

DISTANCE IN ARCHITECTURE

George C. Criparacos

Bachelor of Arts in Architecture
Washington University
St. Louis, Missouri
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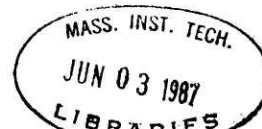
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Thesis supervisor

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DISTANCE IN ARCHITECTURE

by
George Criparacos

Submitted to the Department of Architecture on May 14, 1987
in partial fulfillment of the requirements for the Degree of
Master of Architecture

ABSTRACT

The document which follows represents an exploration of distance and its connection to architecture. This exploration is threefold. On one level it regards distance as an ontological question, researching for precedent work on the subject such as the ancient Greek way of building or, the sociological research of Edward Hall. On another level it undergoes a design process in order to investigate distance vis a vis architectural design in terms of dimensions, architectonic elements and perception. Lastly, it concerns the semantics of distance, particularly from the philosophical point of view of Jean-Paul Sartre.

Thesis supervisor: William L. Porter
Title: Professor of Architecture and planning

to my parents

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INTRODUCTION

I think of distance as a subjective reality. I understand it in terms of space, time and myself.

If there exists a wall some 20 feet from where I stand at a particular time, the distance which separates the wall from me is perceived by me in terms of how far-or, close- I am from that wall, at that particular time.

I could describe that I stand 20 feet away from that wall, But, the experience of that distance...
that is another matter.

PART 1

DISTANCE

"..man creates distance,
while distance has no meaning
outside human space." 1
Jean-Paul Sartre

DEFINITIONS

The word 'distance' is generally understood as the degree or amount of separation between two objects in space. For example, we may say that the distance between two houses is 80 feet, meaning that these two houses share a certain measurable degree of separation in relation to each other. This definition of 'distance' however, allows only a fragment of the meaning of the word to be revealed. For the word, can be used in a variety of different meanings depending on the context of a particular phrase. The word can be used to acknowledge a portion of time, as an interval between

two events in time: "the distance between birth and death"; or simply as an expanse of space: "a country of flat plains and great distances"; as the quality of being spatially remote: "my mind is in the distance"; and in many cases the word can be used to suggest remoteness in non-spatial relationships, in personal and emotional circumstances, or in cases of moral apathy: "there is a great distance between religion and the Church"; on another level its definition may suggest disparity: "social distances".

In the Greek language the word distance is 'apostasi'. It is constituted from two words, 'apo' and 'stasi'. The root word 'stasi' means static, or stop, in a sense immobility or, position. 'Apo' means from, and is commonly used as a prefix to define opposites, much like dis- and un- in the English language. Thus, the definition of the word would be the opposite of stop, or position—that which is not position. This definition is interesting for two reasons: first, it sets up a relationship between position and distance—one is defined by the other which is its polarity, in space and in

time: distance in such a context, cannot exist without position, while there would be no positions without distances; secondly, it defines itself as the opposite of being static. Distance, therefore, is dynamic.

In Physics, distance is defined as the rate of speed multiplied by time ($v = s/t$, $s = vt$). This definition also suggests the dynamic quality of distance because it implies movement and time.

THE SOCIOLOGY OF DISTANCE

In The Hidden Dimension, the anthropologist Edward T. Hall examines human use of space in terms of distance. The fundamental thesis asserts that man's boundary does not begin and end with his skin. Hall has developed a framework to study varying distances between humans and their behavioral differences among these distances by categorizing distance in four zones: intimate, personal, social, and public distances; a summary of which follows here:

INTIMATE DISTANCE:

Close Phase: the distance for love-making, wrestling, comforting.

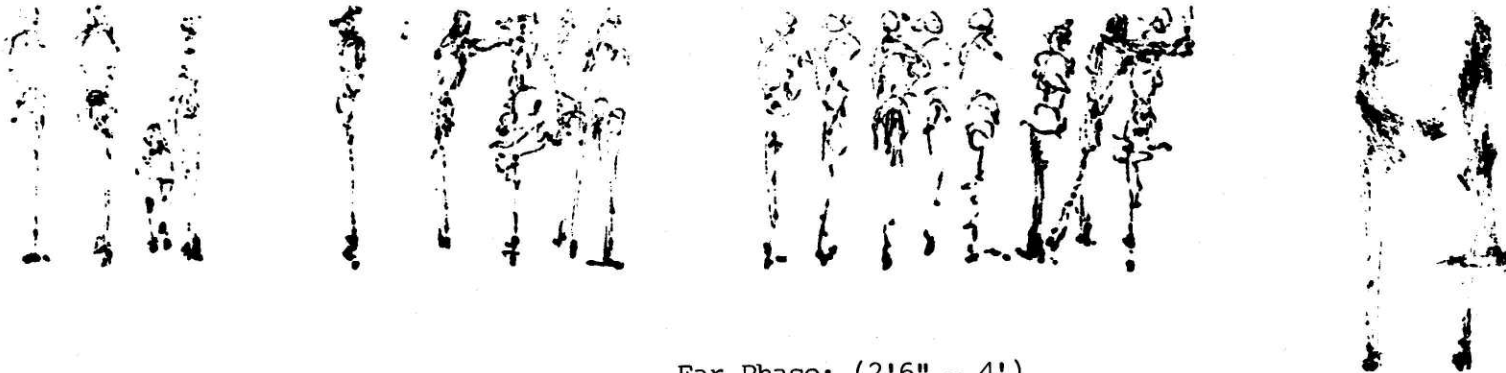
Far Phase: (6-8") Clear vision (15 degrees) includes a portion of the face, which is perceived as enlarged. Peripheral vision (30-180 degrees) includes the outline of the head and shoulders.

PERSONAL DISTANCE:

"Personal distance is the term originally used by Hediger to designate the distance consistently separating the members of non-contact species. It might be thought of as a small protective sphere or bubble that an organism maintains between itself and others."²

Close Phase: (18" - 2'6")

The three dimensional quality of objects is particularly pronounced. Objects have roundness substance and form unlike that perceived at any other distance. Surface textures are also very prominent and are clearly differentiated from each other.



Far Phase: (2'6" - 4')

This is arm's length distance.

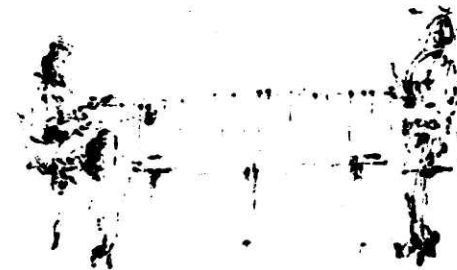
SOCIAL DISTANCE:

The boundary line between the far phase of personal distance and the close phase of social distance marks the limits of domination. Intimate visual detail in the face is not perceived and nobody touches or expects to touch another person.

Close Phase: (4' - 7')



Far Phase: (7' - 12'). A proxemic feature of social distance (far phase) is that it can be used to insulate or screen people from each other.

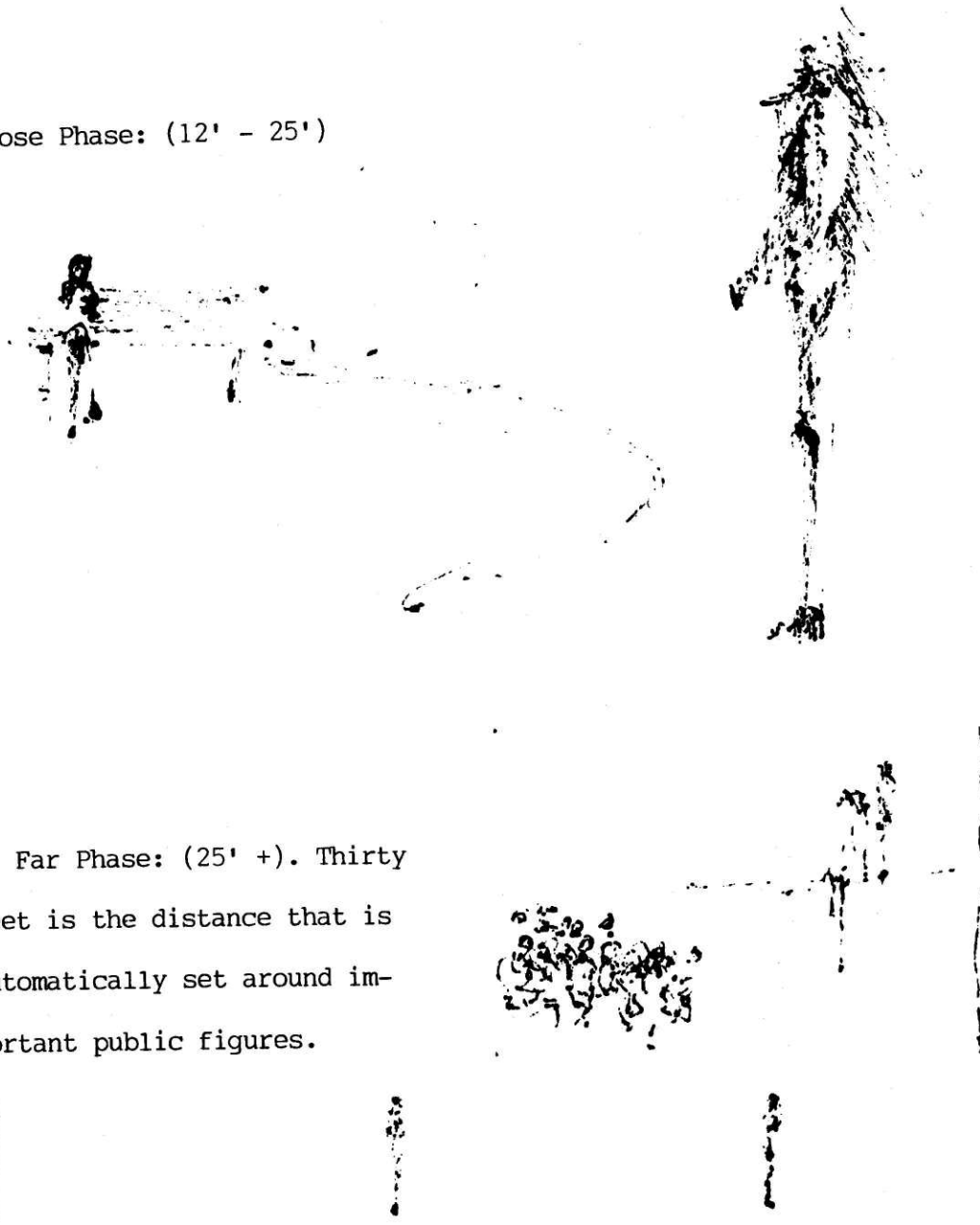


PUBLIC DISTANCE:

"It is in the nature of animals, including man, to exhibit behavior which we call territoriality. In so doing, they use the sense to distinguish between one space or distance and another. The specific distance chosen depends on the transaction; the relationship of the interacting individuals, how they feel, and what they are doing." ³

Close Phase: (12' - 25')

Far Phase: (25' +). Thirty feet is the distance that is automatically set around important public figures.



