

**Investigations Concerning the Making of
Personal Office Buildings**

Robert M Walsh

Spring 1989

"This is a great place to work!" I knew this immediately when I drove through the entrance gate and parked alongside several trucks. The place had a rough and ready feeling throughout. People were busily at work inside and outside the five distinct structures that surrounded the central parking and loading area. The pavement was concrete, the buildings were of concrete block. The entire organization of spaces and the individual buildings were all quite simple and clearly built to serve their purpose, which in this case was the storage, sale and delivery of concrete and related materials. At the heart of the activity was a small office building, the only structure here which required windows. The people were genuinely friendly and went about their work in a manner that suggested they had worked here happily for years. At one point a worker caught my attention from his position two stories above me. He was shouting some helpful advice which made my job easier. As I left this place I knew it must be possible to make an office building which was as full of life as this workplace.

The challenge of making an office building a place that helped people to do meaningful, productive and satisfying work was a problem I had been working on for several months. And yet I was only beginning to really understand the form such an office would take. That living and working are separate activities has become a tacit assumption of our culture. This has led to office buildings which have little or no life.

A noticeable lack of precedents has consequently made the

development of a new sort of office building that embodies life a significant challenge, but one with enormous potential benefits. To better grasp the plight of today's office workers, I visited office parks, converted warehouses, skyscrapers and other working environments. In the worst cases, typically, the glass sheathed steel frame high rises, I even found myself feeling physically ill. How depressing and yet oddly impressive it is that people manage to spend sizeable parts of their lives in these buildings.

Work places which do have a real life to them still can be found. Thus far I have found life most often in those places where the physical reality of the work is inescapable. Farms, auto body shops, and lumber yards are good examples. Although there are indeed differences between this sort of work and office work, these living work environments did provide me with salient clues toward what might be successful. Of the office environments I examined, those which were older houses converted into offices definitely were the most comfortable, and again suggested possibilities worth exploring in larger buildings, where several hundred people could work.

The numerous visits I made to offices and the countless conversations I had with office workers were quite revealing in what our current offices are lacking. Every person I spoke with had a ready suggestion of how their workplace could be improved. During these conversations my concern for these people grew when I saw the alienating work environments they endured on a daily basis.

What does a workplace need, to be a worthwhile comfortable part of life? My initial observations of working environments and discussions with my colleagues suggested several potentially important factors. The issues of natural daylighting, access to nature, working community, and community repair were the starting points of my subsequent investigations. Soon it became apparent that the issues of physical structure, mixture of room sizes and circulation were also important. As I delved further into these subjects I became aware of a deeper problem in office buildings which must be solved for these other issues to be worth addressing. This problem is alienation. Solving this problem ultimately required a fundamental change in the way I approach architecture.

Natural Daylighting

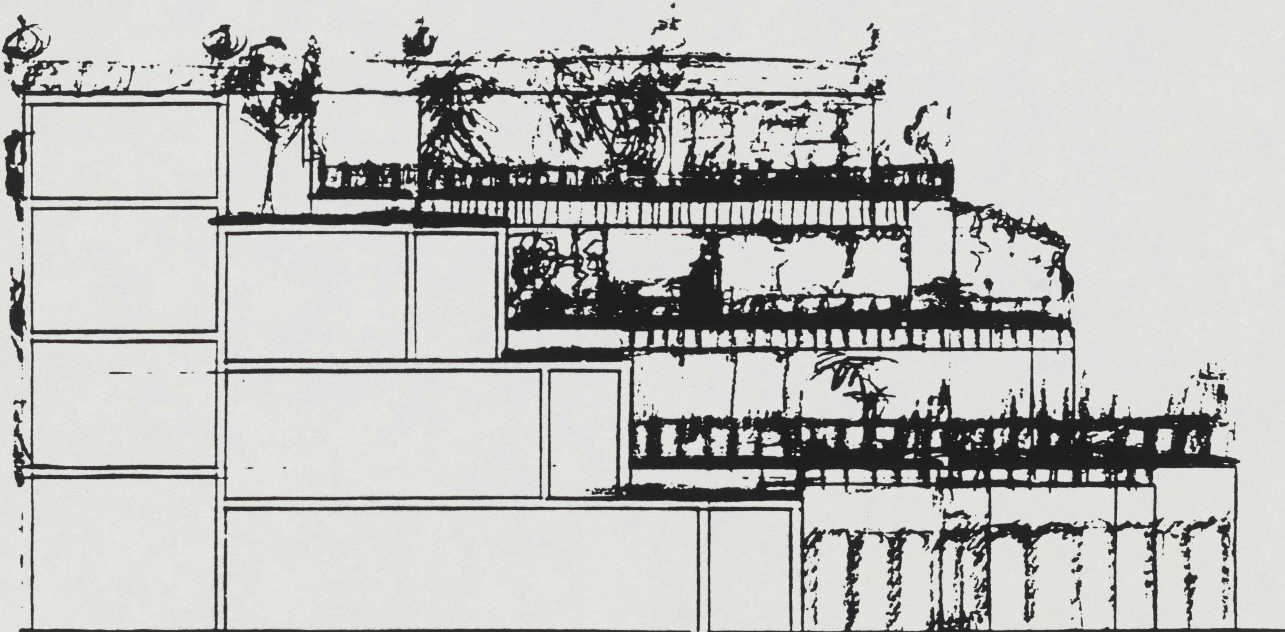
As I spoke with more and more people about how they liked their work environment, a pattern emerged. Typically, I was given an excuse, explaining why they had to work there or how hard it was to get a job there. I began to feel that these excuses, which at times sounded quite apologetic, were actually the excuses these people were making to themselves. Despite being evasive about how they felt about their work space, these people were surprisingly direct when I asked what changes they would make, if anything were possible. Most often I was told, "I'd like a window." And those who had a window already, wanted to be able to open it.

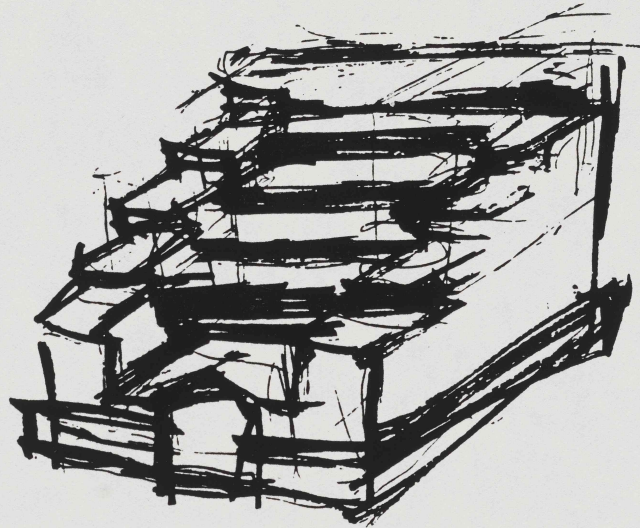
There are many good reasons to give each worker a window. Being able to look out to a distant view every few minutes reduces eye strain. Natural light is far more pleasant to work under than artificial light, and cheaper, of course. Operable windows make fresh air easily accessible. Windows help maintain a connection between workers and the world outside. Unlike a curtain wall of glass, a window can make a work station into a place, visible both inside and outside the building. My guess is that having a window can improve an individual's sense of identity within a larger work group.

Clearly, giving each worker a workplace with a window will change the form of an office building from what people have come to expect. Instead of large monolithic structures which strive to keep out daylight, buildings will need to consist of numerous wings correctly oriented toward the sun and views. Most people when asked, expressed a desire to be within ten feet of a window. This would suggest that wings should be 20-25 feet wide. However, I found that rooms with light from two sides had much better light and could be larger, depending on room height and orientation. When I eventually had a good understanding of the mixture of room sizes my two operating rules were: locate large work areas to get light on two or more sides, and locate each work space within 15 feet of a window or closer.

Access to Nature

At present, office buildings are quite isolated from the world outside. Upon entering an office building you leave behind sunshine, fresh air, and any sounds or smells of the outside. A prevailing attitude of the people who work in these slick, synthetic environments is "you work for a living," and not "work is living." Some workers expressed a desire for fresh air more urgent even than a desire for daylight. How could a connection with the world outside be maintained despite the demands of computerized office work? Sitting in the shade of a tree, walking along an ivy covered brick wall, or pausing to look at the flowers in a window box, are all real and immediate experiences which help us feel connected with the world. At first, I was not sure what form it would take, but the opportunities presented by incorporating gardens into the actual work environment merited further investigation.





