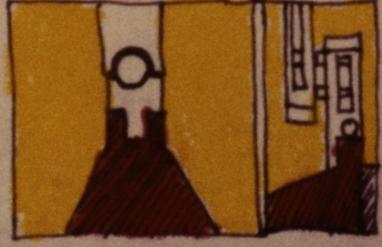
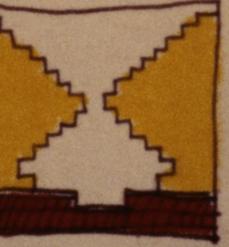
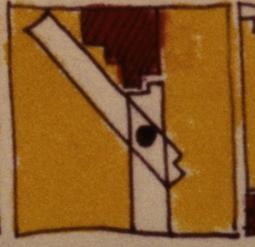
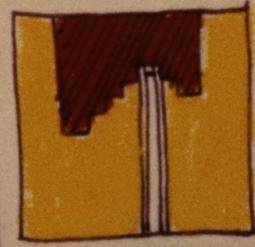
RUDY WATSHER
ARCHITECTURE AS CULTURE, HISTORY (VALUES)
TRANSLATED INTO FORM.
JUNCTION OF REAL TIME AND REAL TIME



HOW MUCH SHOULD
WALL DEPTH IN
ORDER TO ALLOW LIGHT
TO ENTER?
IF JUST FOR LIGHT COULD
ANGLE WALLS FOR MOST
LIGHT. HOWEVER HERE
THE LIGHT DEFINES
THE CONNECTION
TOGETHER OF
THE WALLS.
WALL AND
VOLUME - WANT
TO KEEP SHARP
EDGES. ALLOW THIS
SHARP OR LIGHT
TO ENTER.



ONE MATERIAL DEFORMS
TO ACCEPT ANOTHER MATERIAL
A THIRD MATERIAL (STEEL MORE)
MARKS THE CONNECTION.



SCARPA - CONNECTION CORNER,
WALL, GROUND CUT OUT EXTRA

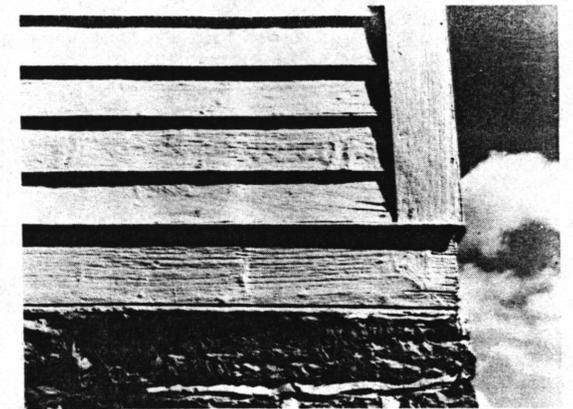
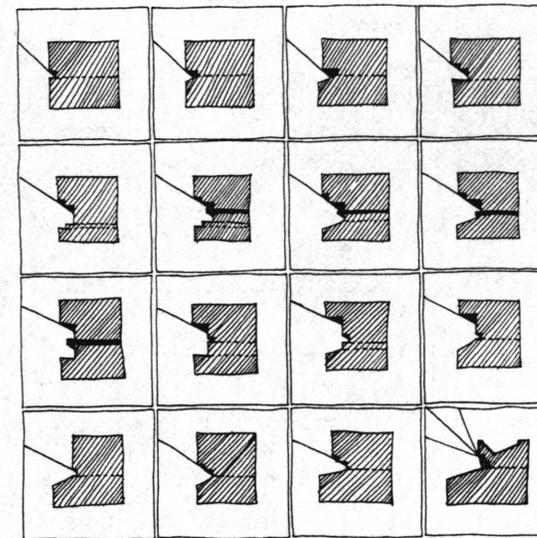
MATERIALS ARE CONC/BLK
FLOOR/WALL
LIGHT/DARK
11 FEB 86

and to see concrete or glass or metal. See each for itself and all as themselves. Strange to say, this required greater concentration of imagination. Each material demanded different handling and had possibilities of use peculiar to its own nature. Appropriate design for one material would not be appropriate at all for another material." (Wright, An Autobiography, p. 148)

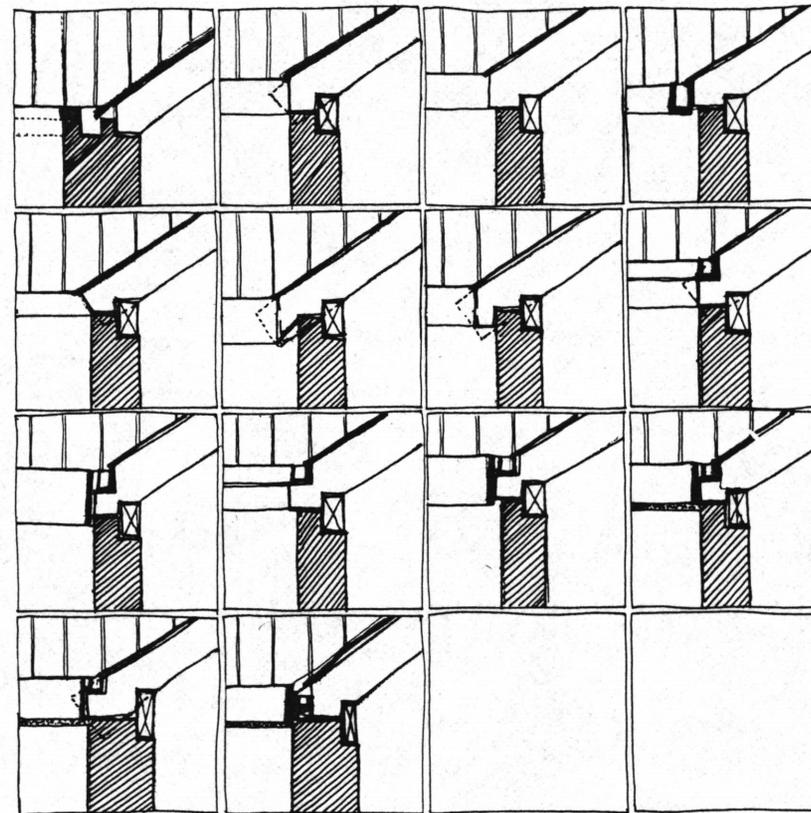
This proper use of materials is the concern of the order of assembly. We must know how to use a material to be able to design a building.

A detail combines the understanding of the material with the ideas which remain inherent in the language. It contains an understanding of the whole and presents it at a different scale. As a connection, the relationship of part and whole is transformed into a physical reality capable of joining two or more materials. An understanding of how form is created demands that materials be connected in a certain way. One material is conceived as the framework that accepts another material and so creates a new whole. Assembling these elements in this way creates a meaning that did not exist prior to our making it. In this instance, when two or more parts are put together, something is created that is greater than the simple addition of the parts.

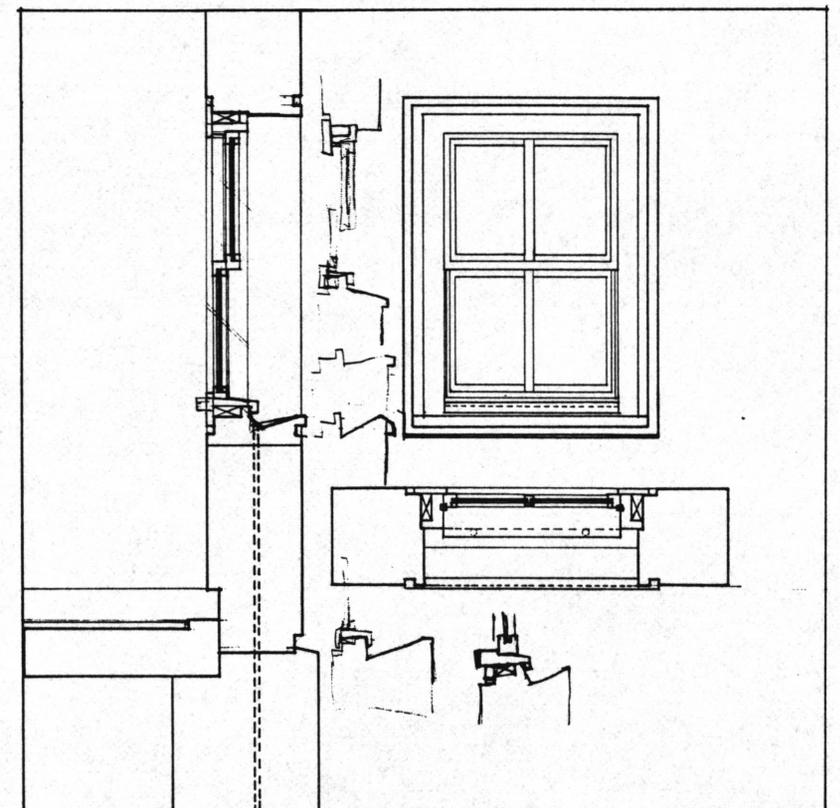
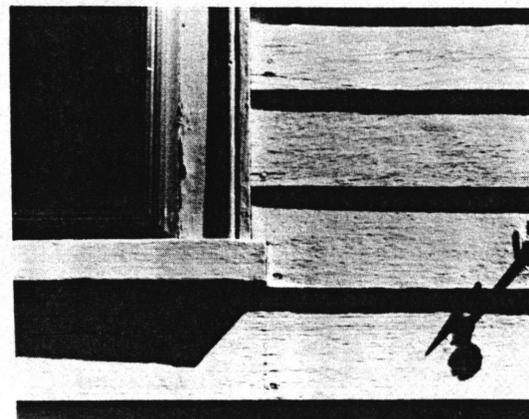
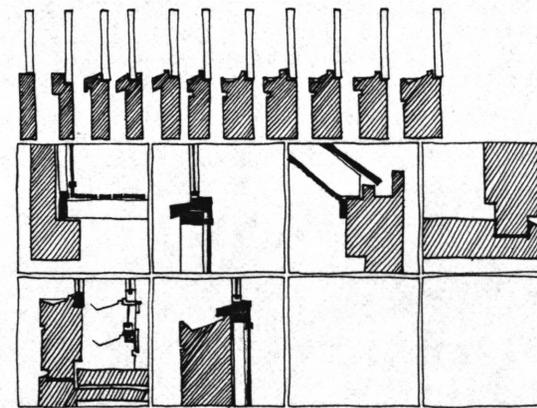
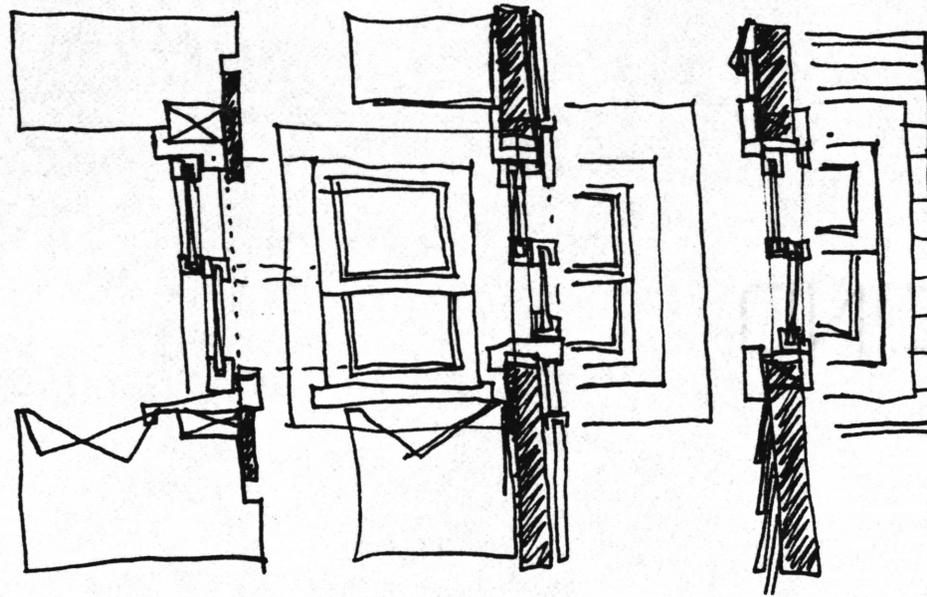
A detail can be designed through ideas of assembly as well as from any other order. The order of assembly suggests how a connection is to be made through practical concerns; keeping out rain, snow, or wind. This gives the connection a certain inherent



Ellett Valley foundation detail.
Exploration of connection of wall to foundation, concrete, light.