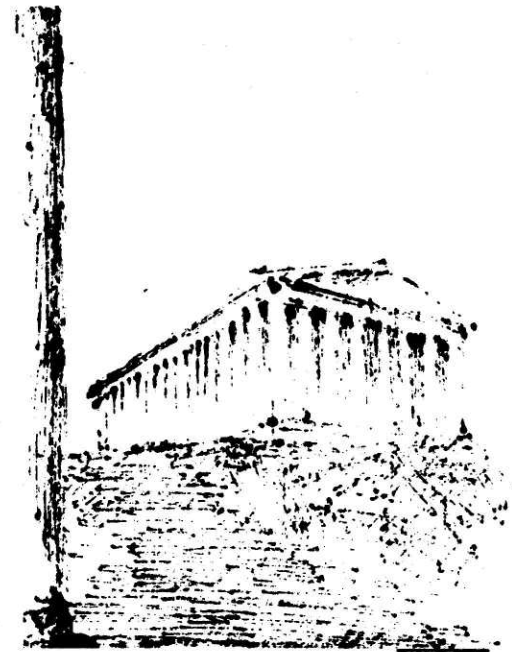
ANCIENT GREECE

There is an example in the history of architecture where the designer was part of the system used to design. The rectangular system of coordinates was unknown to ancient Greek builders. Architectural design in ancient Greece was considered as a polar coordinate system, in which a building's position in a site was determined in terms of the distance of that building from a particular, predetermined point - a human viewpoint. This point was established as the primary position from which the rest of the site could be observed.

R.D. Martienssen points out in, The Idea of Space in Greek Architecture:

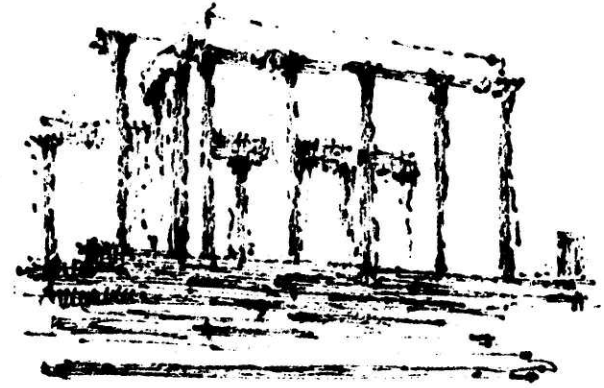
"Cognizance of the main structure from a defined point (the Propylaeum) and subsequently from an infinite number of points along a predetermined pathway so constructed as to maintain a geometric unity with the main structure, established for the structure a formal setting whose limits thus extend far beyond the actual confines of its own shape. As far as the spectator is concerned, the distant and progressive experience which such a framework offers greatly exceeds that which can be obtained by a blunt impact with the perceived structure or even by a series of distant views that are accidental in sequence and liable to interruption by conditions outside the control of a constructed setting." 5

This polar coordinate system is based on the principles of human cognition. It determines the position of a structure in terms of: a) the angle of vision, and b) the distance from the viewpoint.



C.A. Doxiades points out in Architectural Space in Ancient Greece, the polar coordinate system had two design types: the 10-part, and the 12-part systems. Each of the two systems was used in terms of the architectural style employed in the building. With few exceptions, the 10-part system was used by the Ionians, while the 12-part system was fundamentally Dorian. The main reason for this, besides locality, seems to be the difference of philosophical beliefs between Ionians and Dorians.

Particular differences are most noteworthy. Ionians considered space to be infinite; consequently they feared endless space and always enclosed open views in their layouts. The number ten was fundamental to Greek philosophy as seen in Philolaos' book, On The Pythagorean Numbers, "One must study the activities and the essence of Number in accordance with the power existing in the Decad (Ten-ness); for it (the Decad) is great, complete, all-achieving, and the origin of divine and human life and its Leader;...Without this, all things are unlimited, obscure and indescernible."⁴

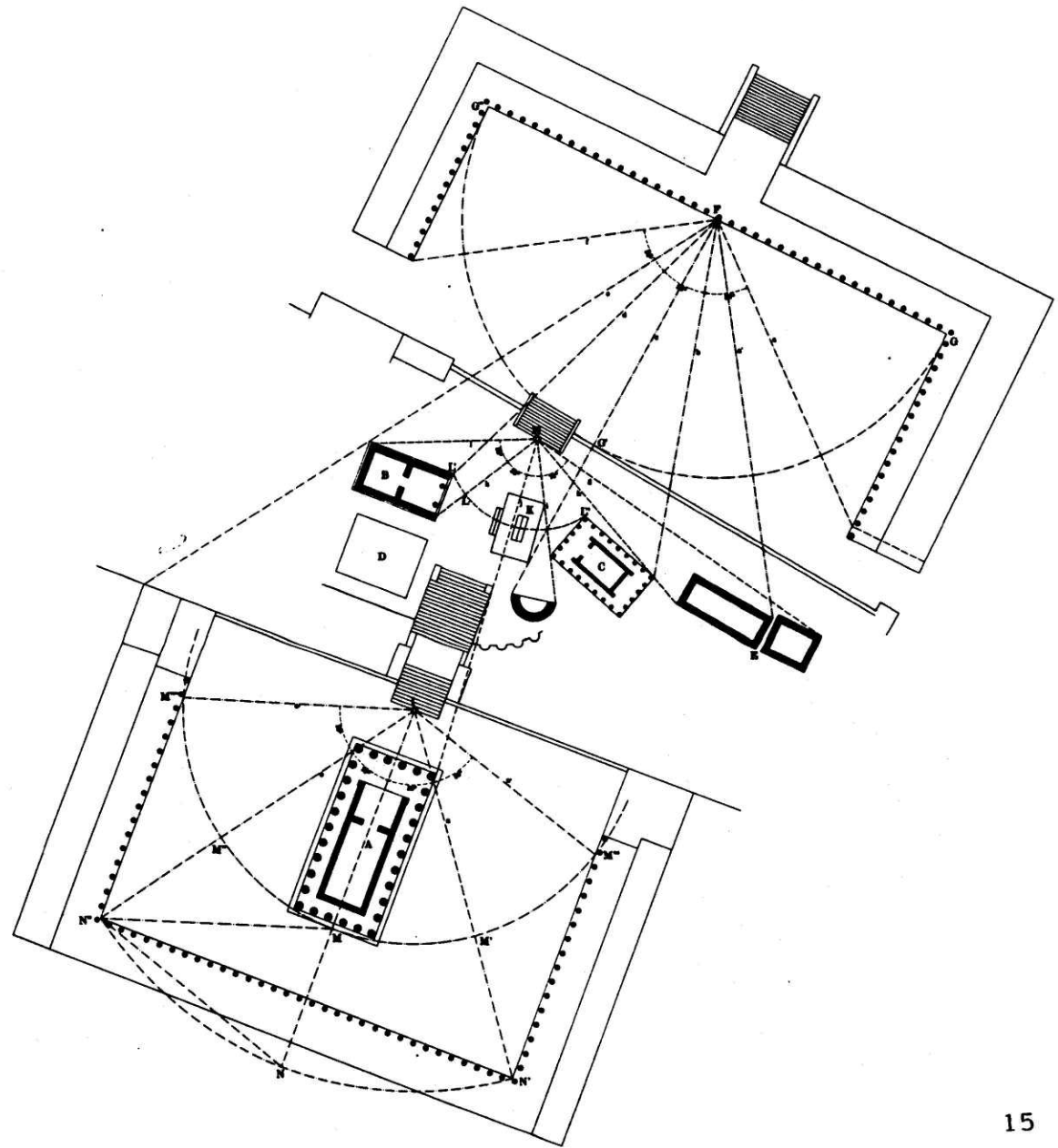


Dorians, on the other hand, along with the rest of the Greeks considered space to be finite, and had no fear of infinity, so their layouts included open paths. Their use of the 12-part system seems to reflect upon the belief that the universe was based on the equilateral triangle, and was dominated by the 30, 60, 90, and 120 degree angles.

10-part system:

Angles: 18, 36, 72, ... (360/10)

Distances: a/b , $(a+b)/a$,
 $(2a+b)/(a+b)$, (area divided
into 10 equal parts)
(the golden section)



Cos, Asclepeion.⁶

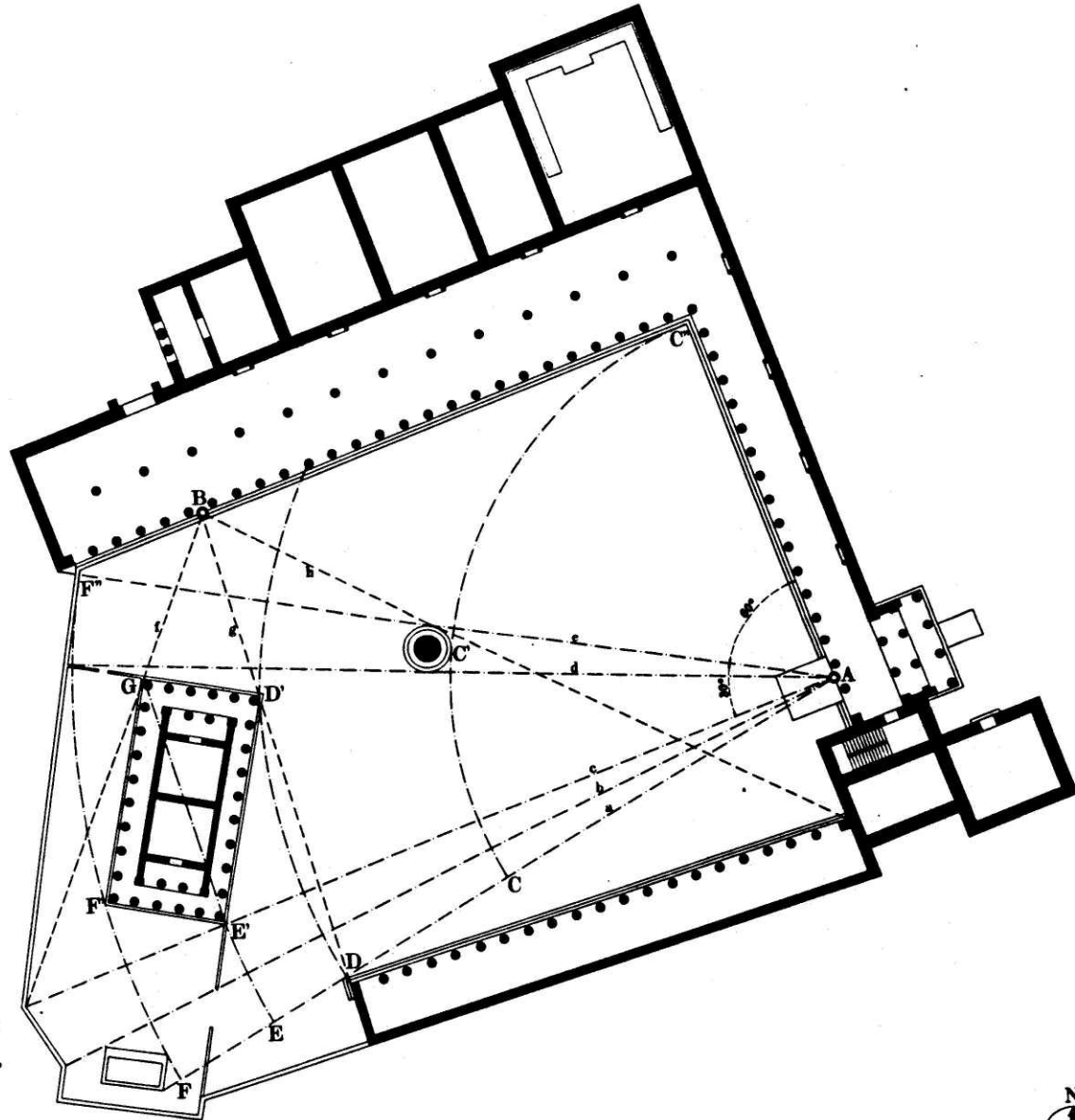
12-part system:

Angles: 30,60,90,...(360/12)

Distances: a , $a/2$, $a/2a$,

(area divided into 12

equal parts)



Pergamon,
Sacred Precinct of Athena. ⁷



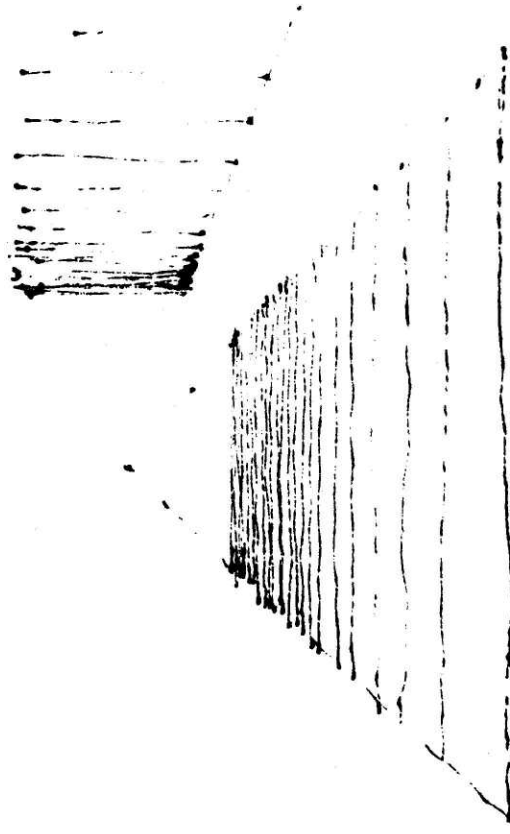
PERCEPTION AND DISTANCE

As I have mentioned before, perception and distance are inseparable, for one cannot exist without the other. It seems to me therefore, that a journey into the principles of perception is unavoidable in the context of this exploration.