Initially I thought these gardens would be large terraced spaces where people from several neighboring work groups might work. Indeed there is a need for larger communal outdoor spaces in an office building. Through observations of actual roof gardens, terraces and balconies, however, I found that the most intense life and use of these green spaces happened in the smaller, well sunlit, yet protected gardens. In fact when office buildings had large balconies they appeared to be completely abandoned. Sunlight is probably the single most important factor in determining the success of a garden space. Additionally, the higher off the ground a garden is the more important protection from the wind becomes.

A general rule developed concerning gardens once I more clearly understood the organization of work groups. Whether it is a roof garden, balcony, or terrace, give each workgroup a viable means of access to the outdoors. This space should be a place which invites people to work there when the weather allows and is pleasant to look out on when the weather does not. These

garden spaces should be placed with care to get adequate sunlight and yet feel like an integral part of the work realm. Instead of thinking of these spaces as appendages which are tacked onto the building, I found it helpful to consider them as places embedded in the structure of the building.

Office as a Working Community

When people live together they naturally tend to form communities. People do this even in the harshest of environments, for example, prison, the Sahara, suburban New Jersey. Considering how adversity brings people together I questioned the need to encourage what was a basic human instinct. There are communities within office buildings today and yet my observations have shown them to be rather shallow and unstable. Typically the management and the regular workers only interact in the context of work. Even when there is considerable social contact between workers and management, there is nevertheless an invisible but real barrier inhibiting the sort of openness which happens between friends. In a real sense, it is lonely at the top. Amongst co-workers there is an uneasy feeling of competing for promotions and yet needing a cohort to confide in. The feeling that employment is temporary, where people are continually being hired, fired, or transferred, encourages people to remain superficial in their interactions.

Fortunately there are other sources of meaningful community in people's lives, where more genuine interaction takes place. Volunteer organizations, clubs, and organized religions are all

places people go to find community. And so the question is not how to encourage communities to occur in an office building, but how to encourage mutually supporting healthy communities in the workplace.

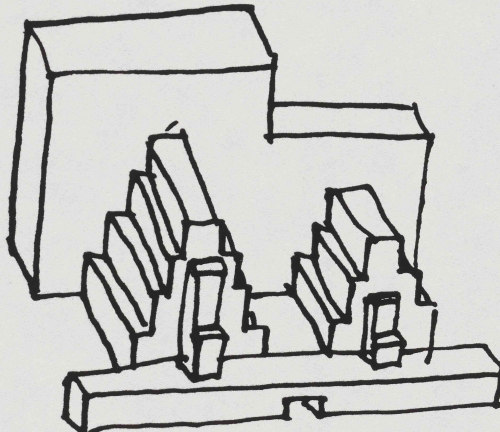
For an individual to contribute fully to the life of a group, two things are necessary: the individual must have a clearly established, comfortable identity within the group, and the group itself must be clearly defined. In architectural terms, any group will have a realm in which it functions. This realm should be a well-defined place with clear thresholds to smaller and larger groups. Because each group will necessarily have control over its place, each group will have the freedom to develop and express its unique character. A typical office community will consist of a hierarchy of smaller groups forming larger and larger groups. Likewise, the control which might normally rest at the top will instead be distributed locally throughout the hierarchy. In an example which takes this decentralized control seriously, workers would be able to change the physical structure of their work space to the limit of their needs and budget.

Certain work organizations have been shown to both improve the feeling of community amongst workers and the quality of work they perform. For example, assembly lines have been the standard method of assembling cars for years. In an experiment Volvo tried using teams of workers to assemble cars from start to finish. Although the rate at which a car was assembled remained

the same, productivity went up because the quality of work noticeably improved and there were fewer rejects. Likewise, large architecture firms are finding the use of one team on a project from start to finish to be quite an effective way to work. In contrast to offices which emphasize private offices, I have been exploring the use of project oriented work groups as the primary working unit.

On Being One Thing

I happened upon this problem early in my work but did not fully appreciate its significance until much later. Through the course of working to increase the area of garden spaces, and general daylight inside an early building scheme, it began to become more and more like two parallel structures, one larger than the other. They were two similar things which quite clearly did not form one pair. Individually they each had a strong



presence, and yet they gave an odd character to the larger urban fabric because they were not two halves of a larger thing. A complex of many buildings must still be one thing.

Community Repair

The current attitude that working and living are distinctly separate can be seen in the lack of concern for the communities in which offices are built. The most recently built building in my own neighborhood is an office building which happens to be next door. I am friendly with the residents of neighboring homes, but I have never seen the people who work in the small office building. Outside of business hours during the week, the office is a dead place. Because this building draws from the life of the community without returning any, it feels like a parasite. The frequently observed community organized opposition to new office development is a natural response to this situation. Nevertheless I feel that the making of office buildings must be an act which increases the life of the community.

The life of a building does not start or end at the property line. In older cities this can be seen in the way buildings together form public outdoor spaces. In this reciprocal arrangement the buildings enhance the life of the community through the presence of this outdoor space, and the buildings are enlivened by the life of this space they have made. The prevailing attitude toward architecture today is that

buildings are largely unrelated objects on individual pieces of land. And yet, those buildings which are most alive also are the ones which add life to the community.

An office building will have a presence in the community in which it is built. Whether this is a positive presence or not depends on how effective the building is in addressing the already existing problems of the community. I coined the term "community repair" to express this idea that the choice of site, building volume, organization and construction of a building should be undertaken to improve the community as a whole, of which this building will be a part. My understanding of this issue developed gradually while I worked on the general office problem. My first designs were not well informed by this real but initially nebulous need.

Physical Structure

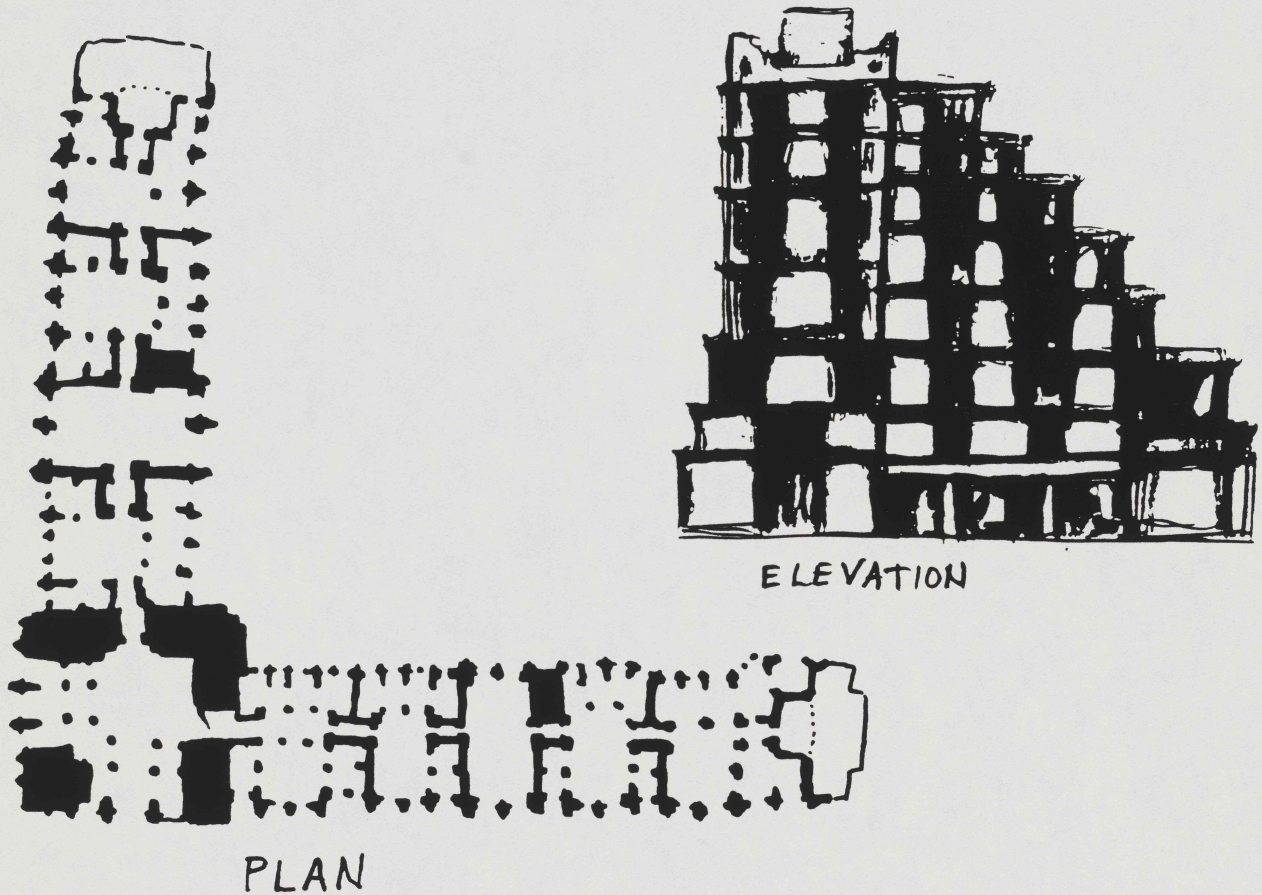
I was beginning to see some tangible effects on the building schemes I was proposing as the result of my new interest in daylight and garden spaces. The physical impact of issues of community was not as readily apparent. I knew I was missing something because my floor plans had a diagrammatic feel not unlike the very office buildings which had produced an ill feeling in me. I was quite curious to know what had caused this feeling. I had spent long hours in a photography darkroom without experiencing this, so I knew it was not just a lack of daylight. I had climbed up cliffs several hundred feet high