Ellett Valley roof detail.
Exploration of connection of wall to roof.



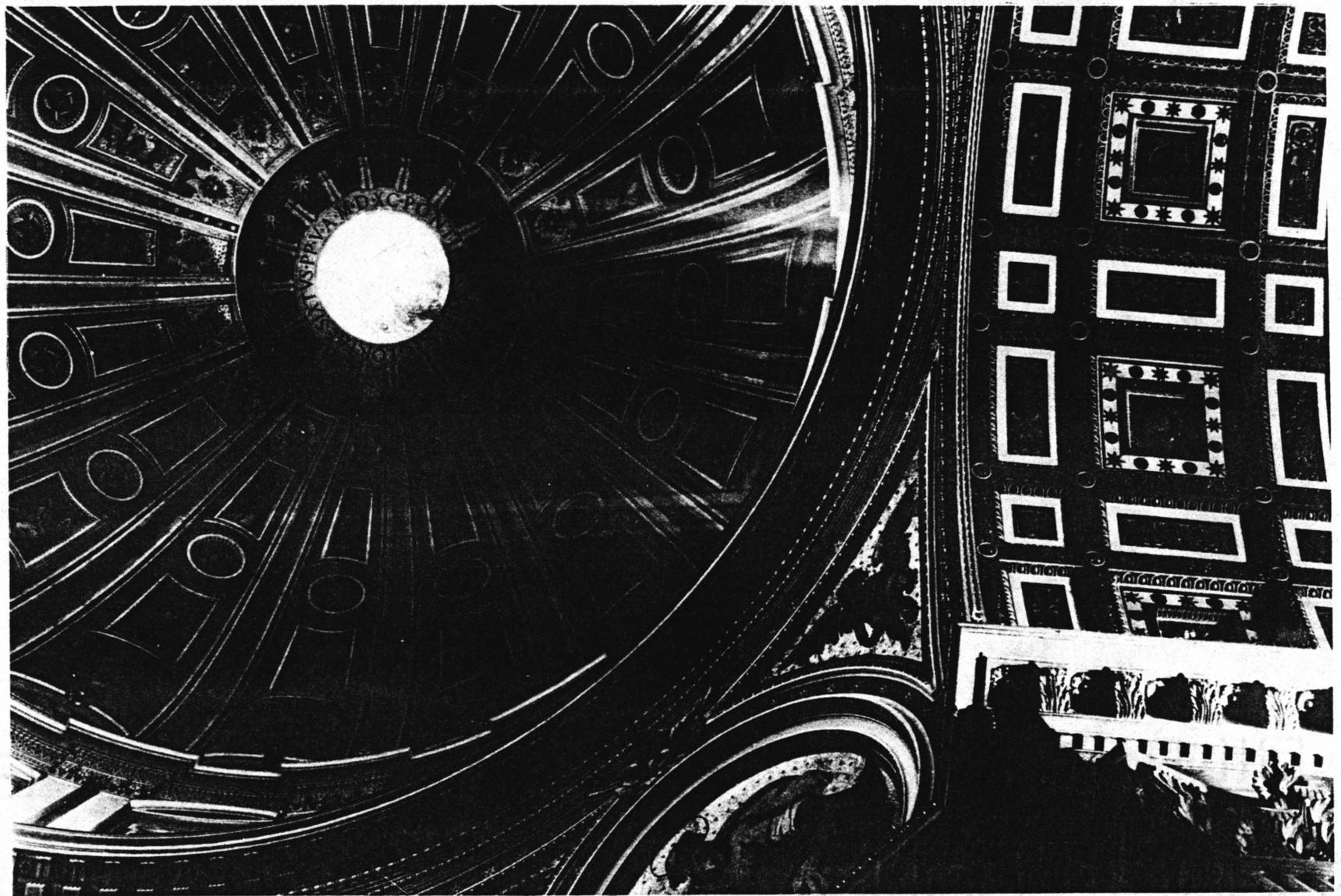
meaning although other meanings can be added to this. The detail may, for instance, be derived from the order of the site or from the order of proportion. It is rare that a connection have only one layer of meaning.

The window detail uses all of the orders I have mentioned. It is derived from existing window details found in the area, it corresponds to the proportional system in use, it is thought of in terms of a certain relationship of part and whole and, finally, it sets forth an understanding of a condition of man. (In this case, the window collects water as it moves from sky to earth thus making apparent man's place in the world). The detail also attempts to solve other criteria of a window by letting in light, controlling ventilation and providing a view. The window is just a single part of the building yet contains many layers of meaning; it is an expression of language.

Exploration of window detail.

Order of Architecture

Through the different orders of architecture, many layers of meaning can be given to a work. As a giver of meaning, Architecture can be seen as a language which is different in its means of comprehension and expression. The language of architecture demands that the world be perceived through built form. Man builds to make a place for himself which enables him to define himself as man. Although architecture is not the only language to use built form as a means of presentation, it is the only



St. Peter's Cathedral, Rome.
La Tourette, France, Le Corbusier.

"An object, one day, failed to fall. Alone of its kind, it remained suspended there, a yard above the ground.

No one understood this at all. They built a temple around it."

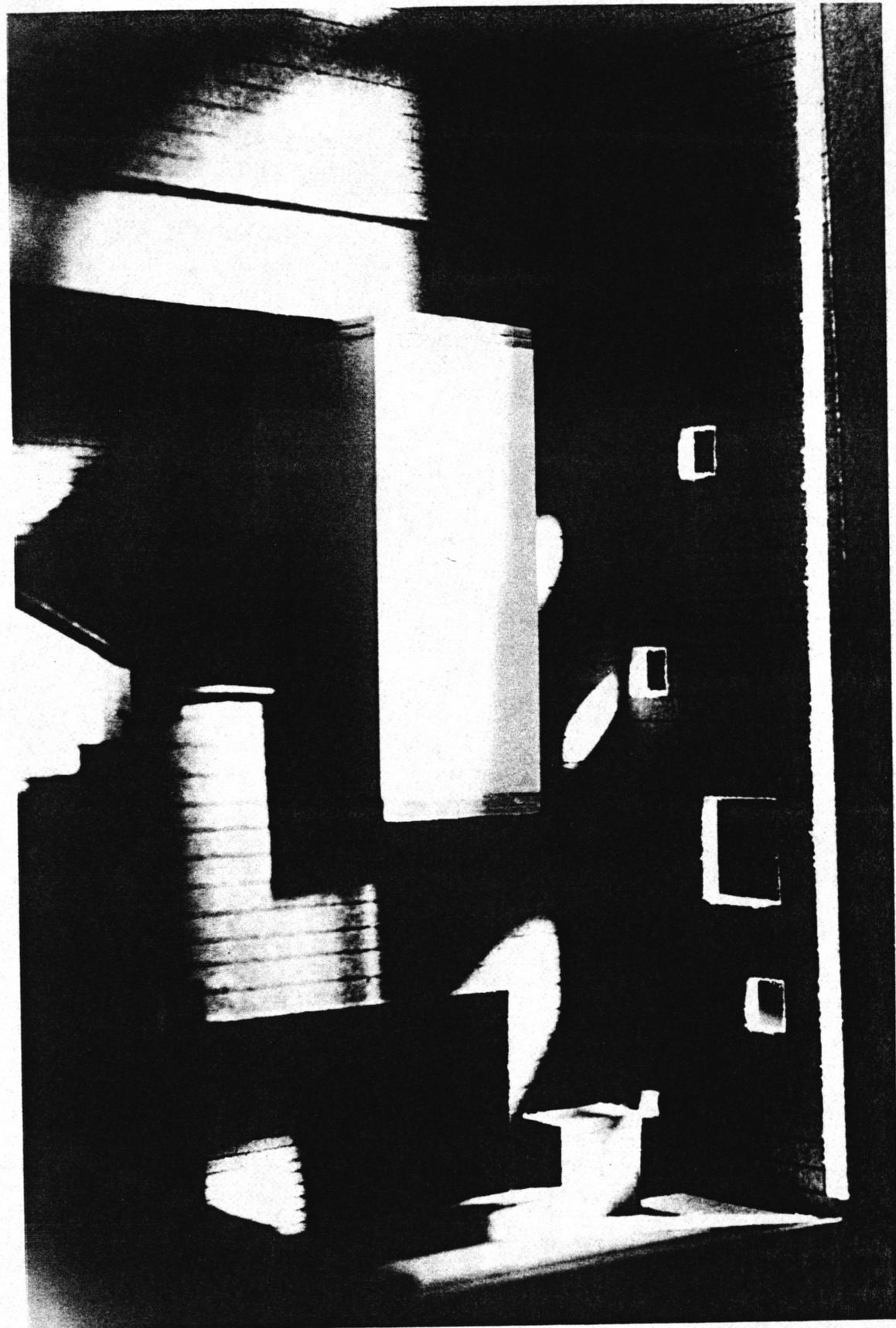
Paul Valéry
Analects

one that encloses and shapes space on such an overwhelming scale. It is also unique in how it uses light and time as an integral way of revealing itself. Both of these elements can be thought of as tools which the architect can try to control.

Light enables us to see both physically and metaphorically. For Le Corbusier, this was the most important part of a definition of architecture: "Architecture is the masterly correct and magnificent play of masses brought together in light." (p. 31) In one sense, light is a form of energy that is registered by the eyes and allows us to see. However light also occurs when one sees with the mind to attain enlightenment. Light in this instance, means understanding. In Le Corbusier's definition, then, Architecture is created by the arrangement of masses in the light of the sun and through the light of understanding. Both types of light are necessary to present a work of architecture.

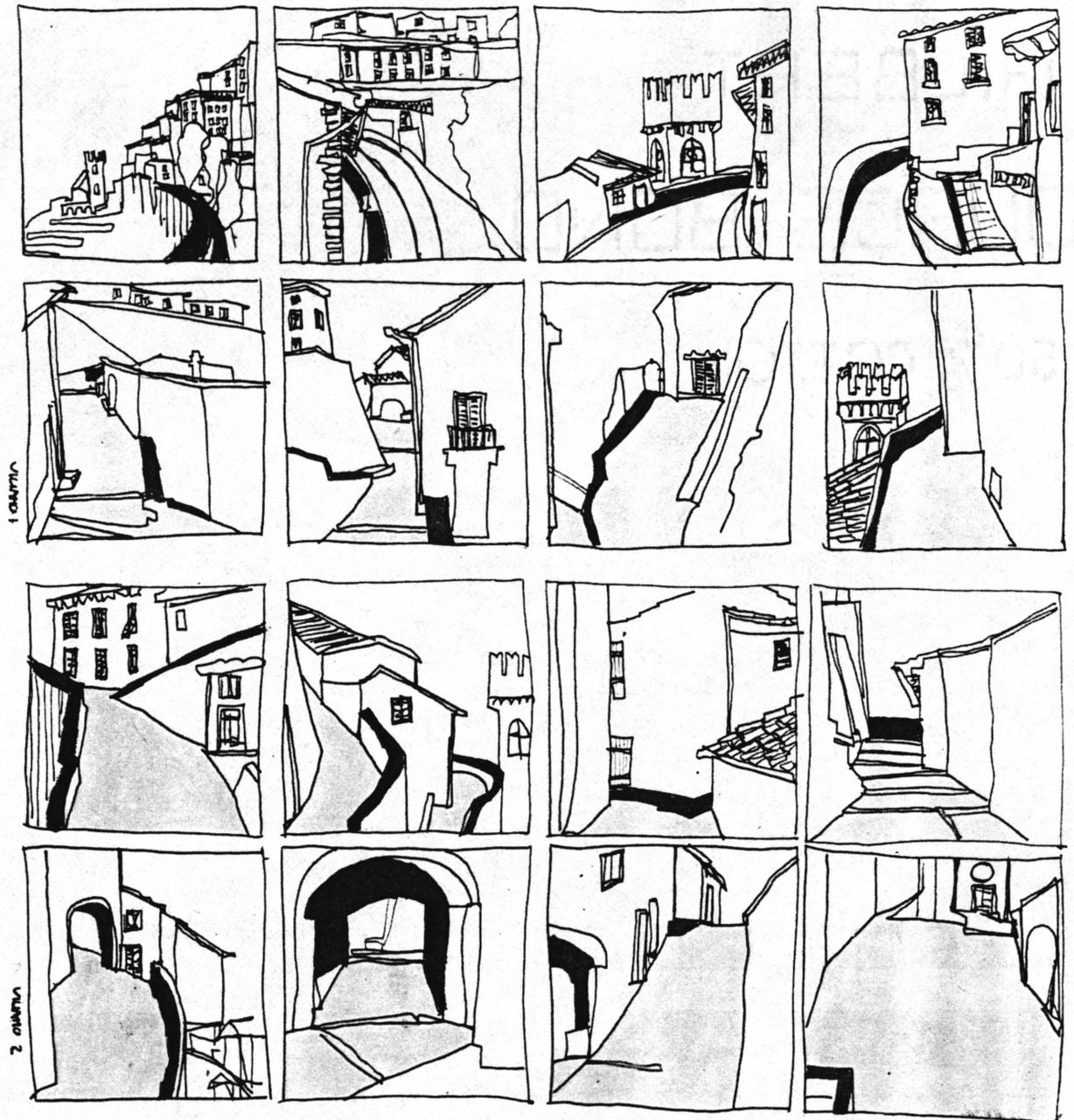
Architecture then, needs light to present itself but it also makes use of time. Time can be thought of in a number of ways. In terms of movement, our body is able to change position in space as time progresses. We do not have to stay in the same place all the time. This is important because we can rarely understand a building completely from one vantage point. We must move through the building, experience the different spaces it contains, and examine the relationship of its different parts. As time passes, we begin to discover the meanings inherent in the building.