In The Perception of the Visual World, James Gibson, discusses these principles. In addition, Gyorgy Kepes in The Language of Vision considers the use of particular types in two-dimensional spatial representations. The principles examined are:

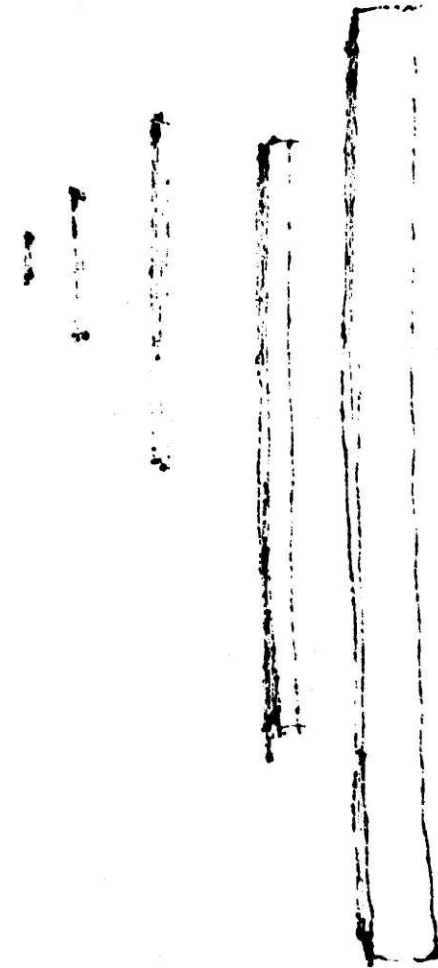
TEXTURE:

There exists a gradual increase in the density of the texture of a surface as it recedes in the distance.



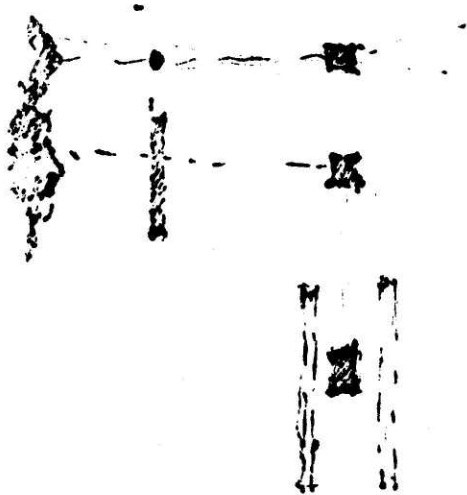
SIZE:

As objects move farther away they decrease in size.



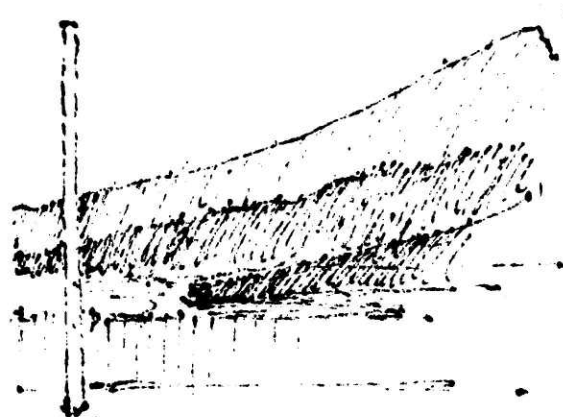
DOUBLE IMAGERY:

Everything between the viewer and a point in the distance will be seen as double. The closer the distance between the viewer and point, the greater the doubling effect. The gradient in this shift is a measure of distance. (a steep gradient = close distance while gradual = far distance)



RATE OF MOTION:

The differential movement of objects in the visual field, (one of the most dependable means of sensing depth). "If two objects are seen as overlapping and do not shift positions relative to each other when the viewer changes position, they are perceived as either on the same plane or so far away that the shift is not perceived."⁸

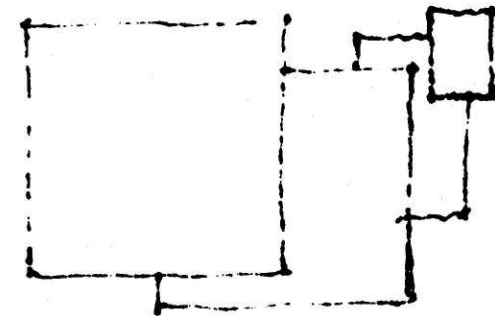


OUTLINE:

If there is no texture shift, no shift in double imagery or in rate of motion, the manner in which one object obscures another determines whether or not the one is seen as behind the other.

TRANSITIONS OF LIGHT AND SHADE:

Brightness is interpreted as an edge. Gradual transitions in this brightness are the principal means of one's perceiving molding or roundness of an object.



AERIAL:

A reduced appearance in scale of an object-is not a reliable indicator of distance.



BLUR:

When focusing on an object in the distance, the background is blurred.



RELATIVE UPWARD LOCATION OF

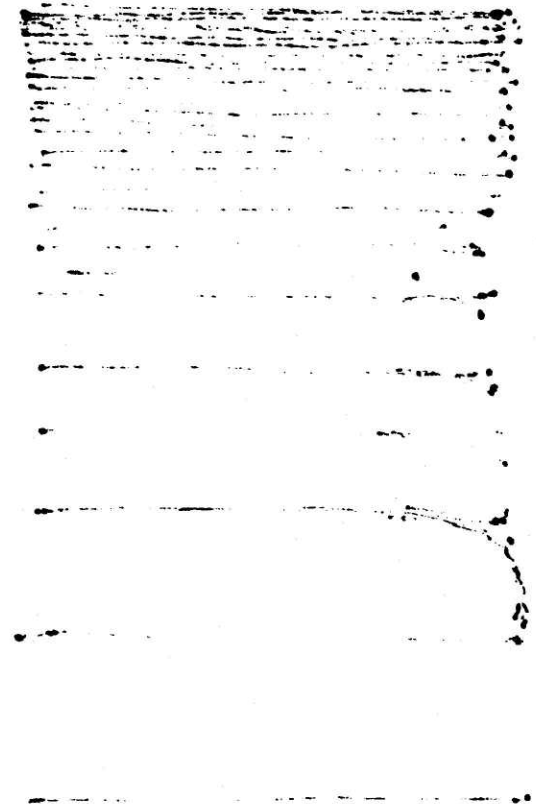
VISUAL FIELD:

On the deck of a ship the horizon - as distance approaches infinity - is seen as a line at eye level. The surface of a globe climbs from one's feet to eye level; the further from the ground the more pronounced is this effect. One looks down at objects that are close, and up at those far away.



SHIFT LINEAR SPACING:

A valley seen over the edge of a cliff is perceived as more distant because of the rapid increase in linear spacing density.



LINEAR:

Parallel lines join at a single vanishing point at the horizon.



BINOCULAR:

(operates out of awareness) the condition owes to the separation of the eyes, each projecting a different image.



MOTION:

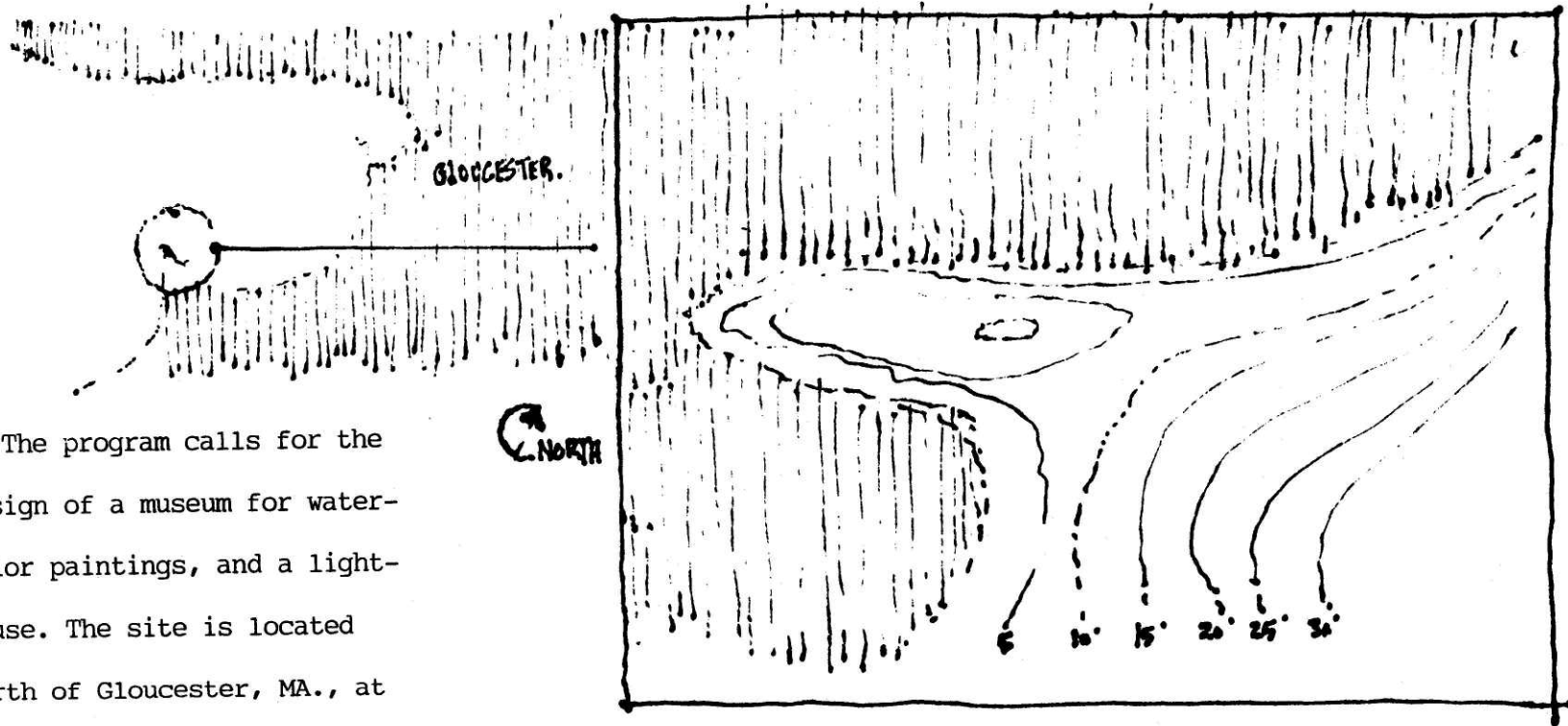
The closer one moves toward a stationary object, the faster it appears to move; objects moving at uniform speed appear to be moving slower as distance increases.