without feeling ill, so I knew it was not a matter of height, despite the marked increase of this ill feeling in higher buildings. Reviewing my notes, I came across an earlier comment that described one of these buildings "feeling like a house of cards." This intrigued me and I decided to investigate it further.

Most buildings I feel comfortable in have a weighty, solid, personally accessible structure. Some of the carpeted floors in office buildings seemed to give under my feet as I walked. This lack of apparent solidity bothered me. The move away from load bearing exterior walls to continuous glass skins has, of course, opened up a wider range of choices concerning the arrangement of interior walls. These walls are typically synthetic fabric covered dimensionless, partitions. Once again mediocrity triumphs in the guise of freedom of choice. What a freedom it would truly be to have one excellent workplace instead of a multitude of bland options.

With the hope of making a building which felt less diagrammatic and more real, I began to beef up the mass of the structure, which I began to feel should be concrete. I wanted the permanent structure to define the vast major of the work spaces, and thus be clearly present throughout the building. I thought that getting the mixture of room sizes correct would allow a building to have the same high degree of flexibility I had found in offices which were converted from houses. Such a

the structure itself could be quite visible, permanent, and massive. An organization where large spaces alternated with small spaces opening onto them somehow reinforced this solid feeling and can be seen in the plan below.



This scheme indeed had a more solid feel, but it also had problems. Access to the outside world was limited to operable windows, and the circulation made the work groups too public. Somehow it felt too rigid but I did not know exactly why.

Mixture of Room Sizes

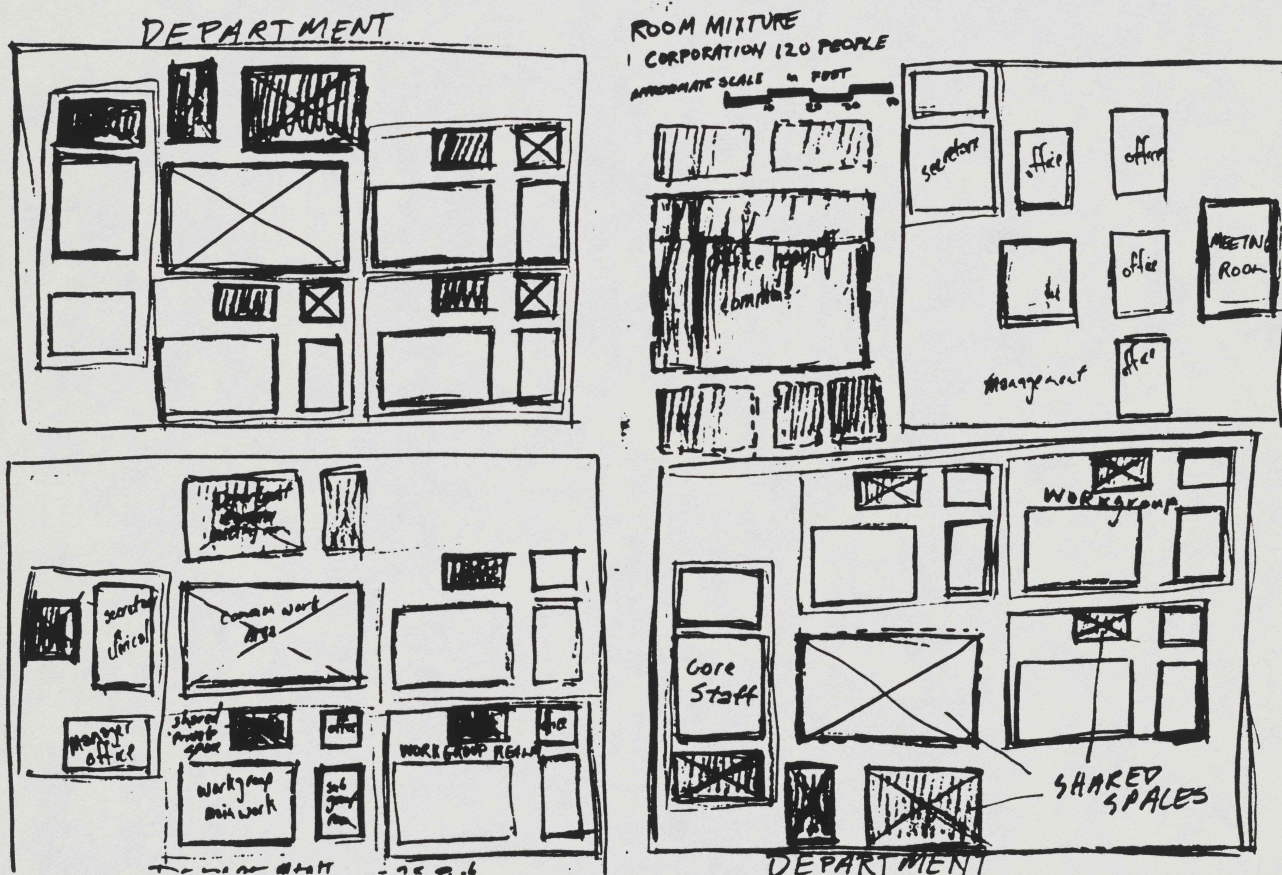
One of the reasons that old houses make good offices is that they have a good mixture of room sizes. This is visibly missing in most modern buildings. However, it can be found in other older buildings. I looked at plans of cathedrals, monasteries, Roman villas, farms, temples, towns, houses, and cities. The more I looked the more I began to feel that something very real was happening in some buildings which was absent from the others. To better understand this, I attempted to quantify it, which proved to be quite difficult, because I found examples of buildings which met my criteria and yet were terrible places. Although far from foolproof this criteria for a good mixture of room sizes still is worth recording.

1. There are rooms of several different sizes and proportions, generally rectangles and only rarely squares .
2. There is one largest room.
3. The largest rooms are not lumped together but are separated by smaller spaces which support them.
4. The smaller spaces will also have spaces still smaller which open onto them.
5. Proportions of larger rooms to smaller rooms vary considerably, but a ratio of 3 to 1 in square floor area appears to be a common approximate relationship.

I have an intuitive feeling that there are certain proportional relationships which are most effective. My guess is that they depend on the actual scale of the spaces involved; a very large plaza could be supported quite well by spaces which might be 1/30

its square area or less, whereas a small workroom might need a room 1/2 its area to achieve a good mixture of room sizes. I began to perceive something which I could not quantify, that had an almost tangible, textural feel. And yet it alluded me.

In order to begin applying what I was finding out about room size mixture to office work, I made abstract studies only concerned with getting the right number of spaces of the correct shape and size. While a workable mix developed, I decided which spaces would be public, private, indoor and outdoor.