Also, as time moves on, the building

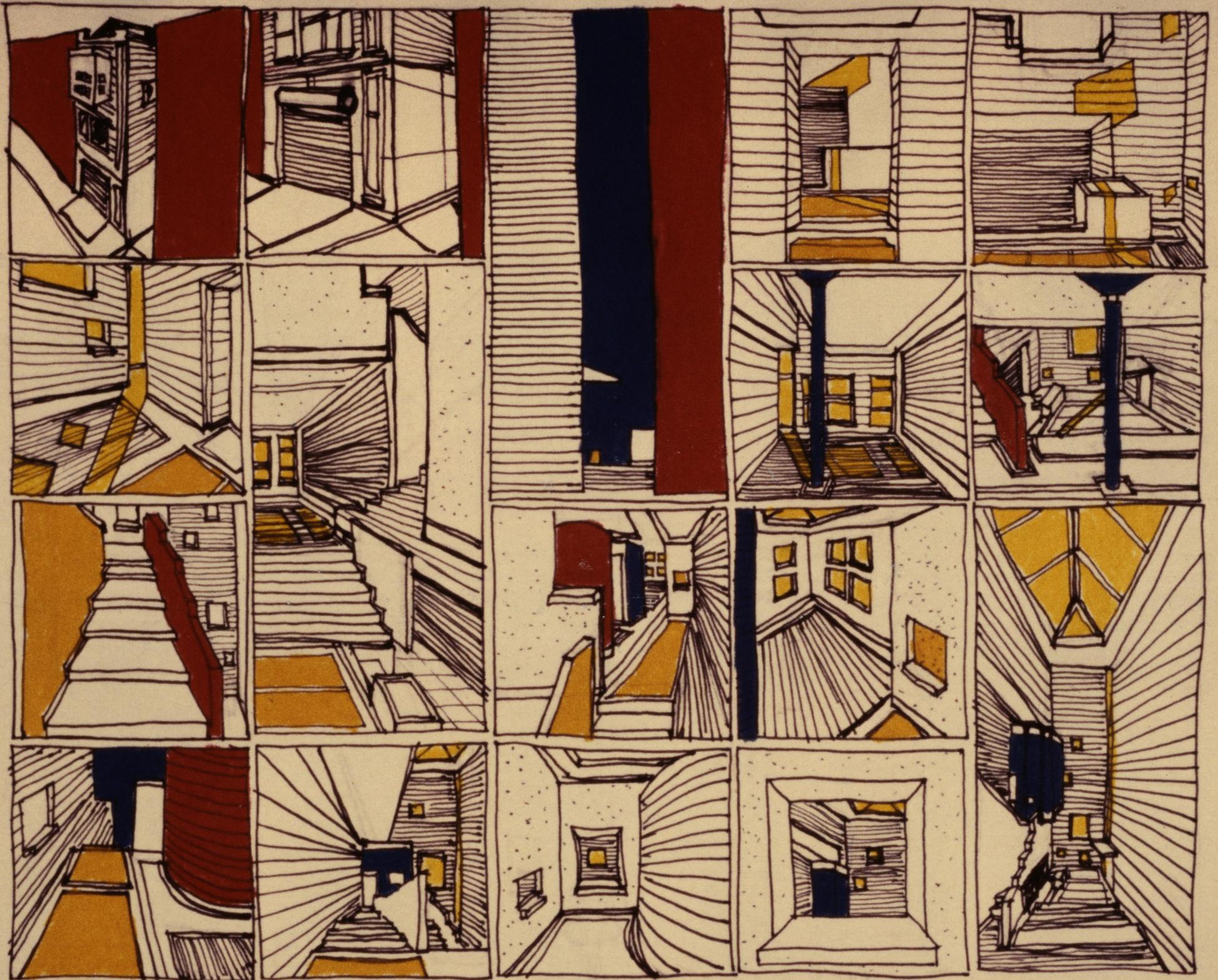


Urban project. Light.

itself slowly changes. Throughout the course of a day, the sun moves across the sky, changing the way that light strikes the earth. If a room has light entering it from outside, the character of the room will change as the light changes: a room is a different place in the morning than it is at night. As days and years go by, the entire building itself undergoes changes. Materials will weather and plants will grow, changing the appearance and the experience of the building. The designer must be able to anticipate these changes so that he can account for them in his design. If he does not do this, the way the building is ultimately realized may be far from his original intentions.



Vilano, Italy.
Progression through town.



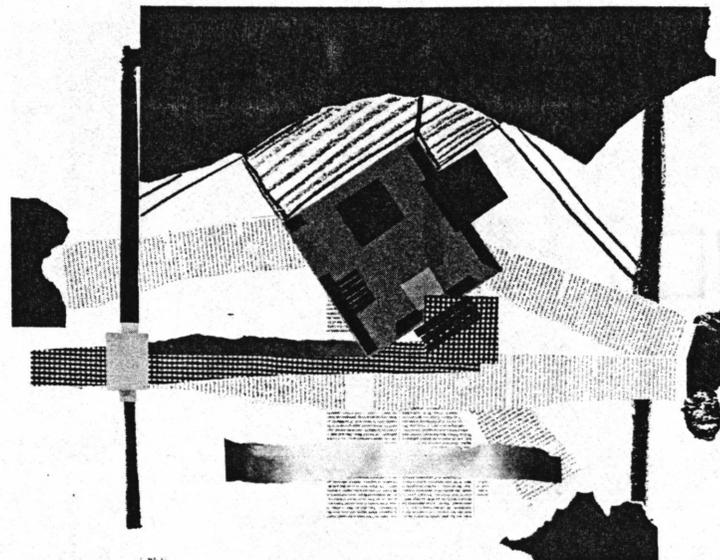
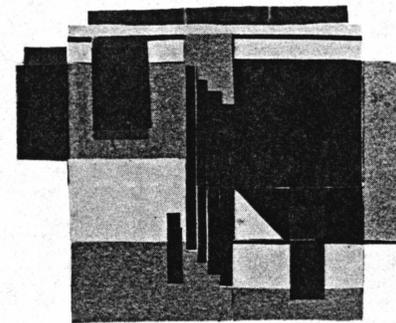
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Projects

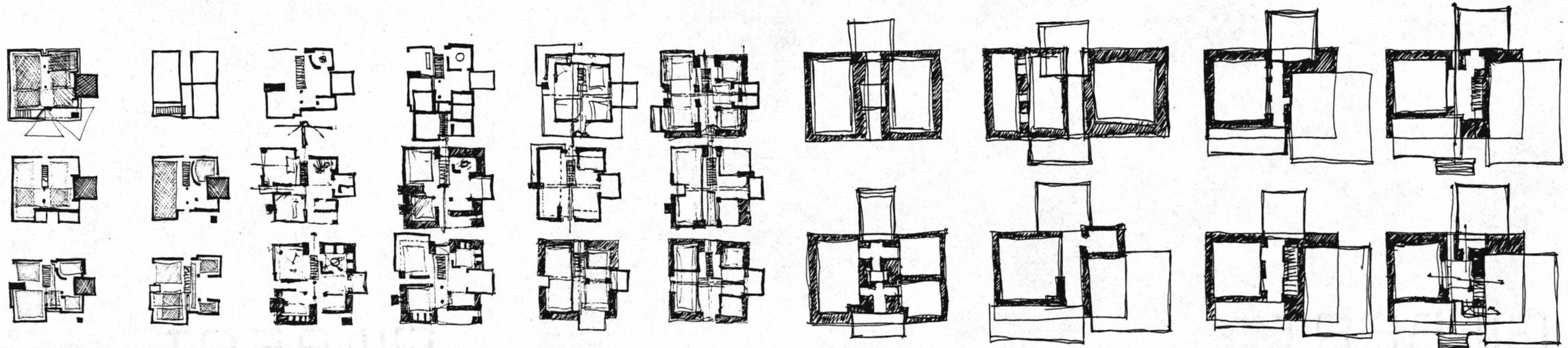
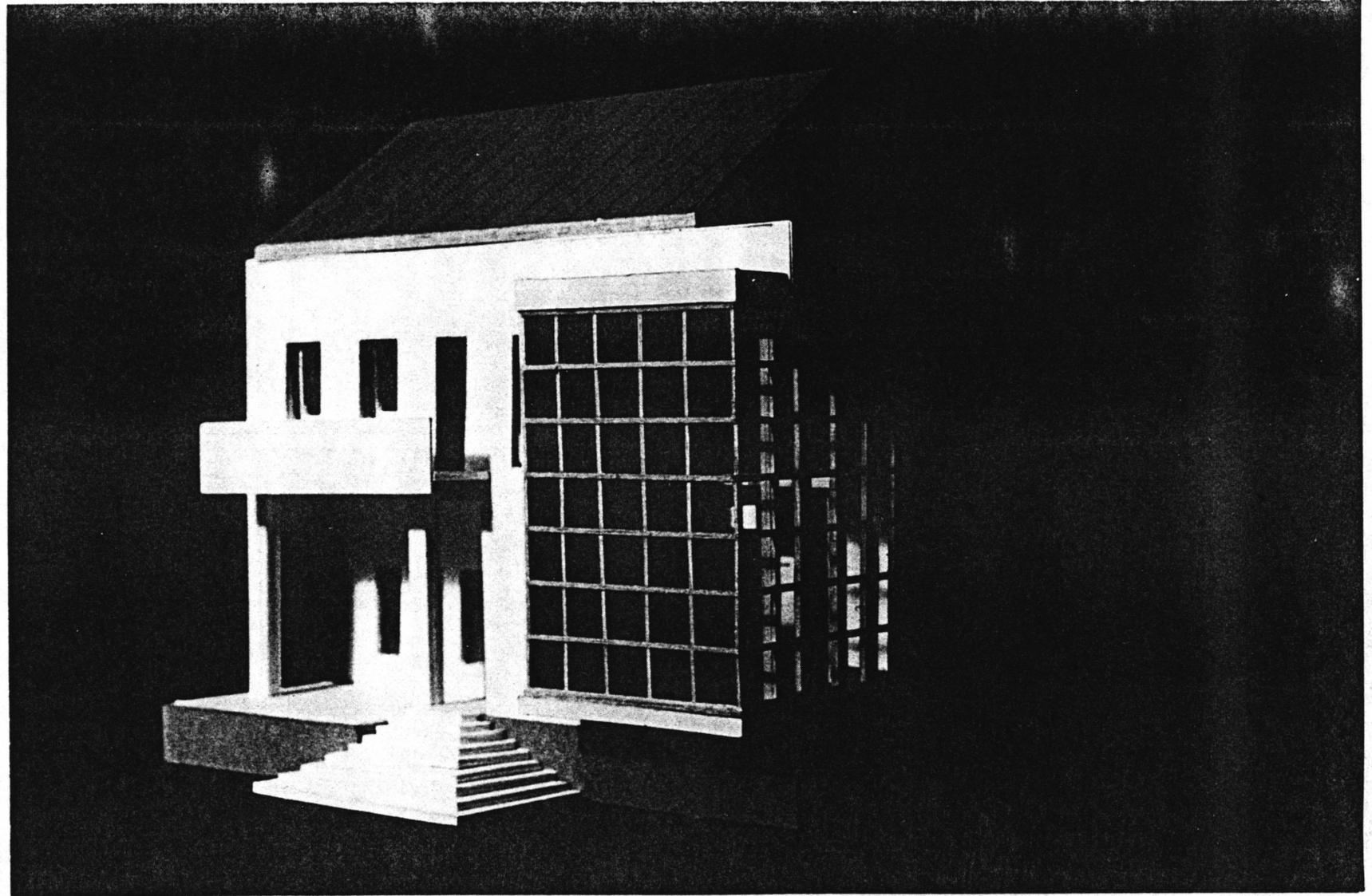
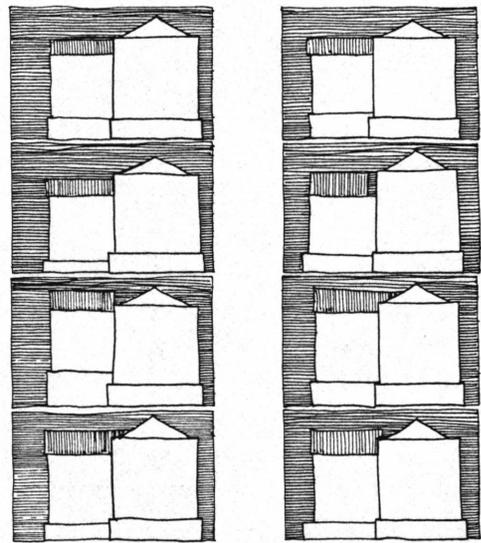
I have used two projects to present certain ideas about architecture. The drawings that present these projects are not architecture in themselves but simply express architectural ideas in a certain form. I use different kinds of drawings throughout the design process to present ideas in a variety of ways. The first type of drawing takes the form of visual notes to myself. I use this format to record ideas and to help me see things in a way that is meaningful to me. Color is used in these drawings as a way to clarify ideas, add graphic coherency to each page, and to force me to look again at what I have drawn.