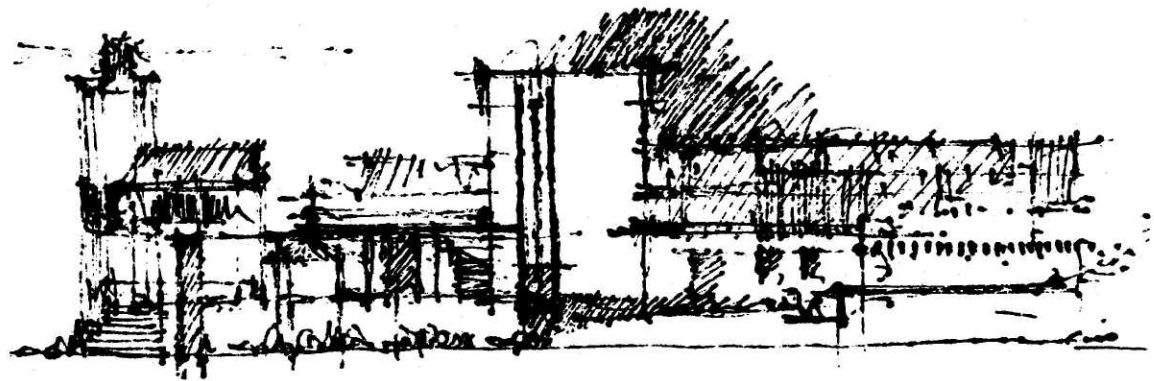
PART II

DESIGN

" I found necessary to put Don Xuan Tavera's hospital in a model form, because not only did it come to cover the gate of Visangra, but its dome rose in a way that surpassed the city; and so inasmuch as I had placed it as a model and had removed it from its place, it seems preferable to show its facade than the rest of its sides. As for its place in the city, it shows on the map."⁹
Dominicos Theotokopoulos



The program calls for the design of a museum for water-color paintings, and a light-house. The site is located north of Gloucester, MA., at the natural entrance to the city's harbor. It is a peninsula--a linear site surrounded by water on three sides--that currently has an old paint factory on it; which for the purpose of this exploration is assumed to not exist.



The ground rules that have governed the following design are based on the ideas considered in the previous chapter. A dimensional system has been employed based on the categorization developed by Edward T. Hall and the research of Phillip Thiel:¹⁰

4ft.: PERSONAL - used for certain transition points.

10 & 15ft.: SOCIAL - used for movement.

35 & 80ft.: PUBLIC - 35' is the main body of the museum spaces; 80' is the recognition distance for human features.

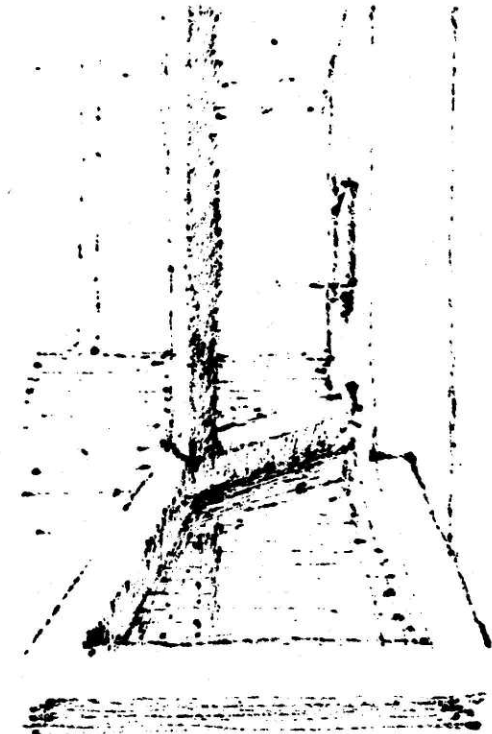
These dimensions govern the positions of walls which structurally, bear the one-way spans which support the roof;

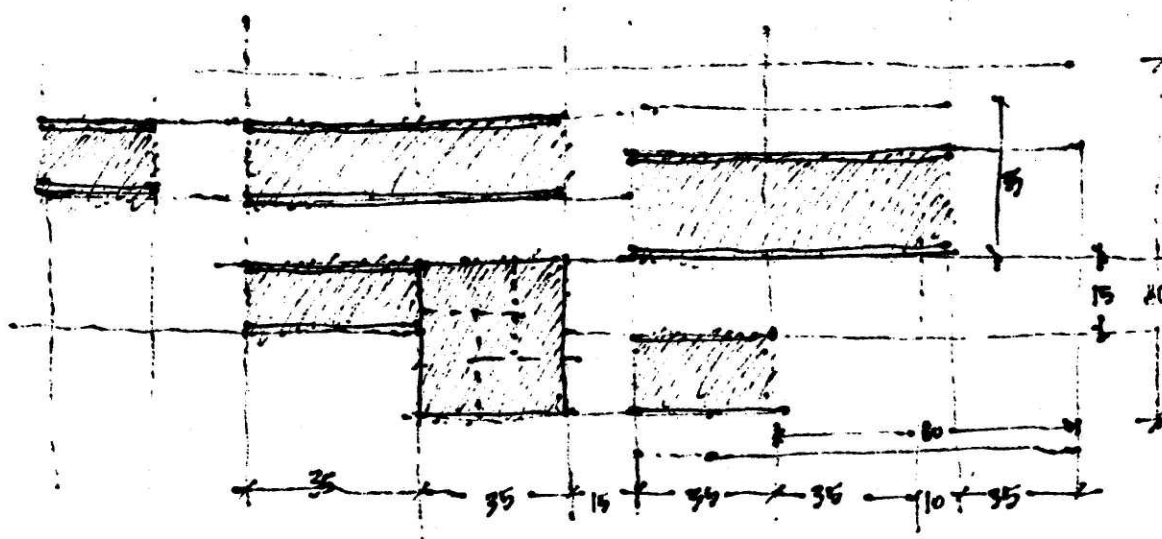
while functionally they provide territorial boundaries: the material is reinforced concrete.

Another system has been employed based on the 12-part system described by Doxiades. This system is circular; its function is associated with light. The material is steel. Structurally they are free-standing, independent of the one-way system, using a three-hinged arch construction, (see section).

When these two systems meet, they resolve their contradiction through the use of water.

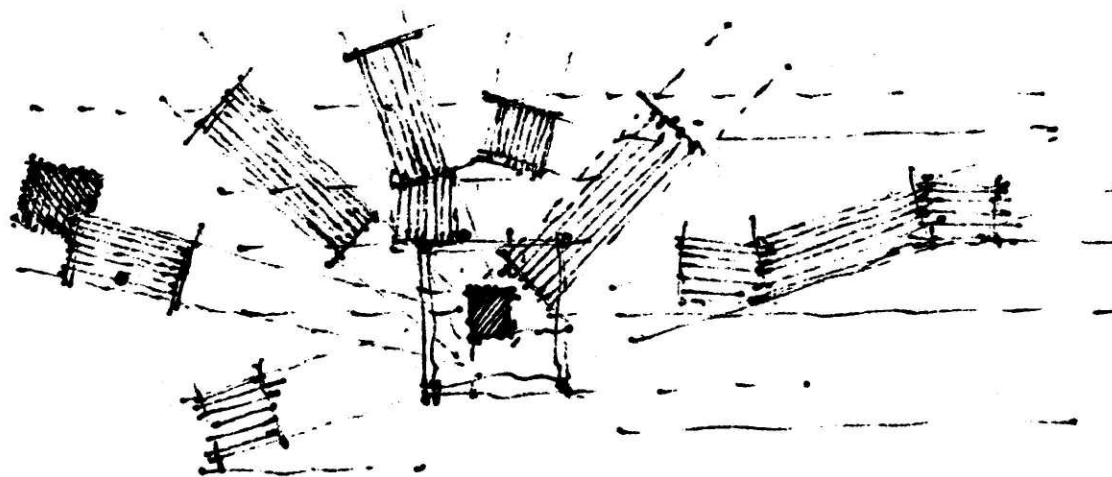
Furthermore, as one moves through the site, the geometry gradually shifts dominance from the directional concrete system to the circular steel and glass system, culminating at the lighthouse.





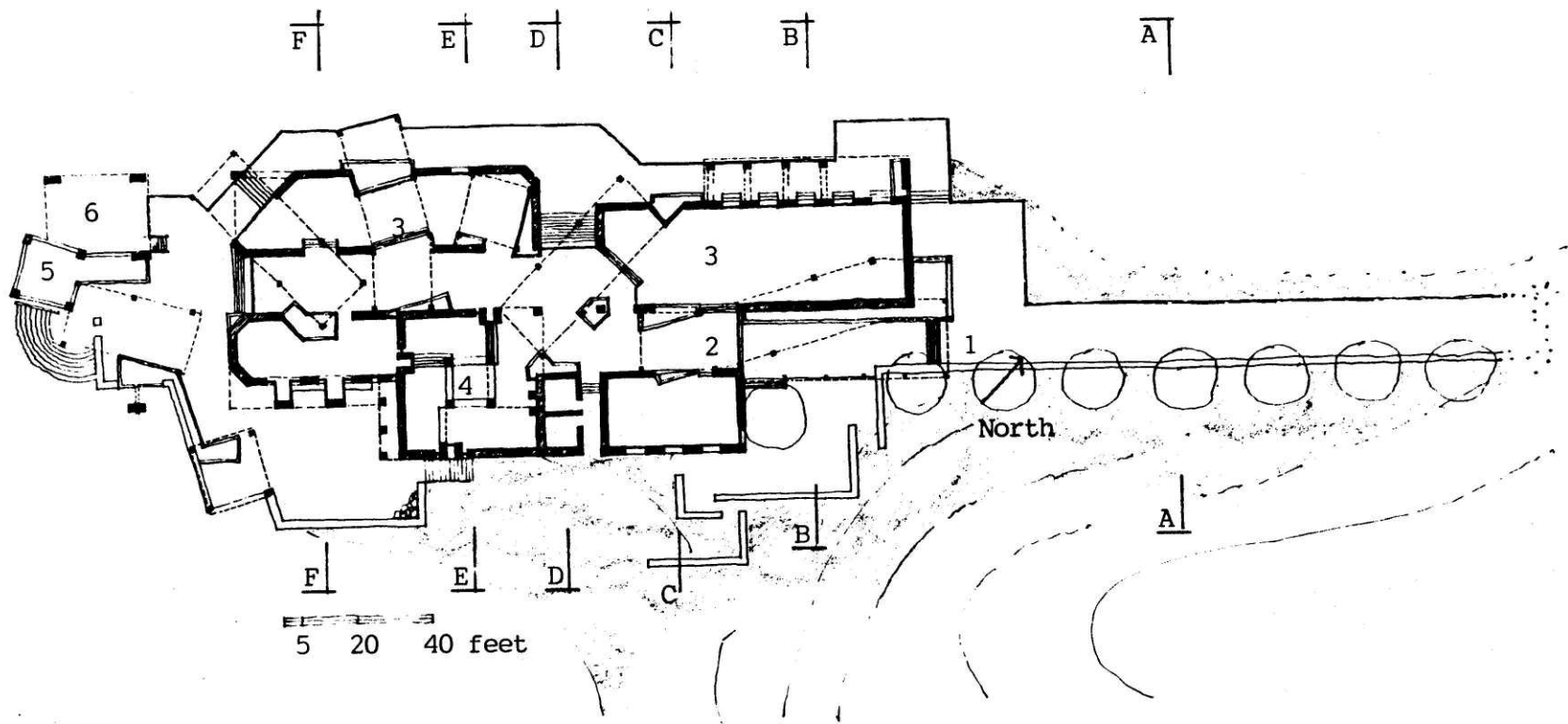
Use of dimensional system
to provide direction.