Organization and Circulation

I was beginning to understand how to devise a mixture of rooms which would encourage the diversity that a working community would need, yet I had not sufficiently addressed the organization of these spaces which made the idea of a working community a functioning reality.

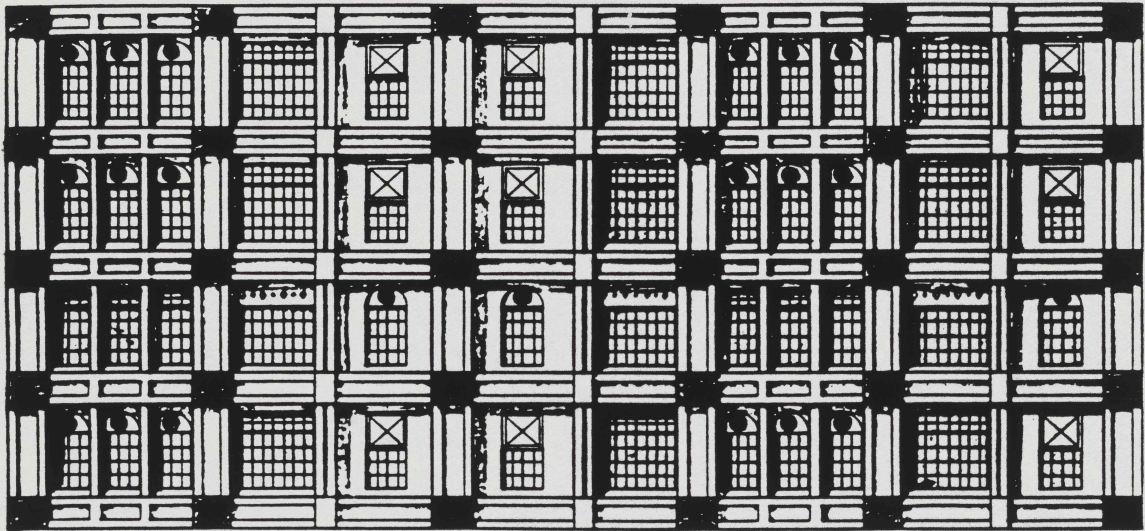
There are special needs within an office that affect its organization. Management and sales people do a large part of their work outside the office. Secretaries and clerical workers are the people who day in and day out maintain the life of the office. And yet these people who are most affected by their work space and have such a stake in determining the life of the office in general are typically given the worst places to work. Offices in which the upper management routinely crossed paths with the common workers had a stronger feeling of community. Offices in which several people, between two and six shared a workroom have a stronger group feeling than wide open offices or individual offices. These group spaces seem most comfortable when they are deadends with no through traffic. However, the building in general functions better when the largescale circulation is looped. One work group organization which addressed these concerns is shown below. In some ways, this arrangement is organized like a series of row houses, where each department has one three story house. The upper two floors contain work group spaces; each work group

has a large workroom, a meeting room, a project manager's office, and an outdoor terrace or balcony. The first floor, functions like the ground level of the rowhouses. The horizontal circulation along this floor connects the various departments. Secretaries and receptionists for the department are located on this floor, the departmental heart is a common space adjacent to the secretarial spaces. Further down the hall are individual offices, interdepartmental meeting rooms and storage lockers.

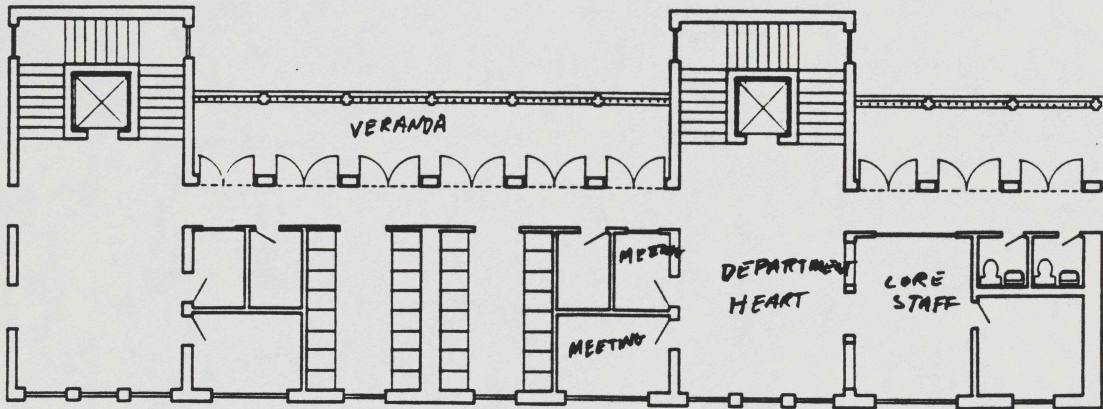
The strength of this scheme is its rich variety of room sizes. The stairs up to the work rooms were a mixed blessing; they created a feeling of privacy in the work rooms, but also created a feeling of being cornered or trapped. Some people expressed a resistance to having to go up and downstairs so often. Initially, I dismissed this complaint as insignificant. Ultimately more revealing was the extreme failure of this scheme when applied to a larger building on an actual site.

Death by Standardization

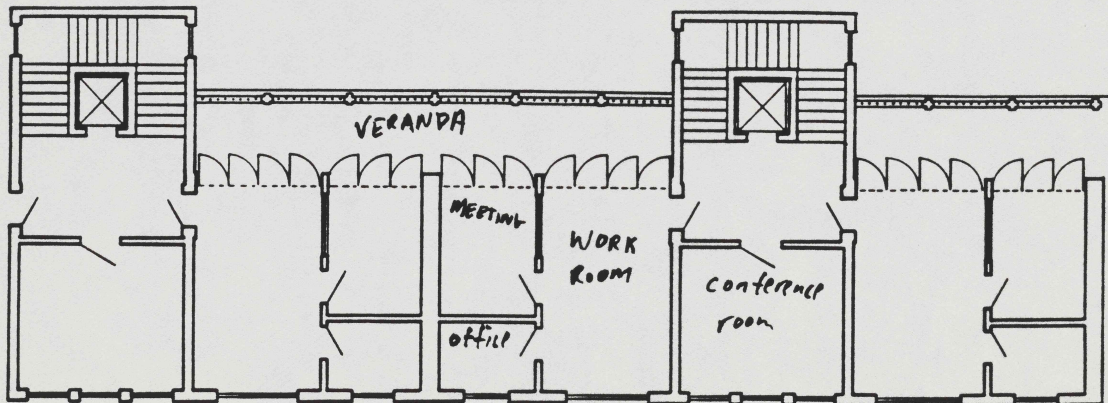
Basically I felt my scheme was a good thing, and so out of haste I made a building by essentially taking this thing and doing it again, and again and. . . . As of yet I had not addressed the modular repetitive quality of high rise office buildings. I had a vague notion that symmetry was a good idea, somehow. The building which resulted from repeating horizontally and vertically a standardized version of the row house scheme was incredibly oppressive.