The second type of drawing I use to explore options and to develop various ideas. Through this medium, I can test different ways of solving a problem and also look at existing solutions to similar problems. Here, I put ideas into a less personal form that allows me to look at the possible solutions and to compare them more objectively.

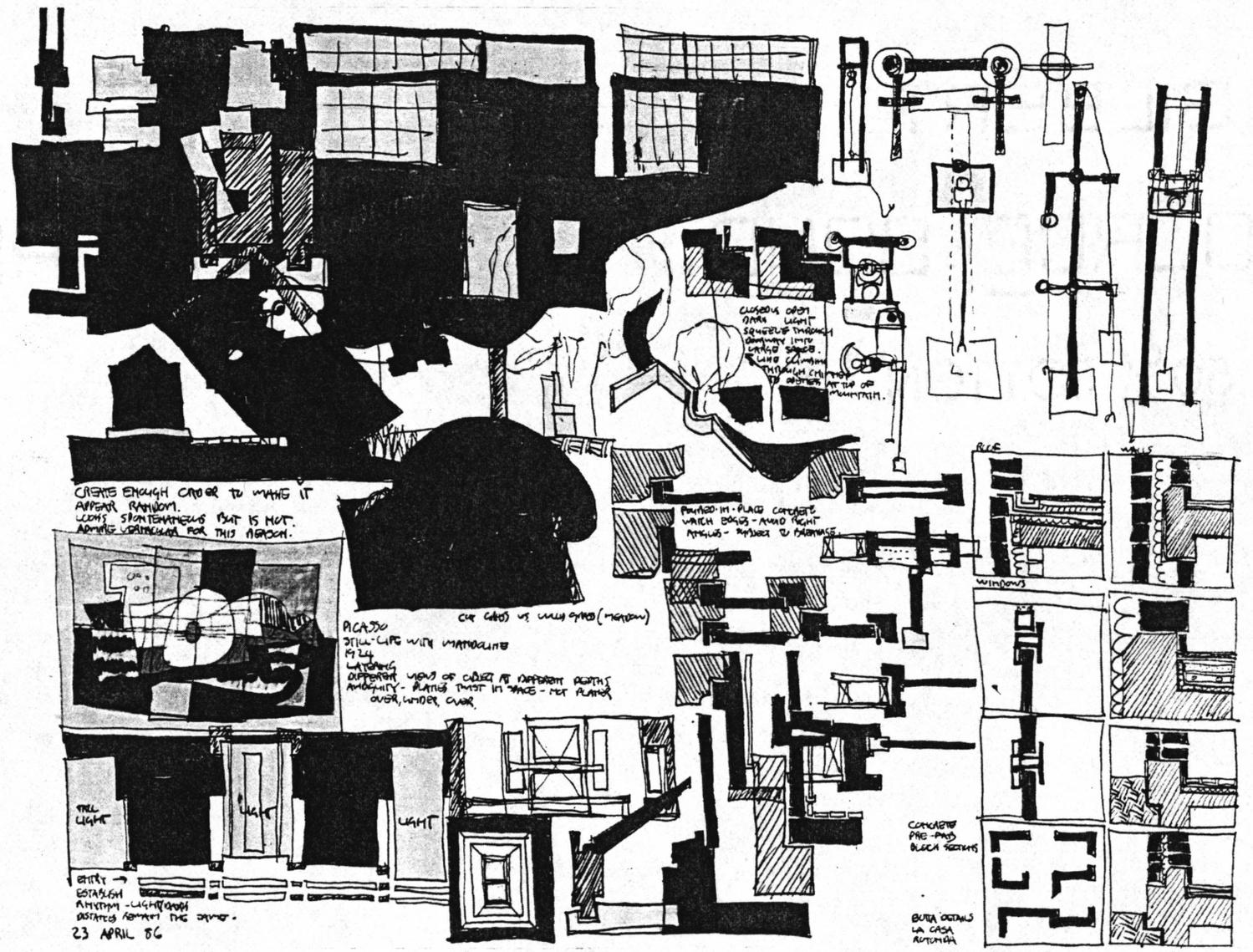
The final drawings present the project at stages in which ideas are more fully worked out. These drawings are done in a manner that is commonly accepted as a way to present architectural ideas. Plans, sections, elevations, as well as axonometric and perspective drawings, are the ways that architects communicate with one another.

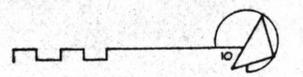
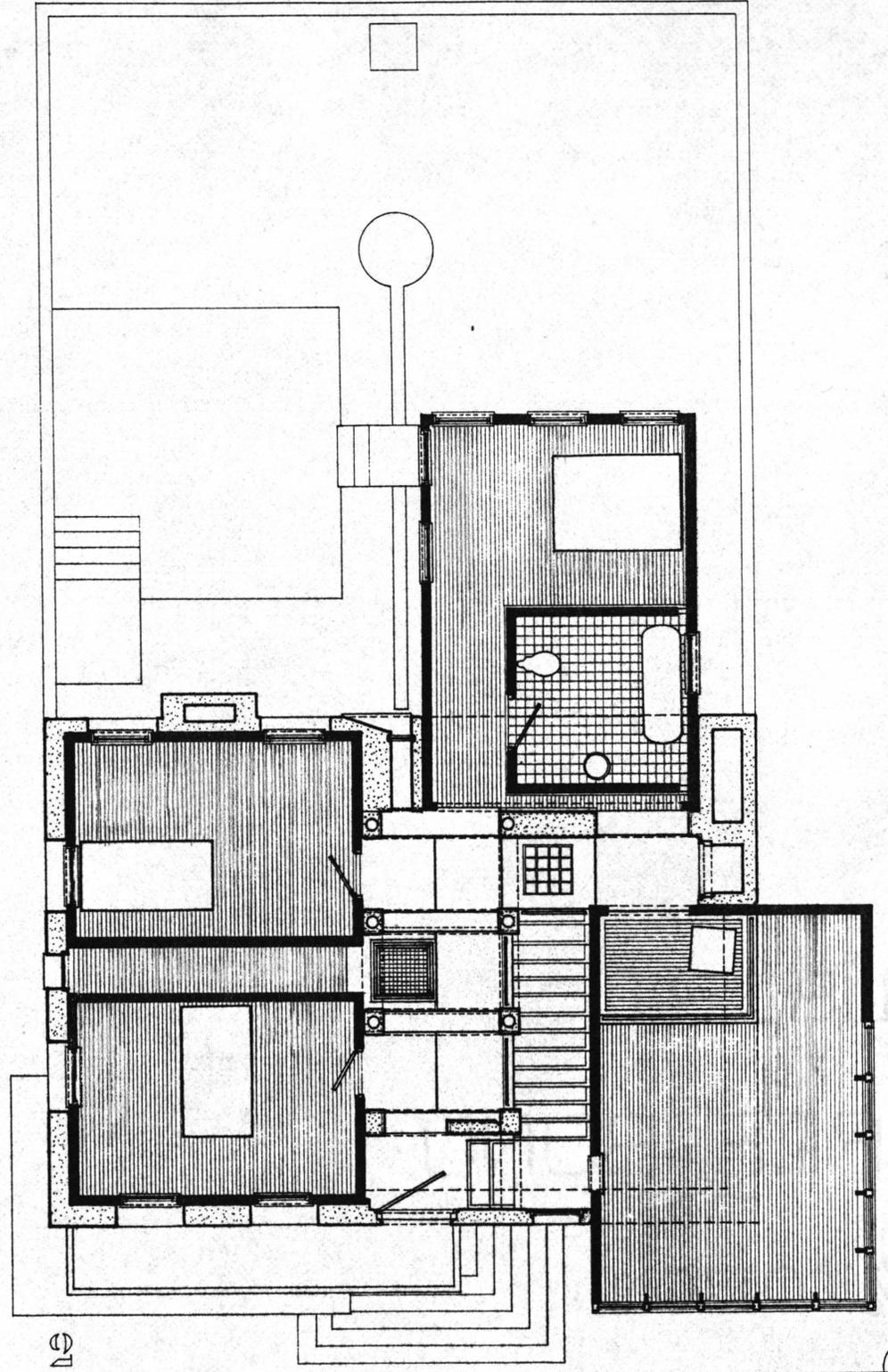
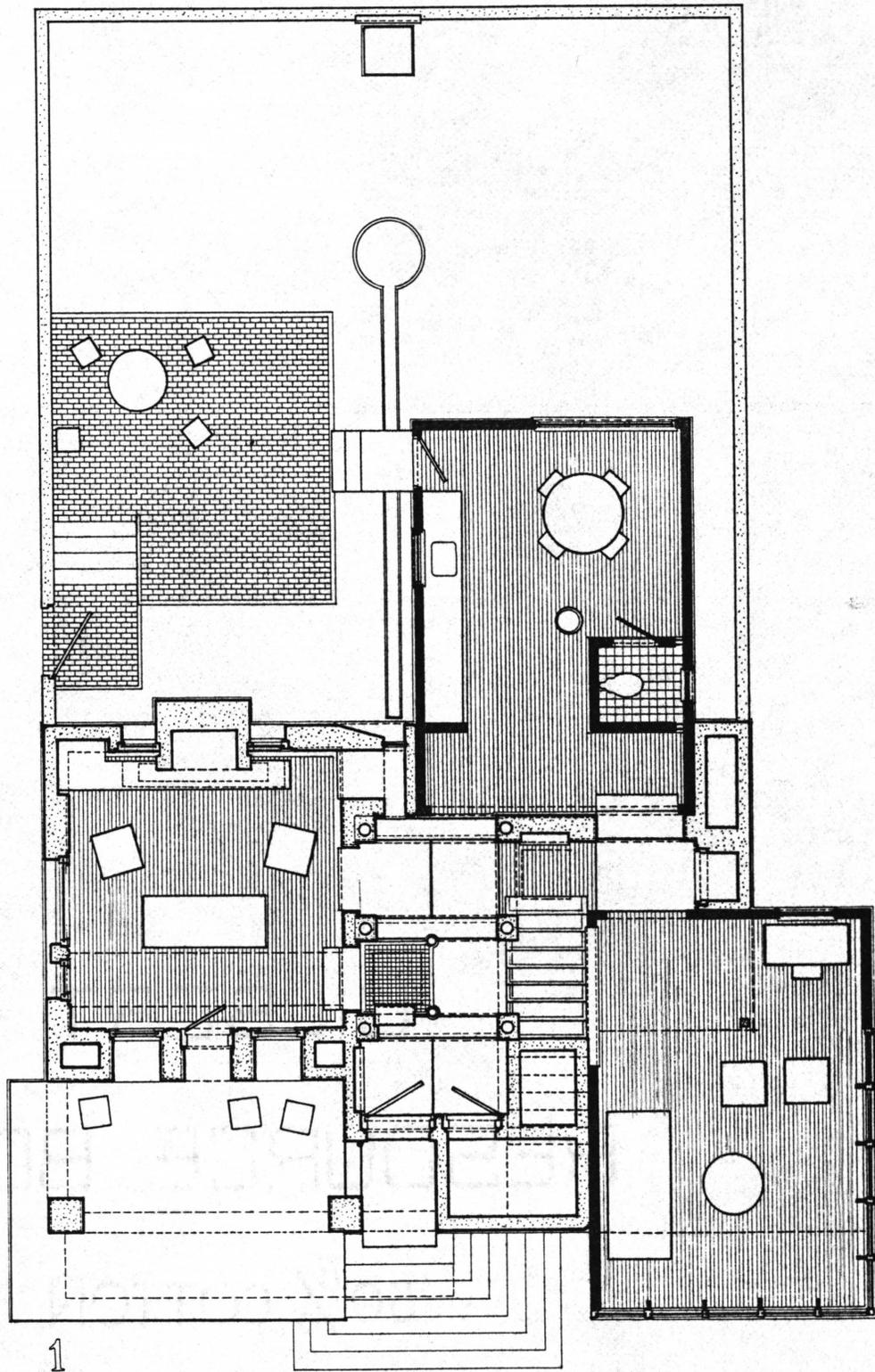