One-way spans, reinforced
concrete.



Use of circular system
associated with light.

Three-hinged arch, steel.

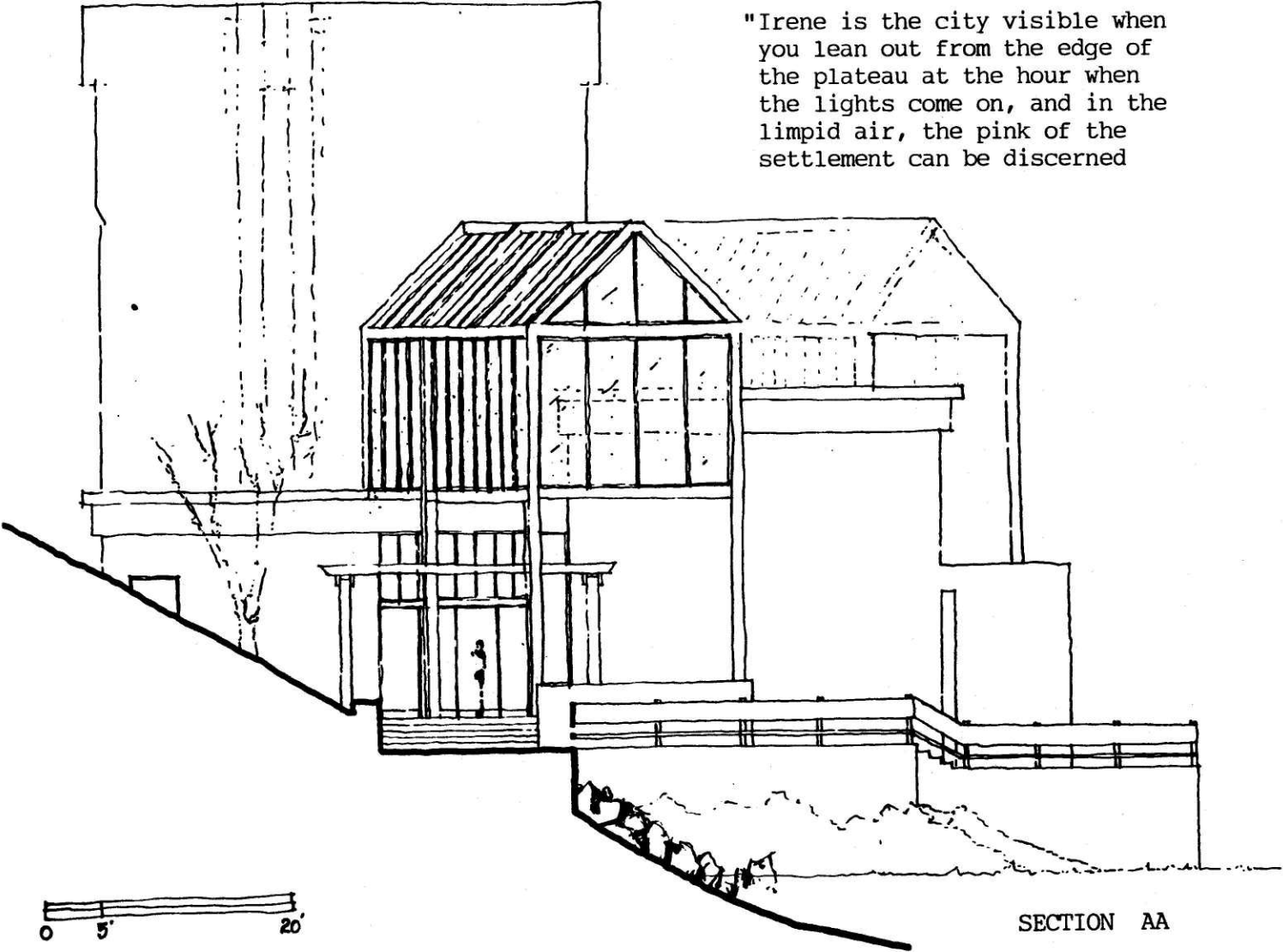


PLAN

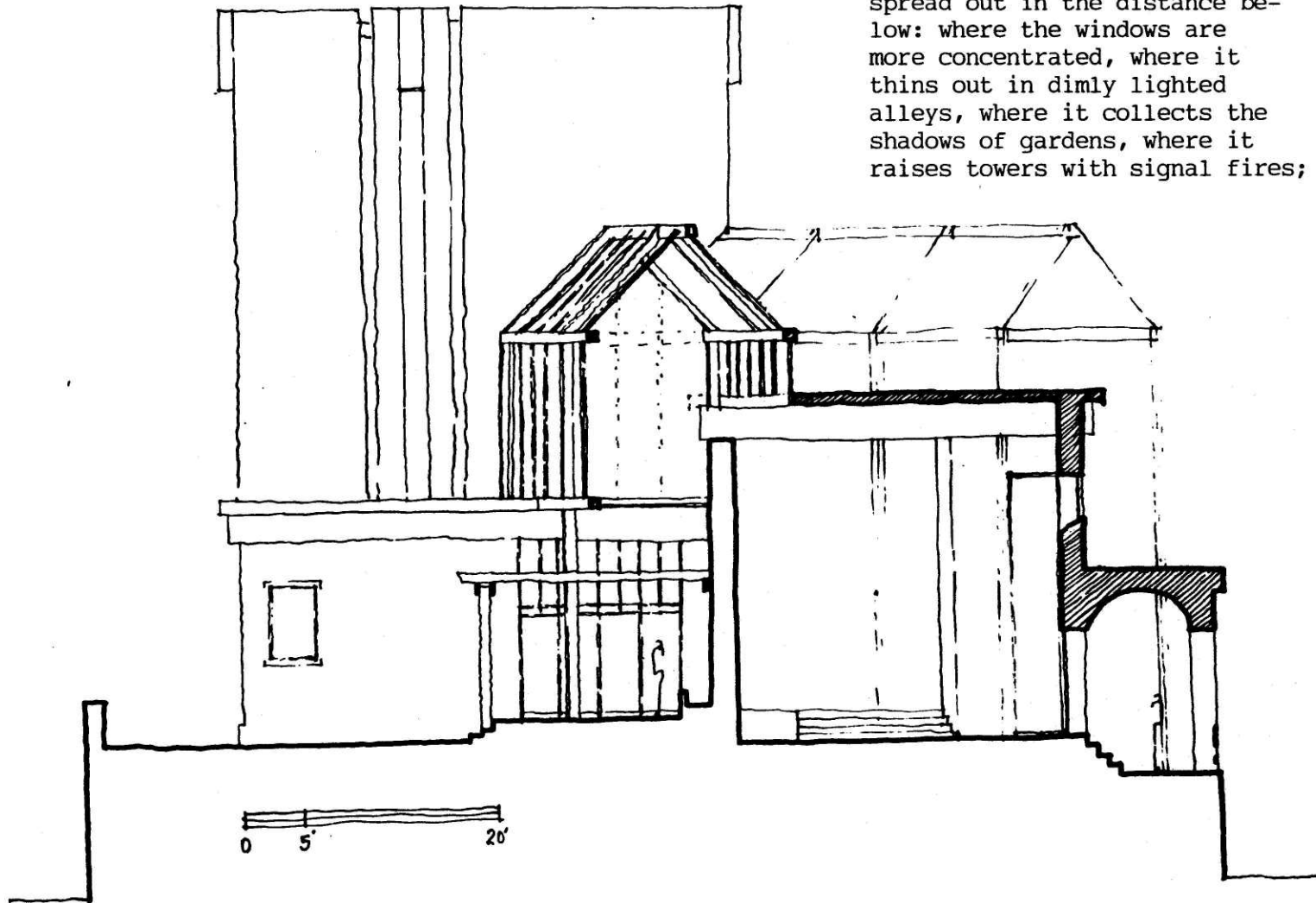
1. Entrance
2. Lobby
3. Main museum spaces
4. Central museum space
5. Light-house
6. Café (above)



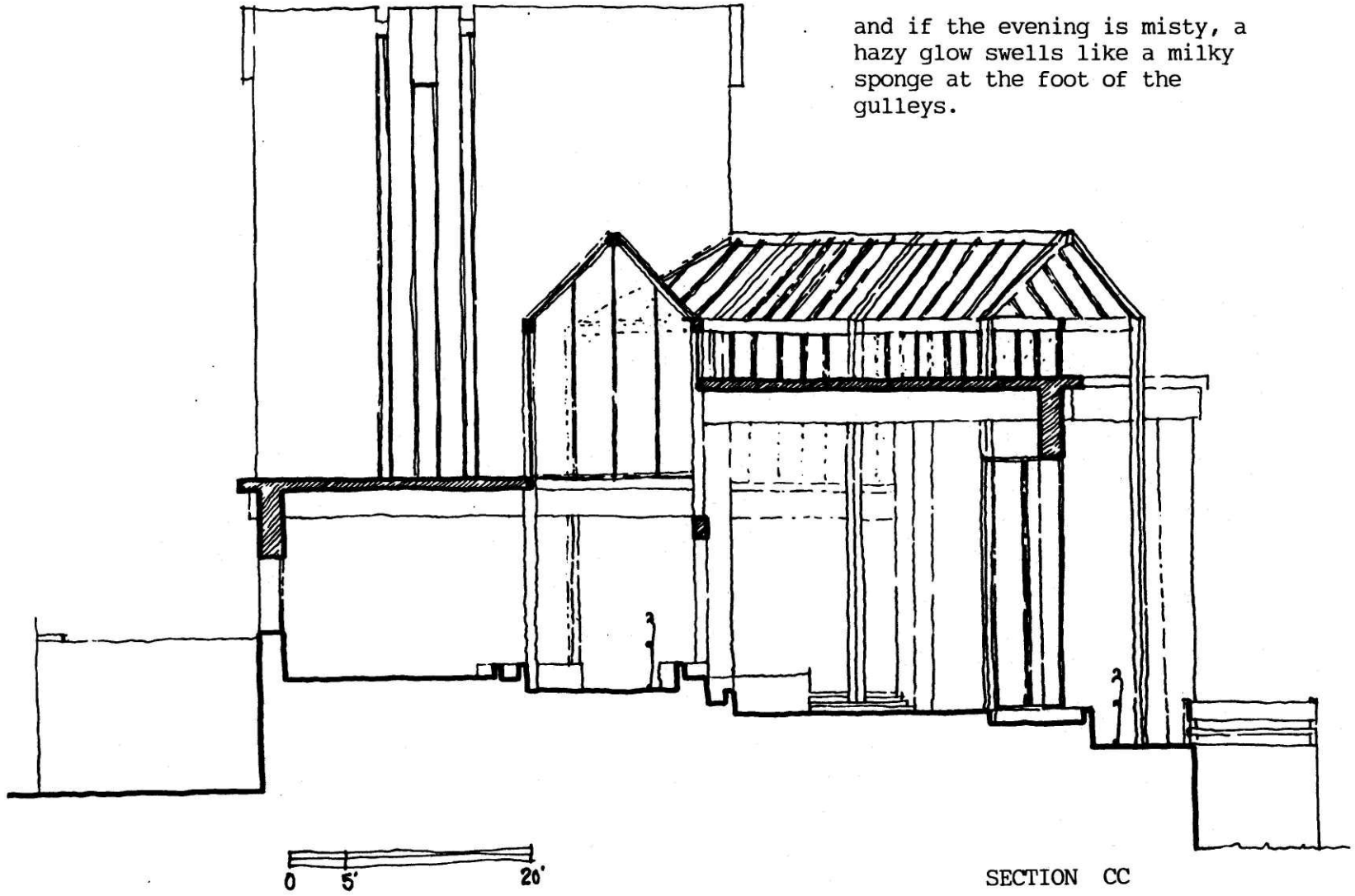
"Irene is the city visible when you lean out from the edge of the plateau at the hour when the lights come on, and in the limpid air, the pink of the settlement can be discerned



spread out in the distance below: where the windows are more concentrated, where it thins out in dimly lighted alleys, where it collects the shadows of gardens, where it raises towers with signal fires;