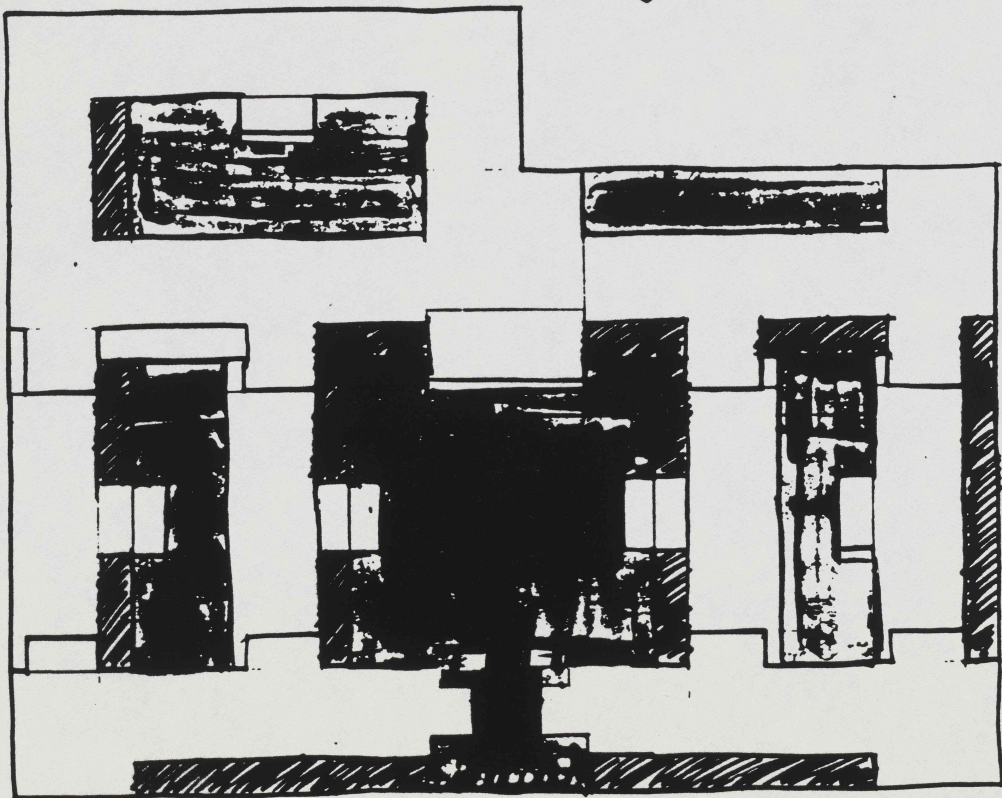
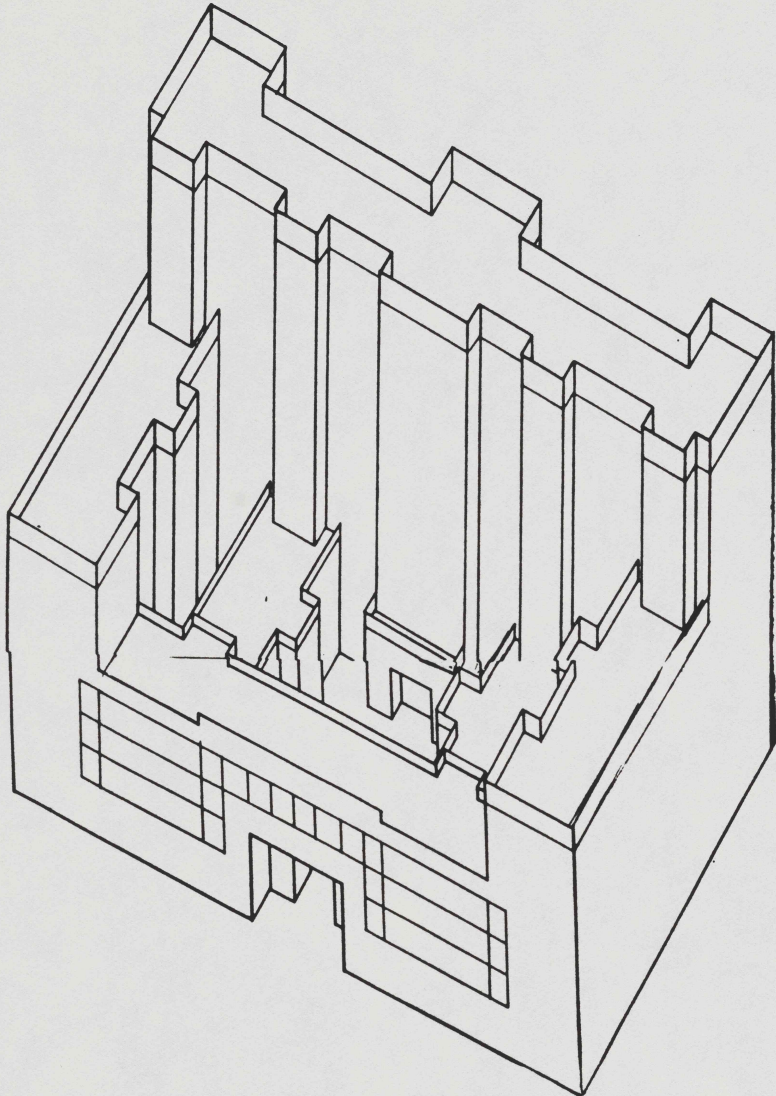
Partial elevation