Rural Project



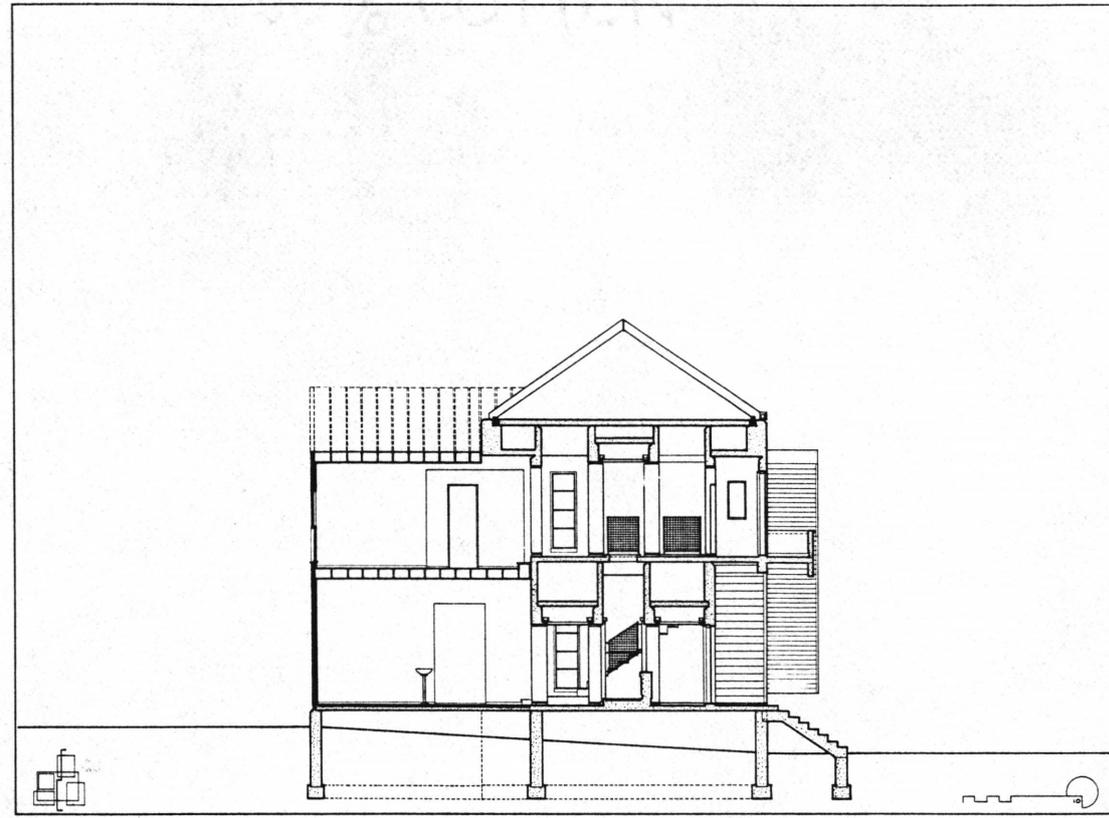
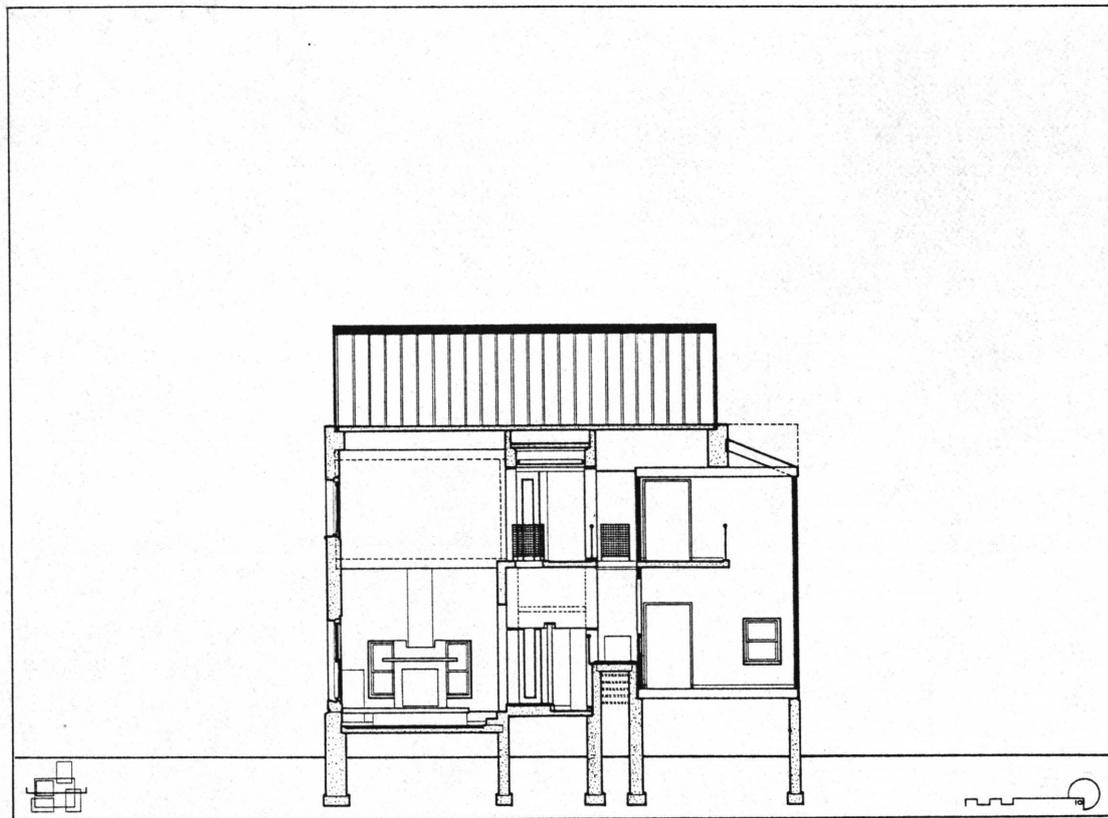
- The Six Essentials (Lu Yao) of Painting.
 "In the Sung period, Liu Tao-Ch'un said:
 1. Action of Ch'i (breath, spirit, vital force of heaven)
 powerful brushwork go together
 2. Basic design should be according to tradition.
 3. Originality should not disregard the li
 (the principles or essence) of things.
 4. Color (if used) should enrich.
 5. The brush should be handled with tzu jan
 (spontaneity).
 6. Learn from the masters but avoid their faults."

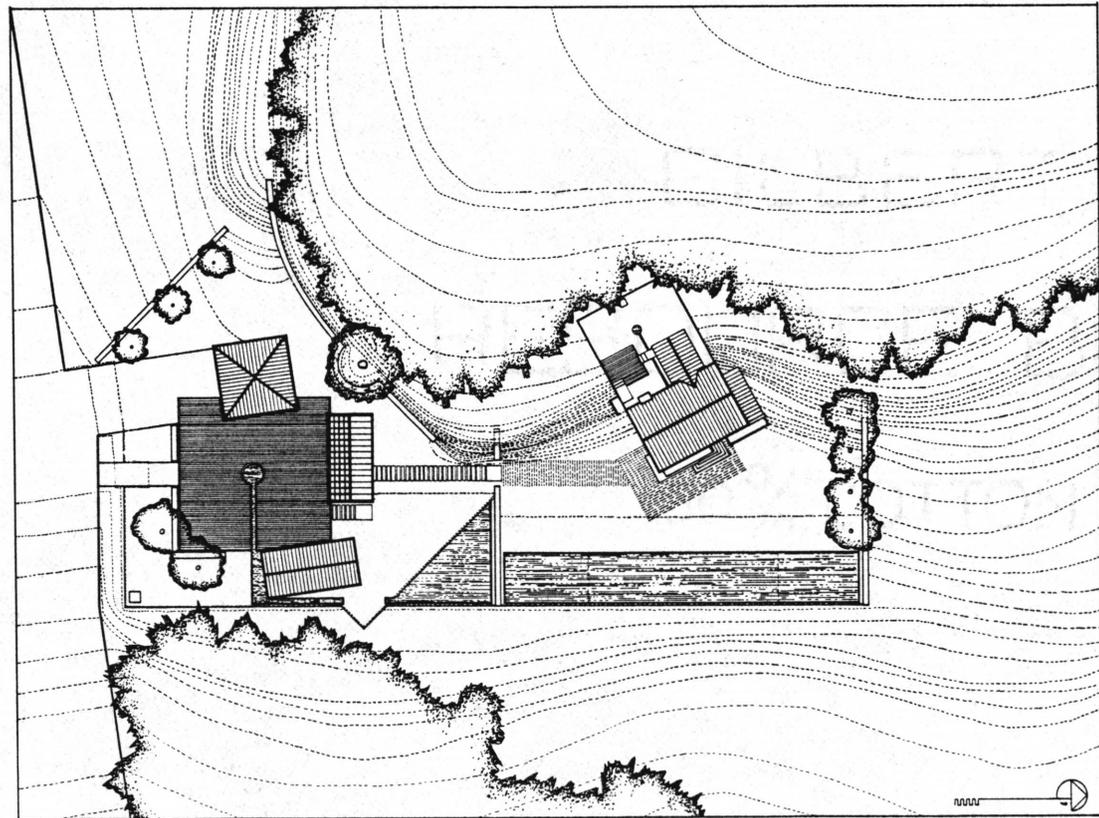
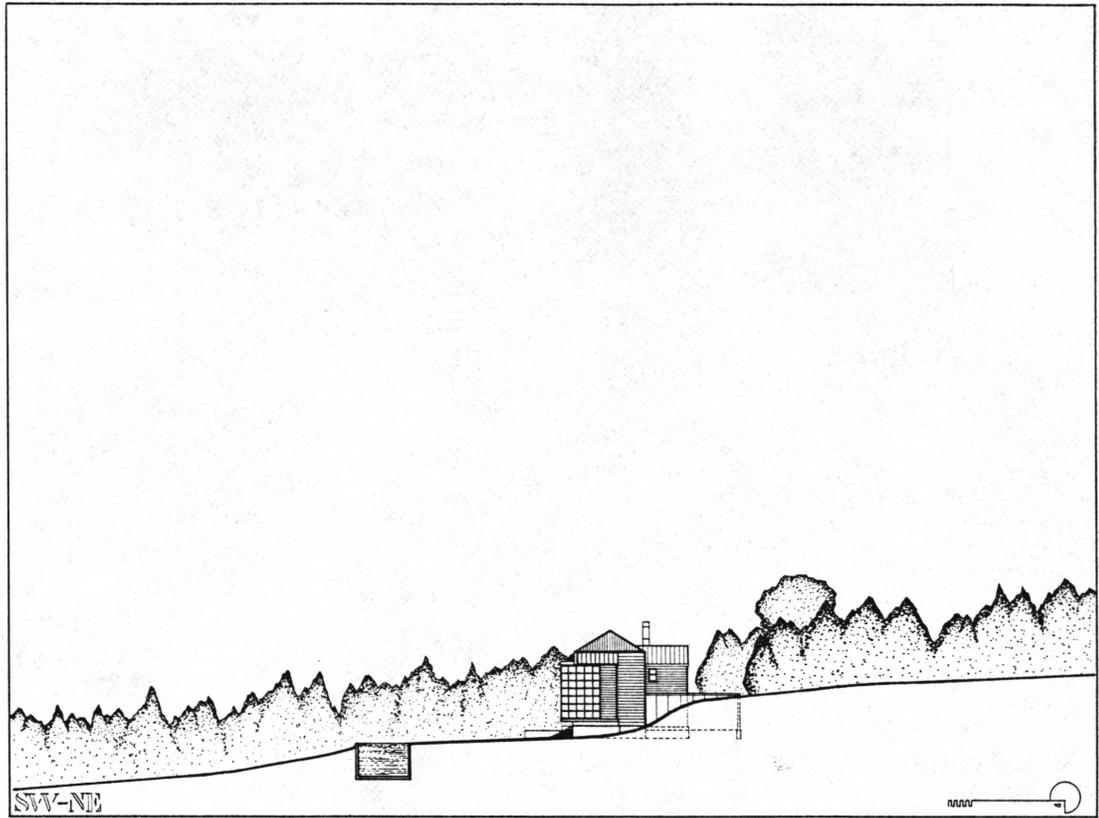