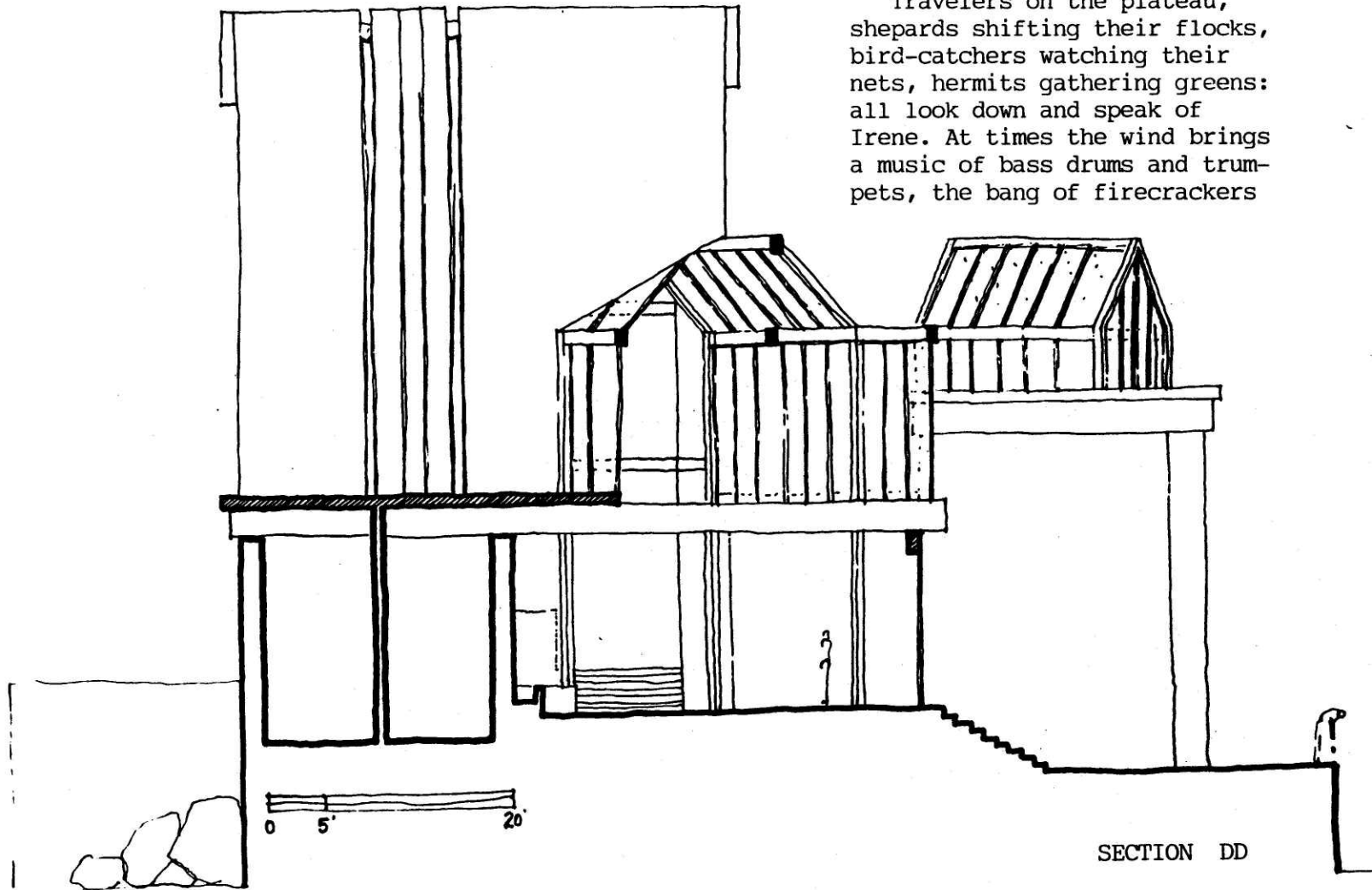
SECTION BB



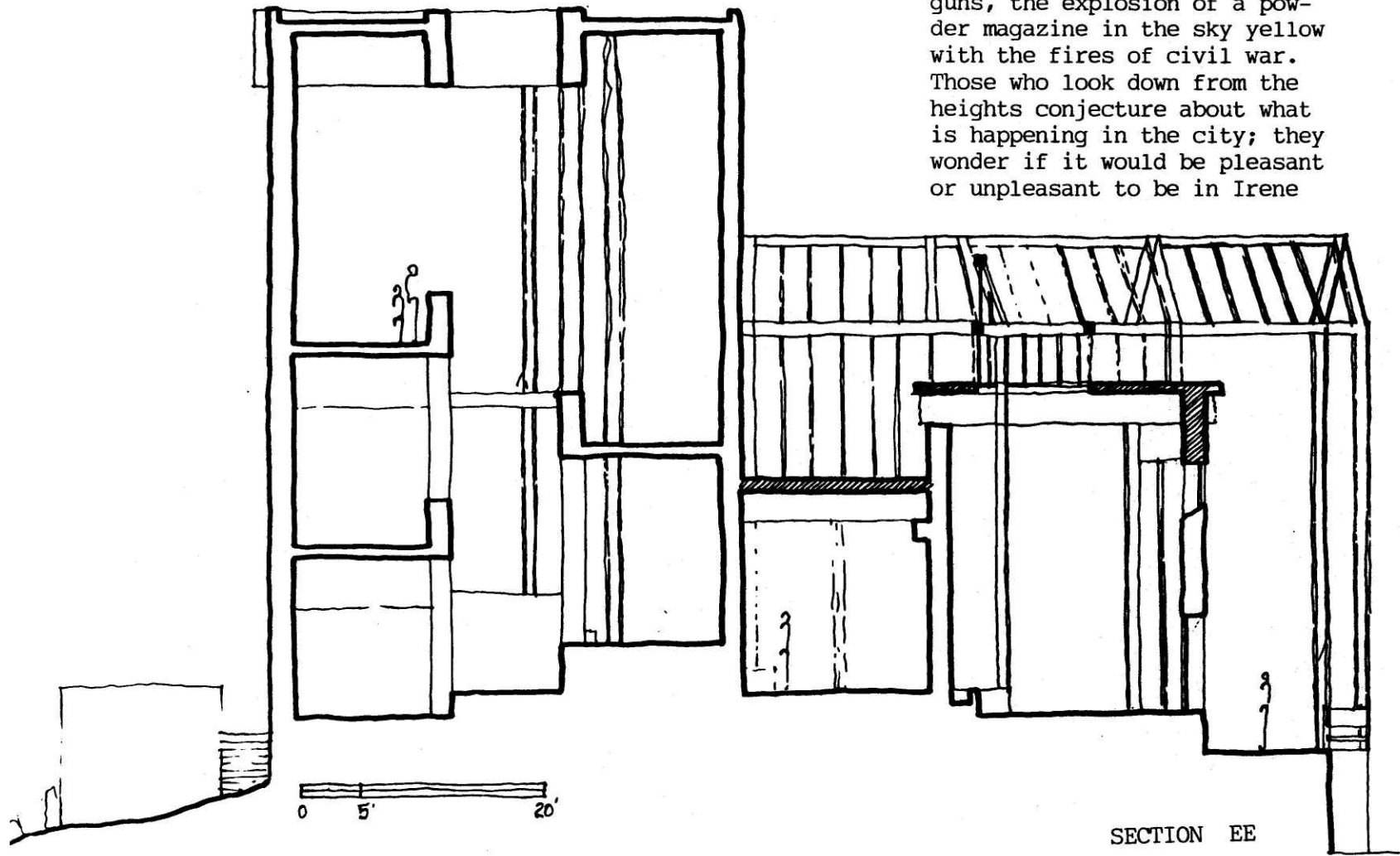
and if the evening is misty, a hazy glow swells like a milky sponge at the foot of the gulleys.

SECTION CC

Travelers on the plateau,
shepards shifting their flocks,
bird-catchers watching their
nets, hermits gathering greens:
all look down and speak of
Irene. At times the wind brings
a music of bass drums and trum-
pets, the bang of firecrackers

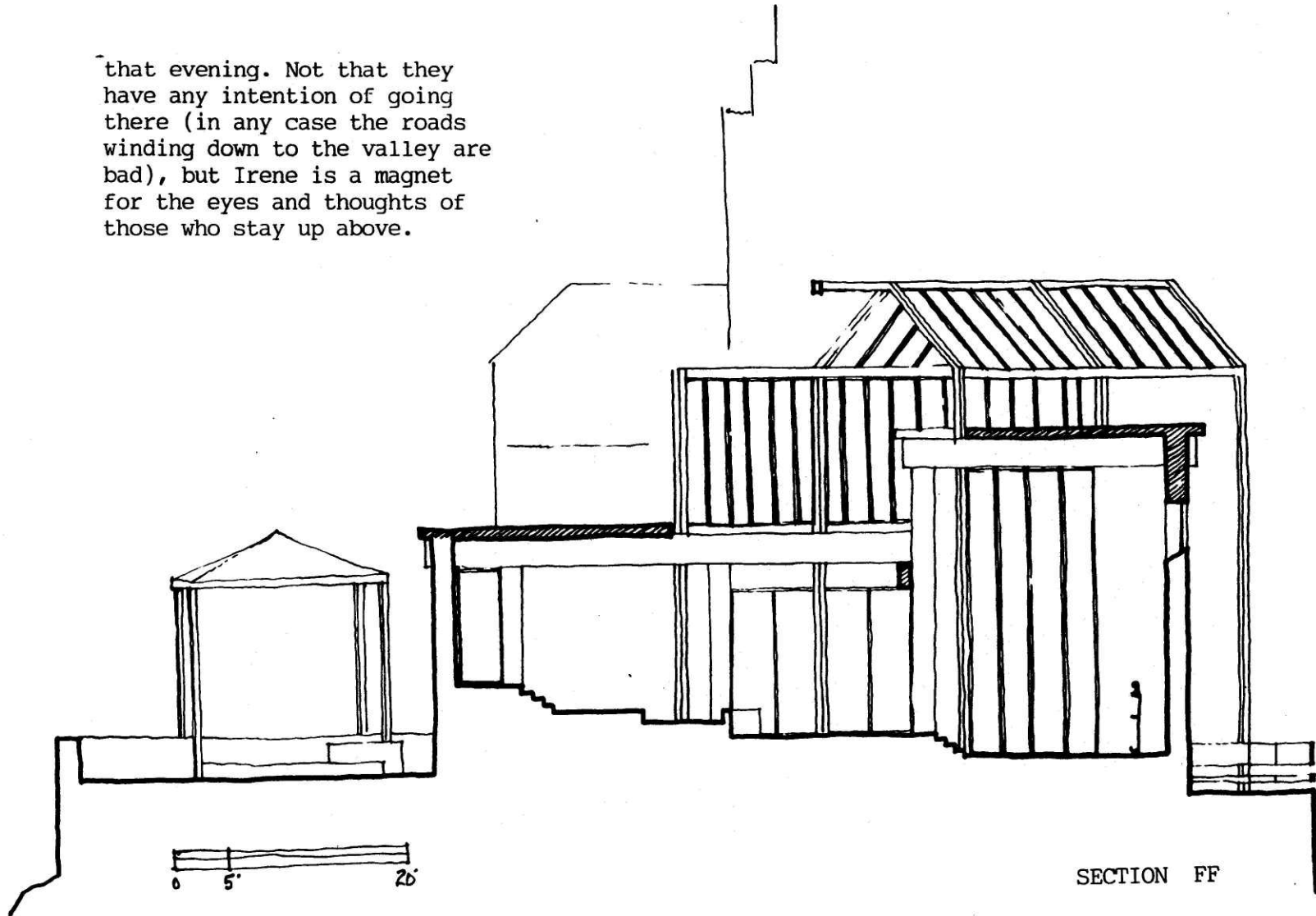


in the light-display of a festival; at times the rattle of guns, the explosion of a powder magazine in the sky yellow with the fires of civil war. Those who look down from the heights conjecture about what is happening in the city; they wonder if it would be pleasant or unpleasant to be in Irene