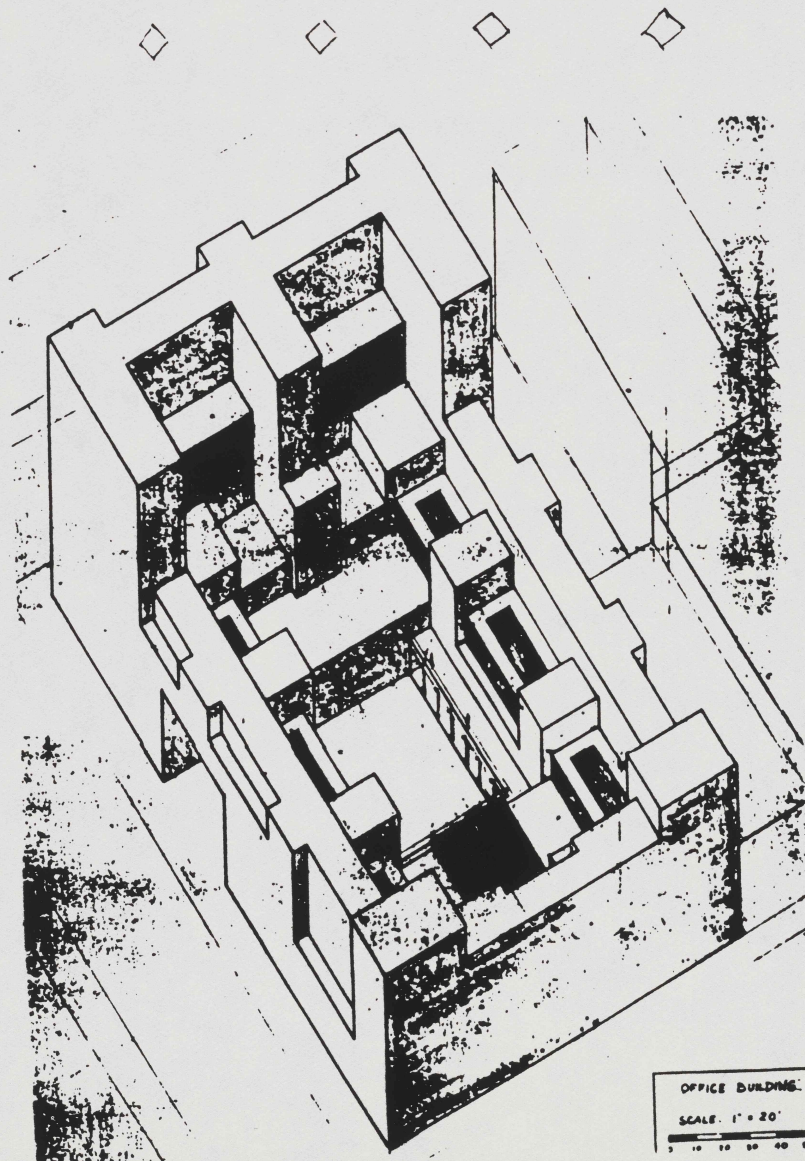
PLAN
A



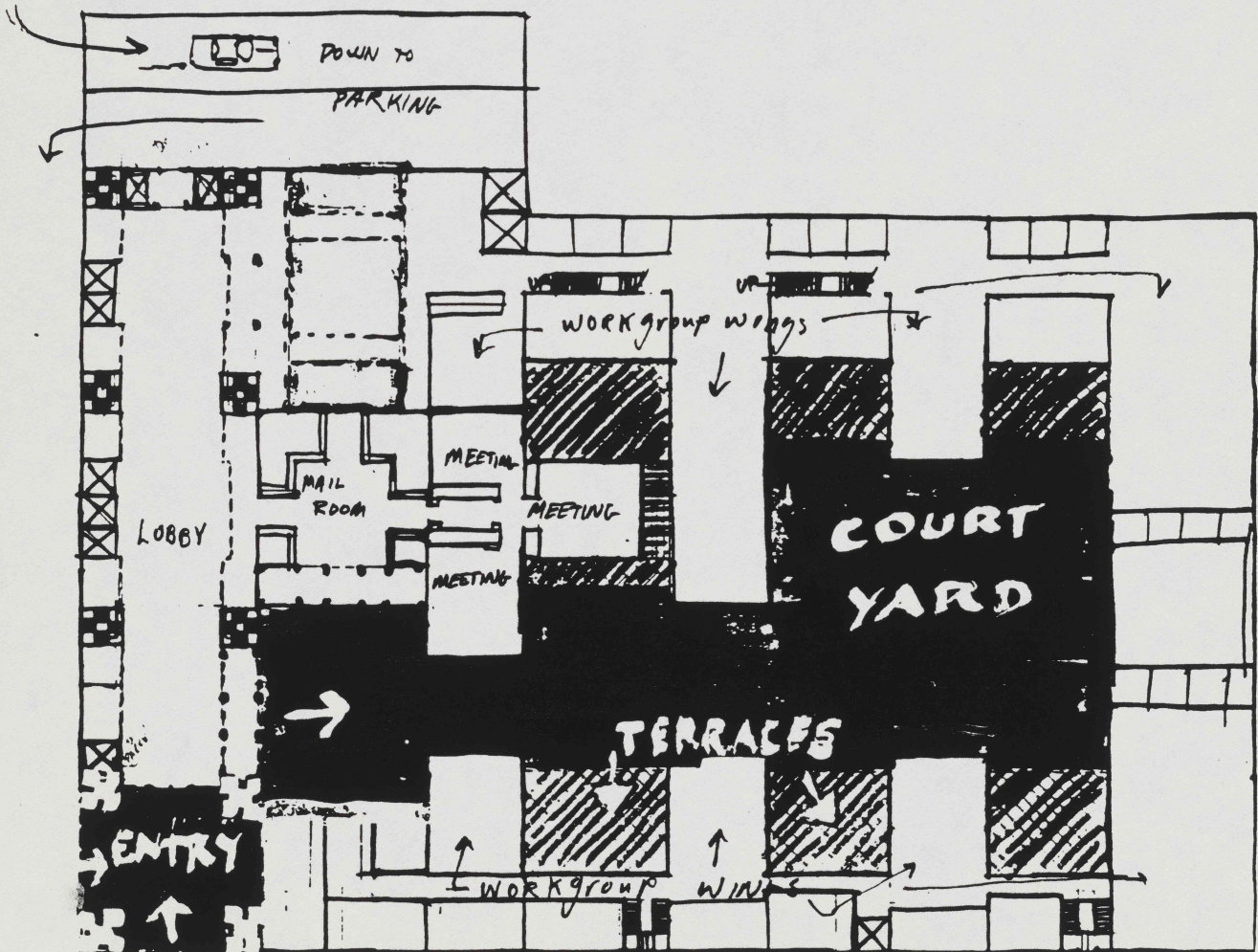
PLAN
B



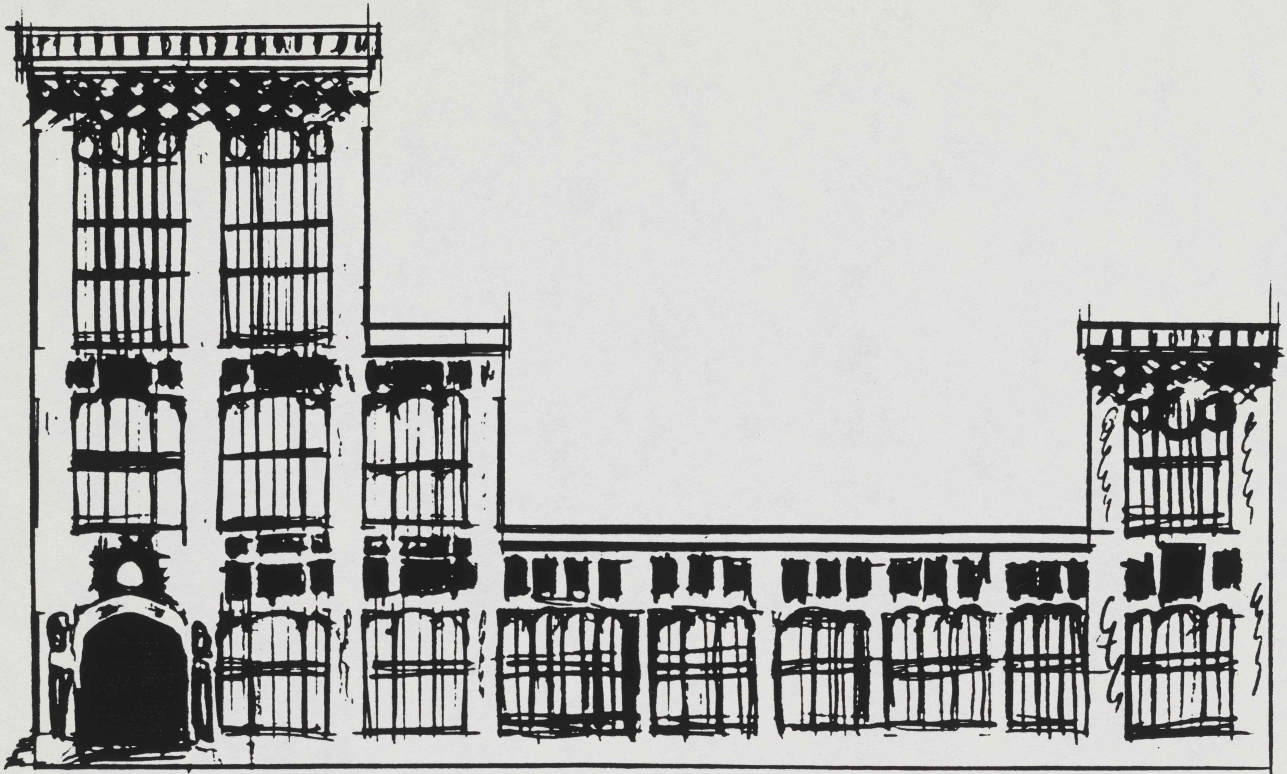
The building lacked a larger sense of order and looked like a random piece of plaid fabric. The workplaces lost most of their capacity to become unique personal places by being so standardized. The scheme also lacked the larger shared spaces which might bring people from different departments together. The fact that a building could fail so spectacularly despite my previous research was a clear indication that there was more to the problem than I had identified.



The lack of medium and large spaces was the most immediate problem with my first scheme, so I developed a new arrangement which was built around a network of interconnected larger and medium-sized interdepartmental spaces. Something about this building was quite oppressive, in a different way from the first scheme. I was becoming both intrigued and baffled by this very real, but as of yet inaccessible problem. The extreme symmetry struck me as a real problem with this scheme, and yet many great buildings are also very symmetrical. I had not yet understood the difference, so the next scheme avoided large overall symmetries.



PLAN ground level



ELEVATION

On Looking Like Life

In principle - an idea may be easy to agree with, and yet applying it requires real understanding. When the proposition was made that a building should look like life my colleagues and I all agree that this was true. After my initial investigation of room size mixture, I continued to examine plans, drawings and photographs of many great and many not so great buildings. The best of them did, somehow, look like life. To explore this further I looked more consciously at trees, paintings, sunsets, people, flowers . . . in short, any thing which clearly had life.

When it came time to apply this knowledge I ran into trouble. My sketches, especially the brutally fast ones, looked much more like life than my finished drawings. A colleague suggested I trace my hard line drawings freehand, but this was no help. I examined the process by which these sketches were being

developed into larger buildings and found that I was smoothing out the rough spots and minimizing the differences created by local conditions. And yet these subtle variations contributed to the life of the sketches, so I looked for ways to keep this throughout the process of developing a set of plans.

Because I was working with a fairly large site, the pattern building complex suggested ways in which I might still have local variations. My ~~last~~ scheme was more of an agglomeration of partial buildings than one building. Although it consisted of many unique places that in and of themselves were better, this building with minimal overall symmetry still had a heavy oppressive character not unlike the previous two schemes. I decided to get to the bottom of this problem.

The Problem of Alienation

Despite having an intuitive grasp of garden spaces, natural lighting, the mixture of room sizes and the circulation which would produce a healthy office work environment, I clearly was missing something. The first two schemes were stiff and oppressive while the third was hopelessly chaotic. I was faced with three buildings with decent daylighting, garden spaces, a good mixture of room sizes, adequate circulation, and yet I knew that a real supportive community would happen in none. In a word, these buildings were alienating.