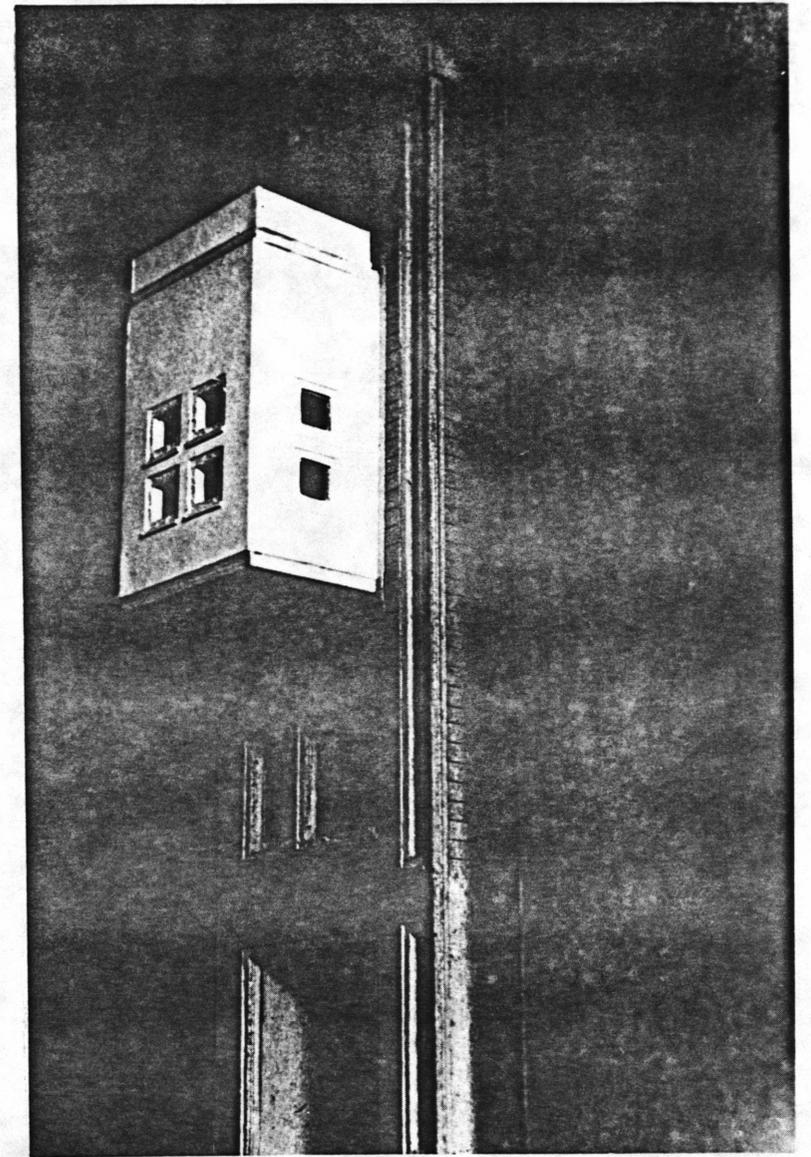
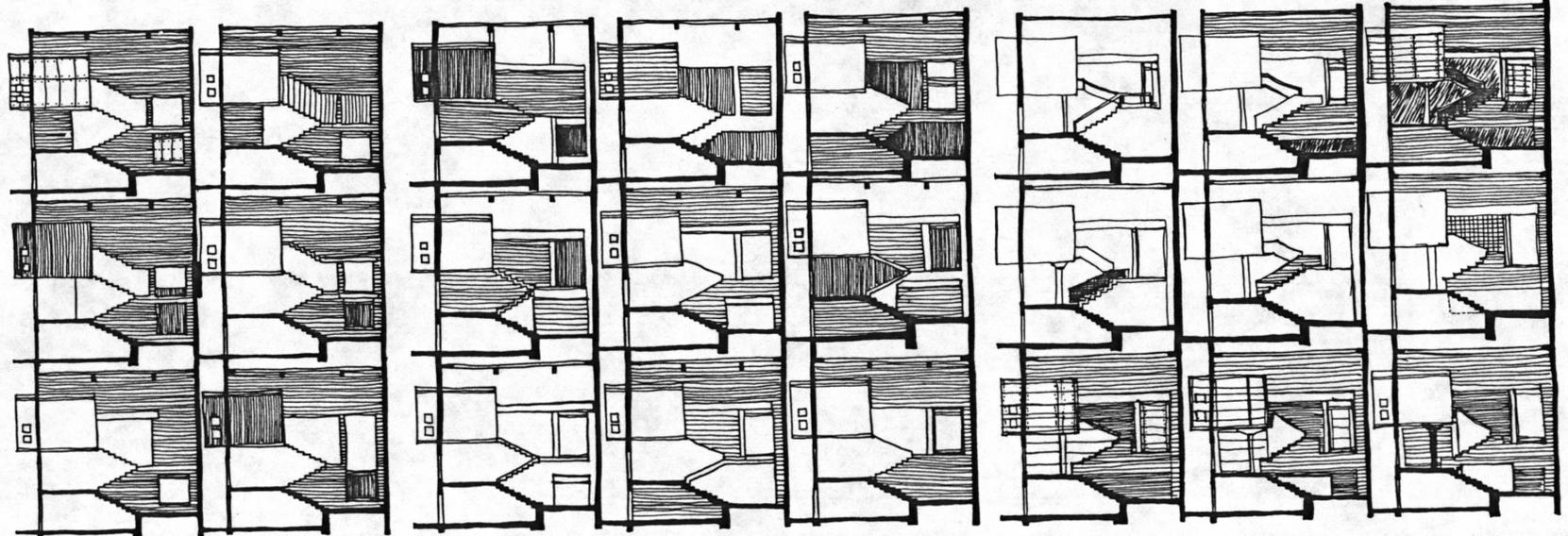
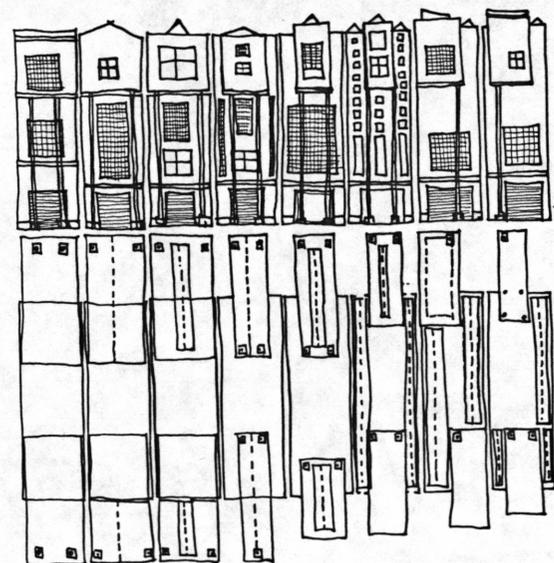
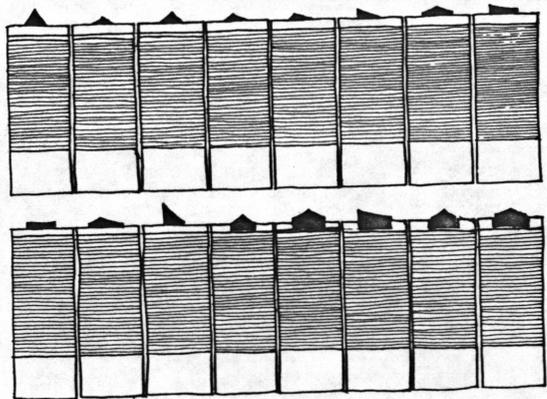
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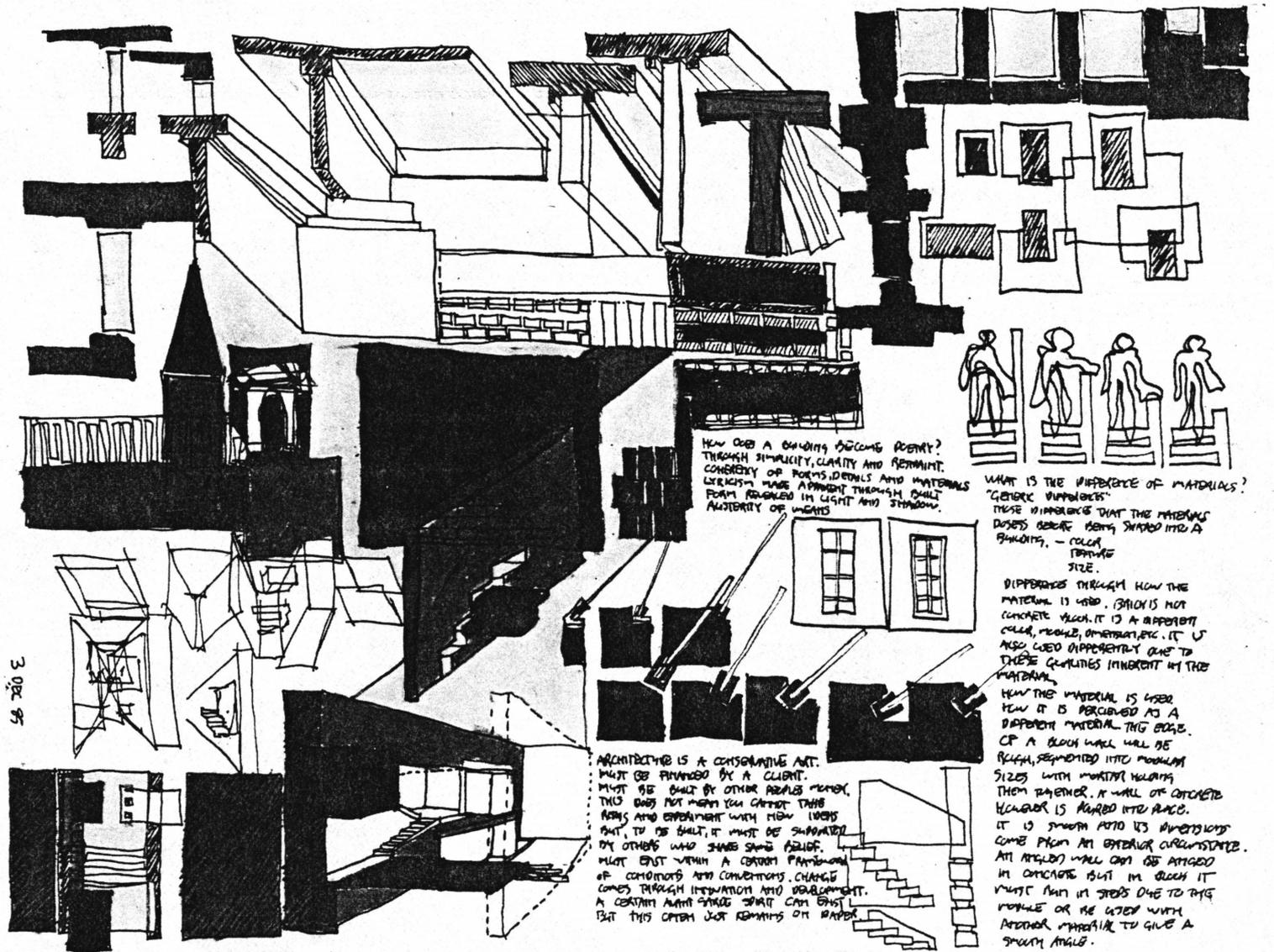