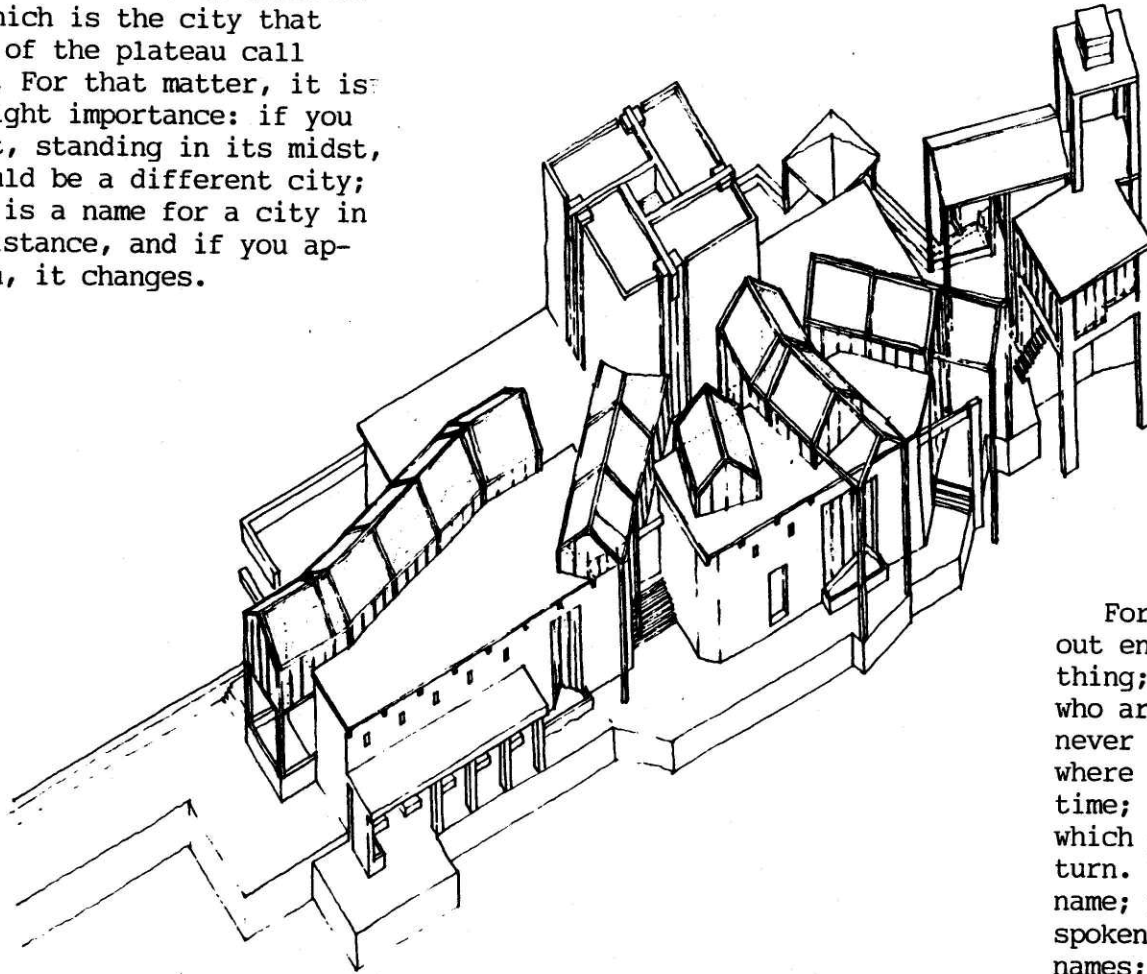


SECTION EE

that evening. Not that they have any intention of going there (in any case the roads winding down to the valley are bad), but Irene is a magnet for the eyes and thoughts of those who stay up above.



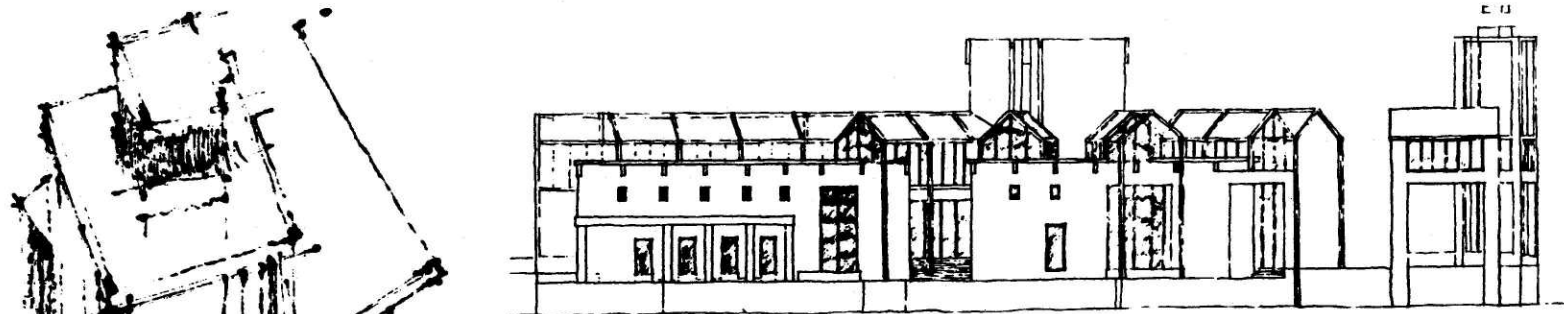
At this point Kublai Khan expects Marco to speak of Irene as it is seen from within. But Marco cannot do this: he has not succeeded in discovering which is the city that those of the plateau call Irene. For that matter, it is of slight importance: if you saw it, standing in its midst, it would be a different city; Irene is a name for a city in the distance, and if you approach, it changes.



AXONOMETRIC

For those who pass it without entering, the city is one thing; it is another for those who are trapped by it and never leave. There is the city where you arrive for the first time; and there is another city which you leave never to return. Each deserves a different name; perhaps I have already spoken of Irene under other names; perhaps I have spoken only of Irene."11

Italo Calvino



NORTH ELEVATION

PART III

SEMANTICS

"From the back of the room where I was sitting at the Sphinx, I could see several nude women. The distance that separated us (the glossy wood floor seemed insuperable even though I wanted to walk across it) impressed me as much as did the women."¹²
Alberto Giacometti

THE QUEST FOR THE ABSOLUTE 13

by Jean-Paul Sartre

Consider Ganymede on his pedestal. If you ask me how far away he is, I will tell you that I don't know what you are talking about. By "Ganymede" do you mean the youth that was carried away by Jupiter's eagle? If so, I will say that there is no real distance between us, that no such relation exists because he does not exist. Or are you referring to the block of marble that the sculptor fashioned in the image of the handsome lad? If so, we are dealing with something real, with an existing mineral, and can draw comparisons.

Painters have long understood all that since in picture the unreality of the third dimension necessarily entails the unreality of the two other dimensions. It follows that the distance between the figures and my eyes is imaginary. If I advance, I move nearer the canvas, not to them. Even if I put my nose on them, I would still see them from twenty steps away since for me they exist once and for all at a distance of twenty steps. It follows also that painting is not subject to Zeno's line of reasoning; even if I bisected the space separating the

Virgin's foot from St. Joseph's foot, and the resulting halves again and again to infinity, I would simply be dividing a certain length on the canvas, not flagstones supporting the Virgin and her husband.

Sculptors failed to recognize these elementary truths because they were working in a three-dimensional space on a real block of marble and, although the product of their art was an imaginary man, they thought that they were working with real dimensions. The confusion of real and unreal space had curious results. In the first place, instead of reproducing what they saw - that is, a model ten steps away - they reproduced in clay what was - that is, the model itself. Since they wanted their statue to give to the spectator standing ten steps away the impression that the model had given them, it seemed logical to make a figure that would be for him what the model had been for them; and that was possible only if the marble was here just as the model had been out there.

But what is the meaning of being here and out there? Ten steps away from her, I form a certain image of a nude woman; if I approach and look at her at close range, I no longer recognize her; the craters, crevices, cracks, the rough, black herbs, the greasy streaks, the lunar orography in its entirety simply can not be the smooth, fresh skin I was admiring from a distance. Is that what the sculptor should imitate? There would be no end to his task, and besides, no matter how close he came to her face, he could always narrow the gap still further.

It follows that a statue truly resembles neither what the model is nor what the sculptor sees. It is constructed according to certain contradictory conventions, for the sculptor represents certain details not visible from so far away under the pretext that they exist and neglects certain others that do exist under the pretext that they are unseen. What does this mean other than that he takes the viewpoint of the spectator in order to reconstruct an acceptable figure?

But if so, my relation to Ganymede varies with my position; if near, I will discover details which escaped me at a distance. And this brings us to the paradox: I have real relations with an illusion; or, if you prefer, my true distance from the block of marble has been confused with my imaginary distance from Ganymede.

By reversing classicism, Giacometti has restored to statues an imaginary, indivisible space. His unequivocal acceptance of relativity has revealed the absolute. The fact is that he was the first to sculpture man as he is seen--from a distance. He confers absolute distance on his images just as the painter confers absolute distance on the inhabitants of his canvas. He creates a figure "ten steps away" or "twenty steps away," and do what you will, it remains there. The result is a leap into the realm of the unreal since its relation to you no longer depends on your relation to the block of plaster--the liberation of Art.

A classical statue must be studied or approached if it is continuously to reveal new details; first, parts are singled out, then parts of parts, etc. with no end in sight. You can't approach one of Giacometti's sculptures. Don't expect a belly to expand as you draw near it; it will not change and you on moving away will have the strange impression of marking time. We have a vague feeling, we conjecture, we are on the point of seeing nipples on the breast; one or two steps closer and we are still expectant; one more step and everything vanishes. All that remains are plaits of plaster. His statues can be viewed only from a respectful distance. Still everything is there: whiteness, roundness, the elastic sagging of a beautiful ripe belly. Everything except matter. From twenty steps we only think we see the wearisome desert of adipose tissue; it is suggested, outlined, indicated, but not given.

Now we know what press Giacometti used to condense space. There could be but one —distance. He placed distance within our reach by showing us a distant woman who keeps her distance even when we touch her with our fingertips. The breasts that we envisioned and anticipated will never be exposed, for they are but expectancy; the bodies that he creates have only enough substance to hold forth a promise.

"That's impossible," someone might say. "The same object can't be viewed from close range and from afar." But we are not speaking of the same object; the block of plaster is near, the imaginary person far away.