The problem of alienation was quite real, and yet I did not fully understand it. To get a better handle on this problem, I devised a simple yet effective test, which I then applied to

numerous buildings. Whether walking through an actual building or looking at one on paper I did the same thing. I imagined myself to be a worker in this building, even choosing my desk when possible. After I had a clear sense of how it would be to work there, I asked myself these two questions: Is this my building? Is this my workplace? The only buildings to which both answers were yes, were those in which alienation was not a problem. These buildings I began to refer to in my notes as 'personal buildings'.

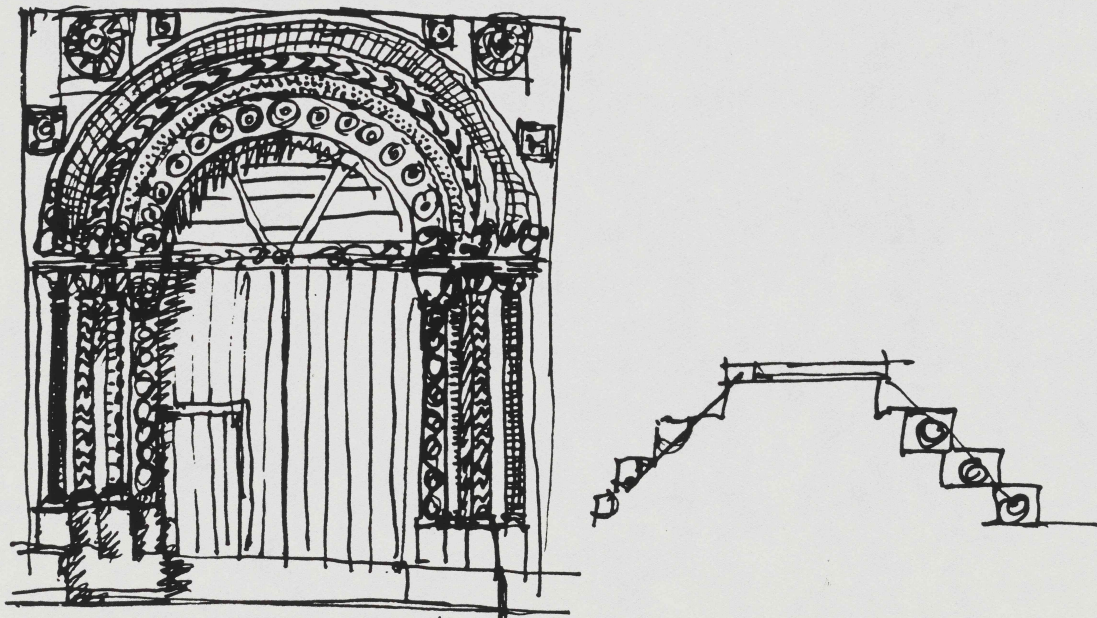
I realized that alienation is a problem that happened on many scales, or more precisely across scales. My test essentially was the same question asked twice at different scales. I came to realize that only my first question, 'Is this my building?' is fully necessary. Only if I have a work space that feels like it is mine can an entire building also be mine. Nevertheless, using both questions provides a useful check and at times makes this problem of alienation more accessible. The understanding that alienation operates across scales proved essential in discovering how to actually solve this problem.

At the time I devised this test for alienation I did not fully appreciate the significance of the way it carried through from one scale to the next. However, a fundamental change began to happen in the way I saw and approached architecture. Previously I had been essentially operating in a mode where I worked at different scales fairly independent of each other. Instead I began to see things as a sort of scaleless continuum where the same thing was happening on all scales, all the time.

In essence, any decision made on one scale permeates the entire thing and even beyond its bounds, regardless of scale. The intensity of the effect of a decision diminishes as the magnitude of scale changes.

Alienation and Symmetry

My test for alienation was rather cut and dry; either a building was personal or it was not. Nevertheless I also began to see that alienation was a somewhat relative phenomena which varied in intensity from building to building and up and down levels of scale. I noticed that buildings which had a strong personal quality in their overall massing were roughly symmetrical at this scale. In my attempts at office buildings thus far, the work groups which were most personal had strong local symmetries. The symmetries I had been drawing were lacking something I had seen in older buildings. Suspecting this somehow tied into alienation, I once again began looking through large folios of illustrations of medieval and Islamic buildings. This time I decided to copy some details freehand, which heightened my awareness. While I was drawing the entrance shown below I began to arrive at a deeper understanding of symmetry.



Portal of the Church of Sant Carcere.

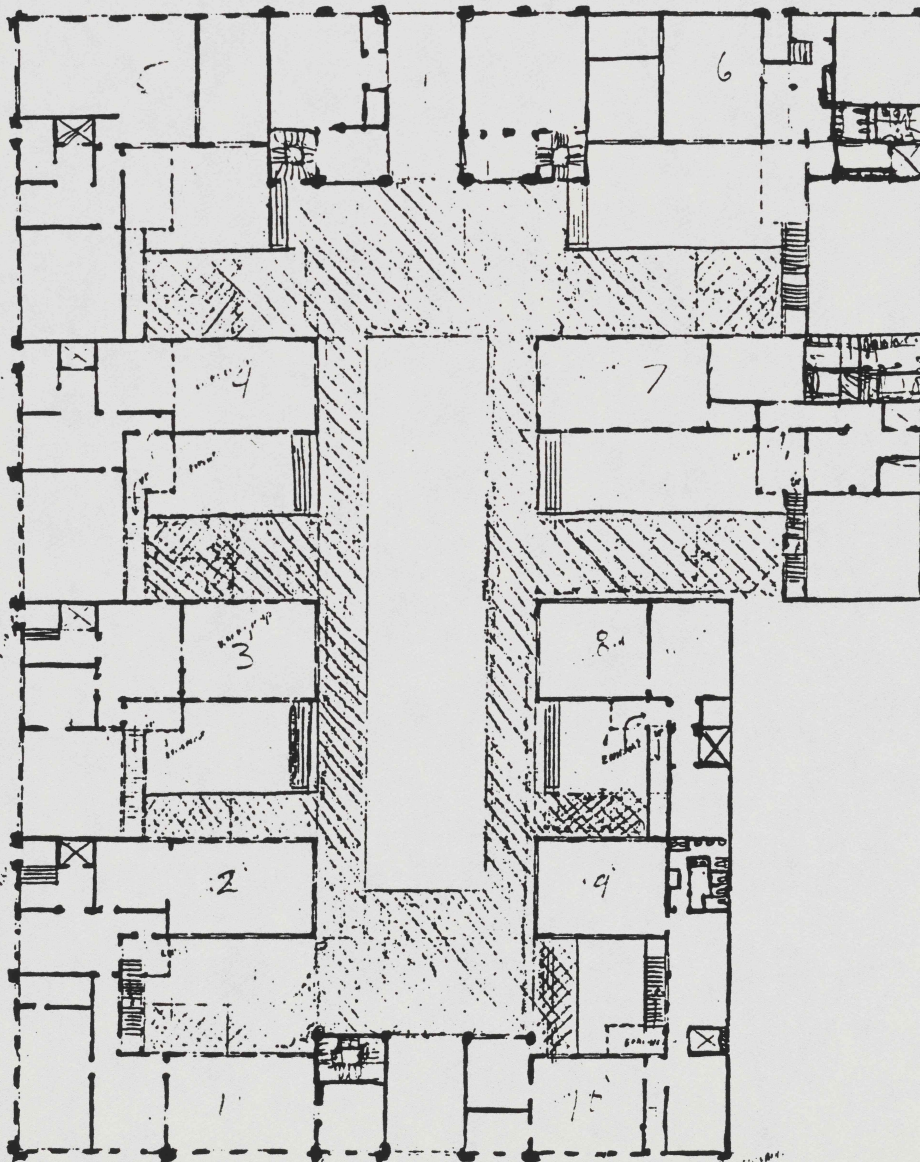
Overall, it is quite symmetrical, yet it is not a mirror image. On either side of the arched stone work are pairs of individually carved ornamental stones. The level of detailing, the shape and size and rough organization are quite similar in each pair. At first glance and from a distance, they appeared identical. The structure of each pair was symmetrical at any scale where both were seen at once. When I began detailing each individual stone I found them to be surprisingly unique. Each had an internal balance of the same sort and yet realized it individually. Instead of seeing symmetry as an occurrence repeated on different scales, I realized symmetry is one thing which changes across a gradient of scale.