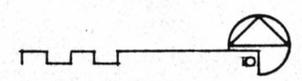
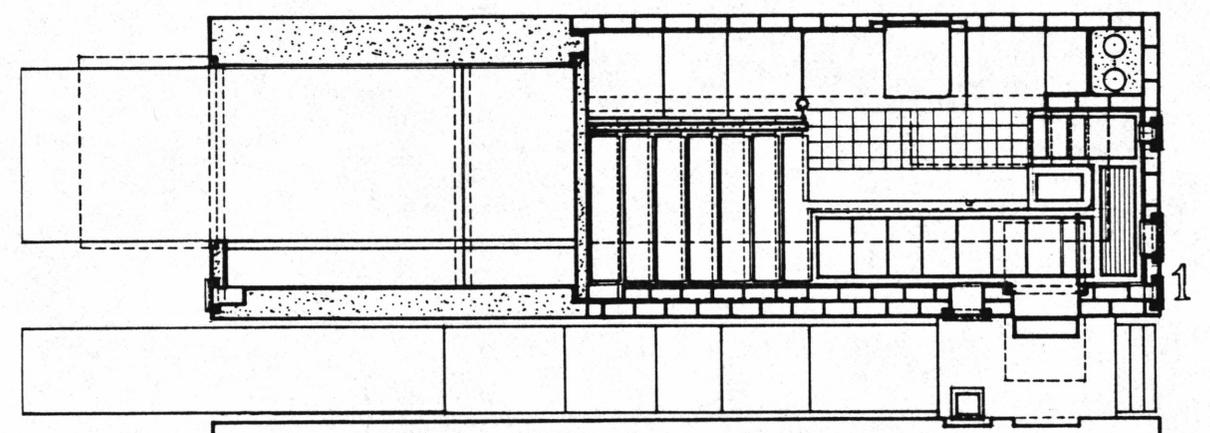
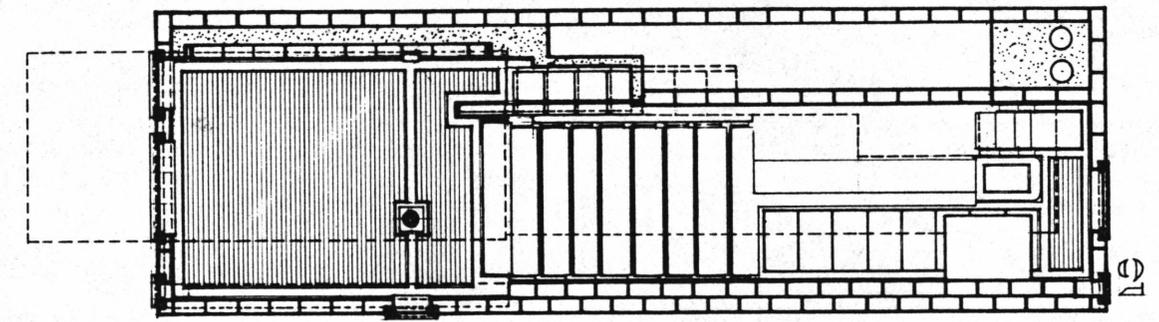
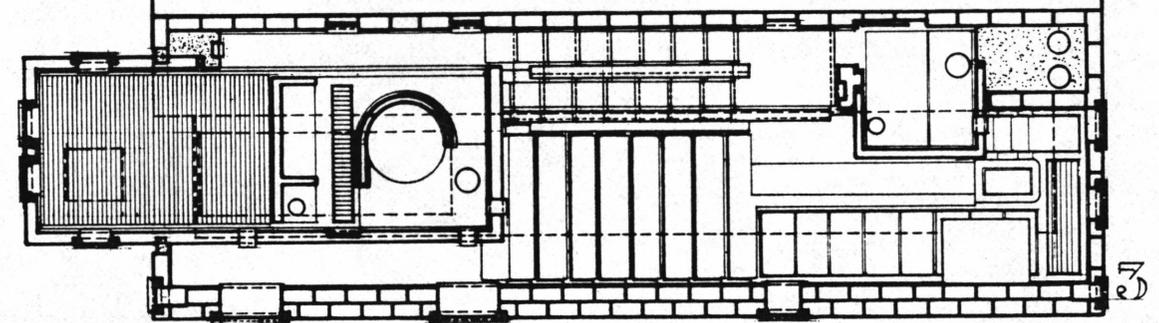


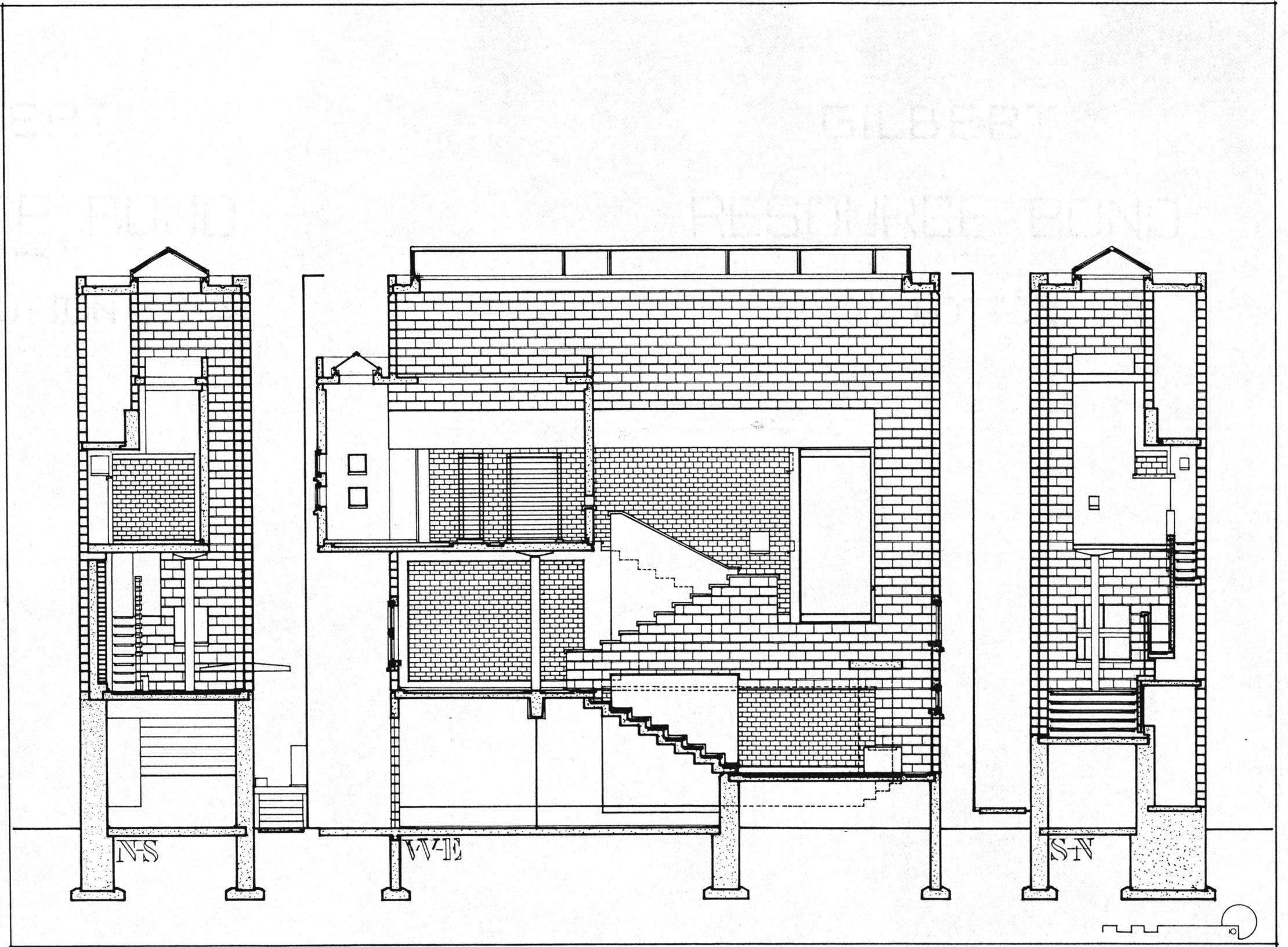
Urban Project



Aesthetic judgement comes from the production process. Each step of the process should become more ordered. Decisions—judgements—are made in reference to previous production. Order comes from what has come before.

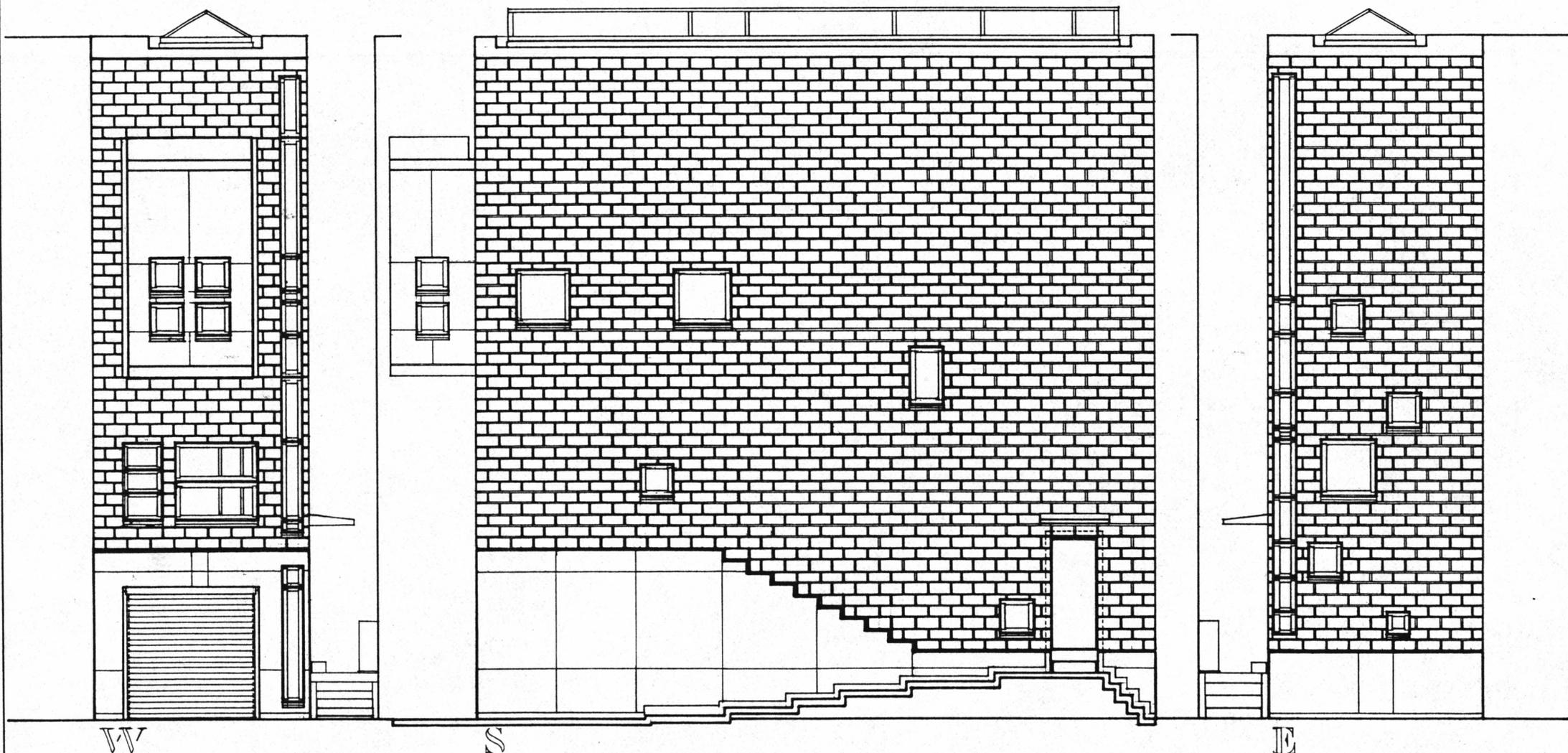






GILBERT
SURF BOND
50% COTTON

GILBERT
RESOLVED BOND
50% COTTON



The Search for Modernism

At the present time, we are in a period that has been given the label "post-modern." It is a period of doubt and of change. The institutions that we have for so long accepted are being questioned. As in similar times throughout history, the arts are no longer being called upon to challenge our conception of self and world, but instead are concerned with establishing a comfortable relationship with the surface of the past and the present. Art is less of a meaningful event and more of a commercial commodity. In this way, art is attempting to gain legitimacy through its own existence, through a popular opinion of what can be defined as "good." (In using the word "art," I am referring to all areas of creative searching - architecture, painting, literature and so forth - which are indicators of a larger whole). This inward looking narcissism is a break in a forward-moving progression of thought that is commonly given the name modernism. (Foucault refers to this break not so much as an interruption but as a mutation).