"Even so, distance would still have to compress all three dimensions, and here length and depth are affected while height remains intact." True. But it is also true that each man in the eyes of other men possesses absolute dimensions. As a man walks away from me, he does not seem to grow smaller; his qualities seem rather to condense while his "figure" remains intact. As he draws near me, he does not grow larger but his qualities expand.

Admittedly, however, Giacometti's men and women are closer to us in height than in width— as if they are projecting their stature. But Giacometti purposefully elongated them. We must understand that his creatures, which are wholly and immediately what they are, can neither be studied nor observed. As soon as I see them, I know them; they flood my field of vision as an idea floods my mind; the idea has the same immediate translucidity and is instantaneously wholly what it is. Thus Giacometti has found a unique solution to the problem of unity within multiplicity by simply suppressing multiplicity.

Plaster and bronze are divisible, but a woman in motion has the indivisibility of an idea or an emotion; she has no parts because she surrenders herself simultaneously. To give perceptible expression to pure presence, to surrender of self, to instantaneous emergence, Giacometti has recourse to elongation.

Such is the type of Copernican revolution that Giacometti has attempted to introduce into sculpture.

Before him men thought that they were sculpting being, and this absolute dissolved into an infinite number of appearances. He chose to sculpture situated appearance and discovered that this was the path to the absolute. He exposes us to men and women as already seen but not as already seen by himself alone. His figures are already seen just as a foreign language that we are trying to learn is already spoken. Each of them reveals to us man as he is seen, as he is for other men, as he emerges in interhuman surroundings —not, as I said earlier for the sake of simplification, ten or twenty steps away, but at a man's distance. Each of them offers proof that man is not at first in order to be seen afterwards but that he is the being whose essence is in his existence for others. When I perceive the statue of a woman, I find that my congealed look is drawn to it, producing in me a pleasing uneasiness. I feel constrained, yet know neither why nor by whom until I discover that I am constrained to see and constrained by myself.

Furthermore, Giacometti often takes pleasure in adding to our perplexity--for example by placing a distant head on a nearby body so that we no longer know where to begin or exactly how to behave. But even without such complications his ambiguous images are disconcerting, for they upset our most cherished visual habits. We have long been accustomed to smooth, mute creatures fashioned for the purpose of curing us of the sickness of having a body; these guardian spirits have watched over the games of our childhood and bear witness in our gardens to the notion that the world is without risks, that nothing ever happens to anyone and, consequently, that the only thing that ever happened to them was death at birth.

Against this, something obviously has happened to Giacometti's bodies. Are they emerging from a concave mirror, from a fountain of youth or from a deportation camp? We seen at first glance to be confronted by the ematiated martyrs of Buchenwald. But almost immediately we realize our mistake. His thin, gracile creatures rise toward the heavens and we discover a host of

Ascensions and Assumptions; they dance, they are dances, made of the same rarefied substance as the glorious bodies promised us. And while we are still contemplating the mystical upsurge, the ematiated bodies blossom and we see only terrestrial flowers.

The martyred creature was only a woman but she was all woman--glimpsed, furtively desired, retreating in the distance with the comic dignity of fragile, gangling girls walking lazily from bed to bathroom in their high-heeled shoes and with the tragic horror of scarred victims of a holocaust or famine; all woman--exposed, rejected, near, remote; all woman--with traces of hidden leanness mollified by suave plumpness; all woman--in danger here on earth but no longer entirely on earth, living and relating to us the astounding adventure of flesh, our adventure. For she chanced to be born, like us.

Nevertheless, Giacometti is dissatisfied. He could win the match promptly simply by deciding that he has won. But he can't make up his mind and keeps putting off his decision from hour to hour, from day to day. Sometimes, during the course of a night's work, he is ready to acknowledge his victory; by morning everything has been shattered. Is he afraid of the boredom that lurks beyond his triumph, the boredom that beset Hegel after he had imprudently stapled together his system? Or perhaps matter seeks revenge. Perhaps the infinite divisibility that he eliminated from his work keeps cropping up between him and his goal. The end is in sight, but to reach it he must improve.

Much has been done but now he must do a little better. And then just a little better still. The new Achilles will never catch the tortoise; a sculptor must in some way be the chosen victim of space--if not in his work, then in his life. But between him and us, there must always be a difference of position. He knows what he wanted to do and we don't; but we know what he has done and he doesn't. His statues are still largely incorporated in his flesh; he is unable to see them. Almost as soon as they are produced he goes on to dream of women that are thinner, taller, lighter, and it is through his work that he envisions the ideal by virtue of which he judges it imperfect. He will never finish simply because a man always transcends what he does.

"When I finish," he says, "I'll write, I'll paint, I'll have fun." But he will die before finishing. Are we right or is he right? He is right because, as Da Vinci said, it is not good for an artist to be happy. But we are also right --and ours is the last word.

Kafka as he lay dying asked to have his books burned and Dostoevski, during the very last moments of his life, dreamed of writing a sequel to The Brothers Karamazov. Both may have died dissatisfied, the former thinking that he would depart from the world without even making a mark on it and the latter that he had not produced anything good. and yet both were victors, regardless of what they might have thought.

Giacometti is also a victor, and he is well aware of this fact. It is futile for him to hoard his statues like a miser and to procrastinate, temporize and find a hundred excuses for borrowing more time. People will come into his studio, brush him aside, carry away all his works, including the plaster that covers his floor. He knows this; his cowed manner betrays him. He knows that he has won in spite of himself, and that he belongs to us.

THE PAINTINGS OF GIACOMETTI

From the back of the room where I was sitting at the Sphinx, I could see several nude women. The distance that separated us (the glossy wood floor seemed insuperable even though I wanted to walk across it) impressed me as much as did the women.¹⁵

The result: four inaccessible figurines balanced on the edge of a vertical background formed by the floor. Giacometti painted them as he saw them--from a distance. Still, the four women have an arresting presence. They seem to be poised on the floor, ready at any moment to drop down upon him like the lid on a box.

I have often seen them, especially in the evening, in a little place on the Rue de l'Echaudé, very close and menacing.¹⁶

Distance, far from being an accident, is in his eyes part and parcel of every object. These whores, twenty steps away--twenty impossible steps away--are forever outlined in the light of his hopeless desire. His studio is an archipelago, a conglomeration of irregular distances. The Mother Goddess against the wall retains all the nearness of an obsession. When I retreat, she advances; when I am farthest away, she is closest. The small statue at my feet is a man seen in the rear-view mirror of an automobile--in the act of disappearing; moving closer to the statue is to no avail, for the distance cannot be traversed. These solitudes repel the visitor with all the insuperable length of a room, a lawn, or a glade that none would dare to cross. They stand as proof of the paralysis that grips Giacometti at the sight of his equal.

It does not follow, however, that he is a misanthropist. His aloofness is mixed with fear, often with admiration, sometimes with respect. He is distant, of course, but man creates distance while distance has no meaning outside human space. Distance separates Hero from Leander and Marathon from Athens but not one pebble from another.

I first understood what distance is one evening in April, 1941. I had spent two months in a prison camp, which was like being in a can of sardines, and had experienced absolute proximity; the boundary of my living space was my skin; night and day I felt against my body the warmth of a shoulder or a bosom. This was not incommodious, for the others were me.

That first evening, a stranger in my home town, having not yet found my old friends, I opened the door of a café. Suddenly I was frightened--or almost; I could not understand how these squat, corpulent buildings could conceal such deserts. I was lost; the scattered patrons seemed to me more distant than the stars. Each of them could claim a vast seating area, a whole marble table while I, to touch them, would have had to cross over the "glossy floor" that separated us.

If they seemed inaccessible to me, these men who were scintillating comfortably in their bulbs of rarefied gas, it was because I no longer had the right to place my hand on their shoulders and thighs or to call one of them "knuckle-head." I had re-entered middle-class society and would have to learn once again to live "at a respectable distance." My attack of agoraphobia had betrayed my vague feeling of regret for the collective life from which I had been forever severed.

The same applies to Giacometti. For him distance is not a voluntary isolation, nor even a withdrawal. It is something required by circumstances, a ceremony, a recognition of difficulties. It is the product--as he himself said--of forces of attraction and forces of repulsion. He cannot walk a few steps across the glossy floor that separates him from the nude women because he is nailed to his chair by timidity or poverty; and he feels at this point that the distance is insuperable because he wants to touch their lush flesh. He rejects promiscuity, the fruit of close proximity, because he wants friendship, love. He dares not take for fear of being taken.

Can he do this through sculpture? By kneading plaster, he creates a vacuum from a plenum. The figure when it leaves his fingers is "ten steps away," and no matter what we do, it remains there. The statue itself determines the distance from which it must be viewed, just as courtly manners determine the distance from which the king must be addressed. The situation engenders the surrounding no man's land. Each of his figures is Giacometti himself producing his little local vacuum. Yet all these slight absences that are as much a part of us as our names, as our shadows, are not enough to make a world. There is also the Void, the universal distance between all things. The street is empty, drinking in the sun; suddenly, in this empty space a human being appears.

Sculpture can create a vacuum from a plenum, but can it show the plenum arising from what was previously a vacuum? Giacometti has tried a hundred times to answer this question. His composition La Cage represents his "desire to abolish the socle and have a limited space for creating a head and face." That is the crux of his problem, for a vacuum will forever antedate the beings that inhabit it unless it is first surrounded by walls. The "Cage" is "a woman...." On another occasion he made "a figurine in a box between two boxes which are houses." In short, he builds a frame for his figures, with the result that they remain at a certain distance away from us but live in the closed space imposed on them by their individual distances, in the prefabricated vacuum which they cannot manage to fill and which they endure rather than create.

And what is this framed and populated vacuum if not a painting? Lyrical when he sculpts, Giacometti becomes objective when he paint. He tries to capture the features of Annette or of Diego just as they appear in an empty room or in his deserted studio. I have tried elsewhere to show that he approaches sculpture as a painter since he treats a plaster figurine as if it were a person in painting. He confers on his statuettes a fixed, imaginary distance. Inversely, I can say that he approached painting as a sculptor since he would like to have us assume that the imaginary space enclosed by a frame is a true void. He would like to have us perceive through thick layers of space the woman that he has just painted in a sitting position; he would like for his canvas to be like still water and for us to see the figures in the painting as Rimbaud saw a room in a lake--as a transparency.

Sculpting as others paint, painting as others sculpture, is he a painter? Is he a sculptor? Neither, both. Painter and sculptor because his era does not allow him to be both sculptor and architect; sculptor in order to restore to each his circular solitude and painter in order to replace men and things in the world--that is, in the great universal void --he finds it convenient to model what he had at first hoped to paint. At times, however, he knows that only sculpture (or in other instances only painting) will allow him to treat from every aspect the problem of his relations with others, whether distance has its origin in them, in him, or in the universe.

NOTES

1. Essays in Existentialism, Jean-Paul Sartre, The Citadel Press, N.J., p.403
2. The Hidden Dimension, Edward T. Hall, Doubleday, N.Y., p.54
3. as above, p.67
4. Quoted in Architectural Space in Ancient Greece, C.A. Doxiades, M.I.T. press, p.17
5. The Idea of Space in Greek Architecture, R.D. Martienssen, Witwatersrand Un. Press, p.5
6. Drawing xeroxed from Doxiades's Architectural Space in Ancient Greece, p.130
7. as above, p.107
8. Quoted in The Hidden Dimension, E.T. Hall, p.103
9. Quoted in Poems, by George Seferis (Greek version), p.33. Translated by myself. The quote is the starting point of the poem titled 'STERNA'.
10. see Visual Awareness and Design, Philip Thiel, Un. of Washington Press, Seattle and London, 1981
11. in Invisible Cities, Italo Calvino, p.124
12. quoted in Essays in Existentialism, p.402
13. as above, p. 388
14. as above, p.402
15. see note 12
16. quoted as above, p.403

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