Modernism has occurred at different

points in the past and has been called by many different names but it has always been a time that looks beyond the individual self for legitimacy. It seeks legitimacy in a body of knowledge that, while hard to define, has existed for almost as long as man has been on earth. This knowledge, this "sensus communis" (Kant) is a standard of what is good - "the true, the just and the beautiful" - it involves a common understanding of what it is to be human. It refers the individual to what has come before him and what will continue after his brief life is over. It is not dependent on political situations or economic indicators but is instead part of an order in which the role of the individual is to reinterpret that which has already been stated countless times before and so reaffirm that which gives meaning to our lives. In periods of post-modernism we are less concerned with expressing the continuity of understanding and instead direct our attention inward to self-indulgences which result in times of nationalism, conservatism and complacency. In order to move ahead, we must look beyond ourselves to a larger

understanding of the world. This is what modernism attempts to do.

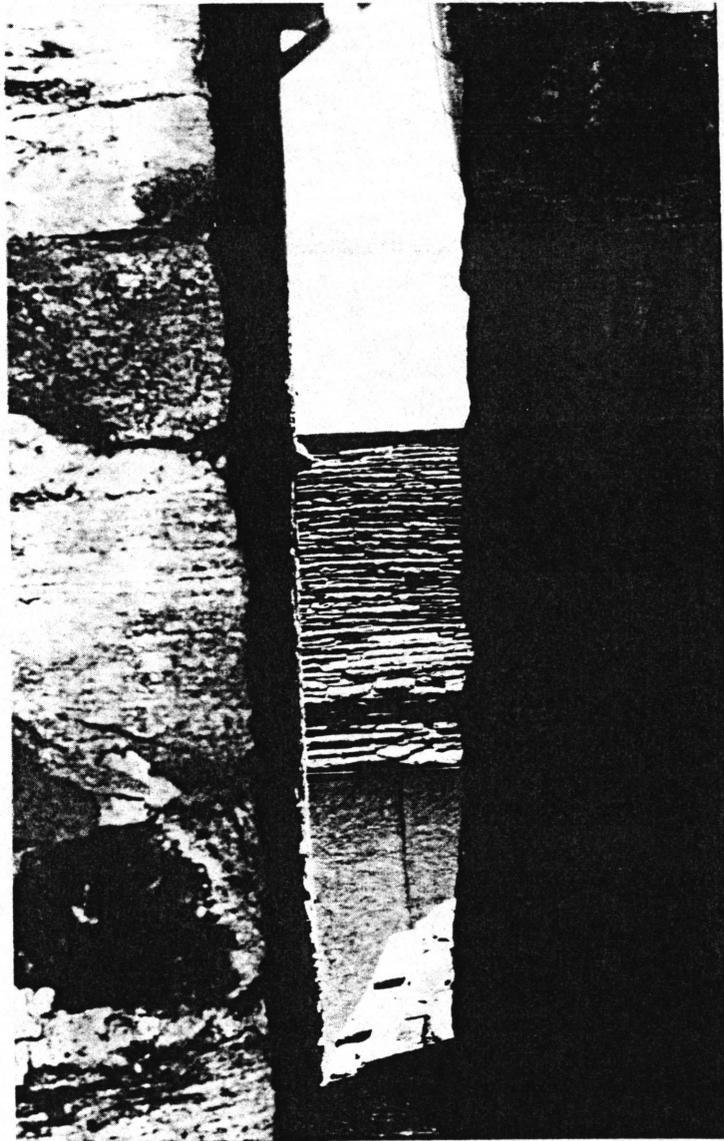
In architecture, modernism is manifested in experimentation and a concern for the expression of more purely architectural ideas in an attempt to present what is "true." In the work of the early moderns of the twentieth century, there was a common concern for breaking with the unthinking traditions of the past. These artists and architects interpreted old and new problems in a way that expressed a "new" architecture. This architecture had, at its roots, a clear understanding of material, structure and facture that made the building more important as a "presentation of the unrepresentable," (Lyotard) rather than say, as a "presentation of a bank in the Islamic style." This search for a greater understanding of architecture is the same search for the expression of that common knowledge that will provide the link with the past and with the future.

It is the search for, and the understanding of this knowledge that must contribute to a work of art in order for it to become truly meaningful.

Thoughts

11/11/11
GILBERT
SOURCE BOND
50% COTTON

11/11/11
GILBERT
RESOURCE BOND
50% COTTON



mountains of stone
from river to snow
watching
waiting
touched by man
stone becomes granite
shaped
formed
into streets, walls, roofs
cities of granite
mountains of stone

Corripo
15 July 1985

Tears

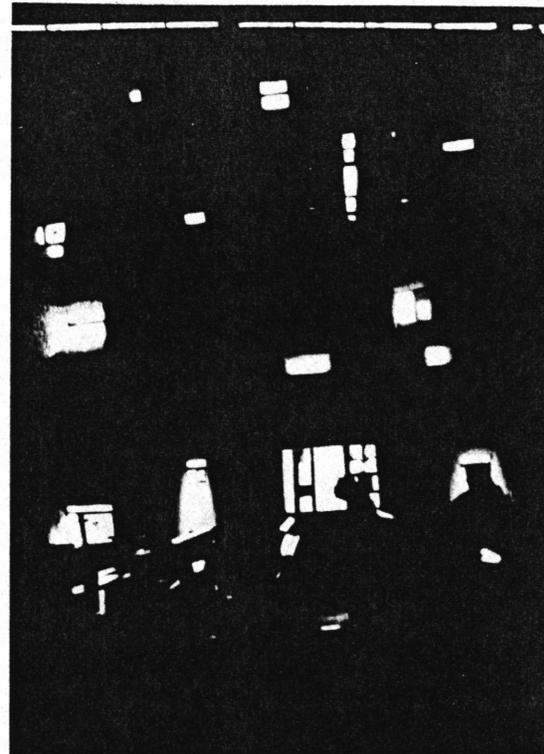
"Tears of various ranks. Tears arise from affliction, from impotence, from humiliation, always from a lack.

But some of them, of a divine species, are born of the lack of strength in the soul to support some divine object, to match oneself up to it, to drain its essence.

A story, a mime, a play, can make you weep by their imitations of the sorrows of life.

But if a piece of architecture, which visually resembles nothing human (or indeed any other harmony so exact that it harrows us like a dissonance), carries you to the edge of tears, this upsurge that you feel willed from your inscrutable depths is of infinite price. For it teaches you that you can be touched by objects wholly indifferent and profitless to your person, your history, your interests, and all the affairs and circumstances that circumscribe you as a mortal."

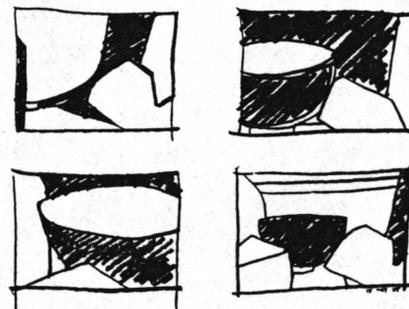
Paul Valéry

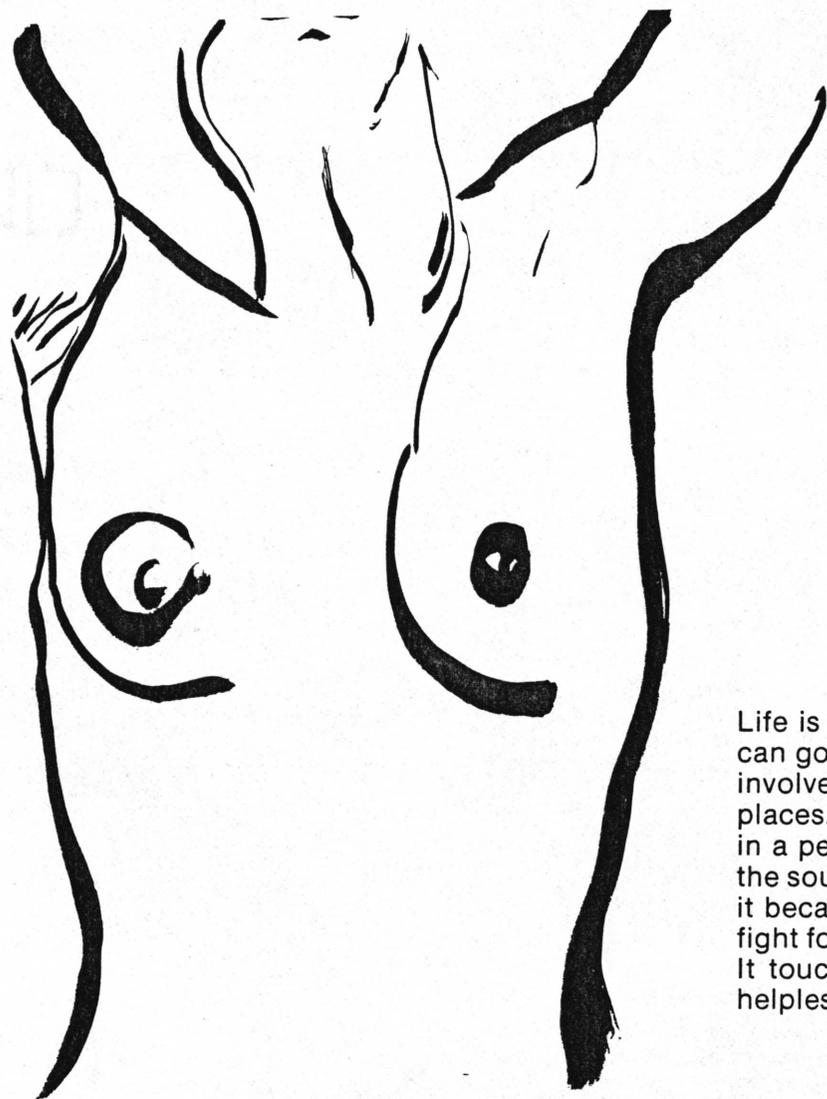


"....All of a sudden we see a dog, a cab, a house, for the first time. We are overpowered by the unique, the crazy, the ridiculous, the beautiful features of each object, the next moment habit, with its eraser, has rubbed out this vivid picture. We stroke the dog, hail the cab, and live in the house. We do not see them anymore.

This is the role that poetry performs. It unveils in the fullest sense of the word. It reveals, naked and lit by a light which arouses the mind from its torpor all the surrounding things by which we are surrounded, and which our senses registered mechanically."

Jean Cocteau





Life is spent in search of a dream or an ideal. This ideal can go by the name of beauty, goodness, or truth, but it involves the same search. Beauty can be sought in many places. In a building, sculpture, or painting, in a book or in a person. It is something that has the power to touch the soul. We may look all our lives for it and still never find it because it is so rare. If we do find it, we are willing to fight for it and to be beaten into the ground because of it. It touches us in a way we cannot control and we are helpless before it.

"I knew very well that a work is never completed except by some accident such as weariness, satisfaction, the need to deliver, or death; For in relation to who or what is making it, it can only be one stage in a series of inner transformations."
Paul Valéry

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