The entire entry and each of its parts had the same personal feeling that the most successful, least alienating buildings had. This intrigued me as did the gradient quality of both alienation and symmetry. To make a building which had this, I knew would require a process much more like the differentiation of an organism and completely unlike the 'parti' method which depends on one big idea pulled out of the blue. To avoid falling back into previous, unsuccessful yet familiar methods, I decided to take a very deliberate approach.

The 50 Labs Project

For this building design I decided what decisions were most important and made a written list of the order in which they would be addressed. This allowed me to fully direct my attention to the task at hand and do it well. I also found this enabled me

to do a large building as one building, and still get into details. Decisions in this method lack the tentative, we can change this later, quality rampant in the parti approach. The resulting building, although not a failure, revealed oversights and judgement errors in the initial prioritizing of decisions. This was a minor problem because I found the method to be substantially faster than my earlier approach.



A closer examination of the economics of my site revealed that a floor area ratio of about 2 would be quite acceptable. Free from the need to go tall, I set about making a design which better responded to the needs of the neighborhood.

The building which developed consists of ten wings with an average height of five stories which face onto a long central space shared by cars and pedestrians. Each floor of a wing contains one work group. Shared spaces used by more than one work group and general circulation form the perimeter of the site. The garden spaces and parking strengthen the feeling of each work group as a place. The feeling of each work group suggests intense work, like a laboratory, happens here. The density of the wings on the site contributes to this intensity. Daylighting in the twenty foot wings was excellent. Their organization was rather cramped. The pervading feeling was one of 'all work, no play'. This was a place where people would drive to work, drive home after work and add very little to the life of the community.

I checked the sequence of decisions I had made. The first decision was the location of the building wings. I had assumed that the wings would be twenty feet wide to maximize the daylight.

Although I thought this width could be substantially modified, the fact was that the actual placement of the wings

depended on the *dimension of these wings* . Changing the width later proved to be a problem which weakened the relationship of one wing to another. This inhibited the development of the wings into parts that were real, substantial entities.

The relationship this building had to the community troubled me. It was cut off from the community and only had a life internal to it. In terms of the fabric of the life of the community, this building did not contribute much more than the empty space which was there before. I realized that my decision-making sequence had begun without addressing the largest-scale issues and anything after the beginning was too late.

This building was not fully alive. It did feel less alienating than my previous attempts. Its strength was also its weakness: it was a collection of wings, it was *not one* building.

Identity, Alienation and the Field of Centers

Midway through this project, I and my classmates were presented with a sort of score sheet against which to evaluate our buildings. At the time I had just given up on the two oppressively symmetrical schemes, and was about to abandon the next equally hopeless scheme which was utterly chaotic when we rated our buildings by this numerical score sheet. My building had a high score because it met

the criteria which were associated with the initial considerations such as daylighting and gardens.

We then evaluated the buildings on the basis of alienation, which my building failed completely. Afterward a classmate wondered aloud how could a checklist correlate to alienation? My off the cuff remark was that the field of centers should account for at least 50% of the possible total points, not 10 or 20. Fifty per cent now strikes me as a very conservative figure.

A friend who was a competent and inventive cook once told me that the secret was to understand the 'thingness' of your ingredients and combine them to bring it out. The implication that thingness is a relative quality may indeed sound suspect. How could something be more of a thing or less of a thing? And yet this is what I found. As I evaluated office layouts I found that those places which were most personal, least alienating had a stronger 'thingness,' they were entities in a real, intense way that less personal places were not. This thingness is a sort of clarity, an identity, an observable degree to which something is really this something. It's actually quite straightforward, and cannot be faked or imitated. A thing which really is the thing it is, will fundamentally be more personal than a thing which only tries to be the thing it wants to be. Thingness could be considered to be how honestly a thing is what it is. A work room where real work naturally happens

is more of a workroom than a workroom in which working is a labored activity.

Any thing in which this thingness is present will have the character of being identifiable as an entity. There is a specificity to this quality. For example if a table is any table it probably is lacking in thingness, but if a table is this table it most probably has 'thingness'. At present I am baffled by my inability to make this simple thing clear.

Alienation is inversely proportional to the degree of thingness. Ultimately, I think alienation is tied to a sense of identity. Is this my building? Is this my work space? Are essentially questions of ownership. An entity must be identifiable to be owned. I must have an identity to be able to own something; and ownership apparently strengthens this feeling of identity or self worth.

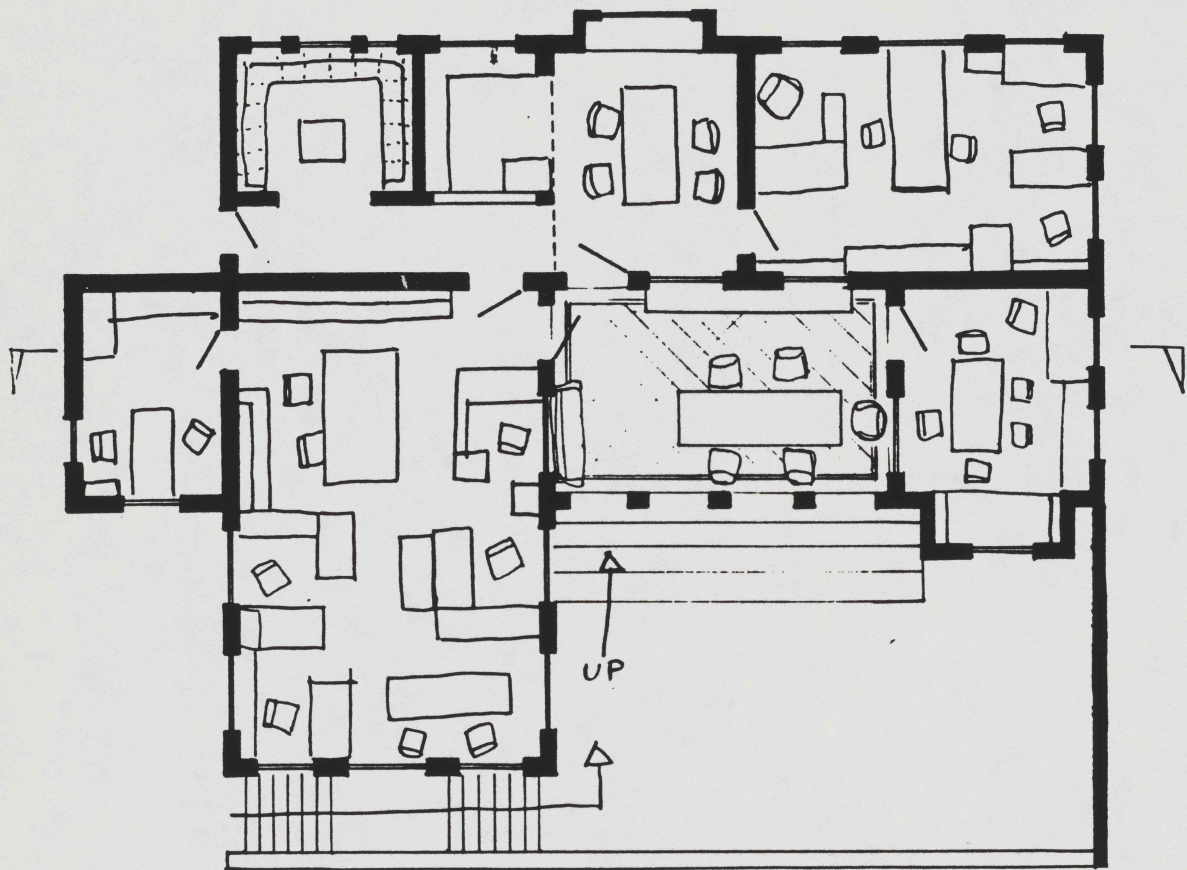
When a place, whether it is a building or a work room, lacks the quality of being a definable, accessible entity it cannot be owned. It is this inability to be owned which I believe results in alienation.

Just as alienation and symmetry are functions which operate independent of scale, so is this quality of being a complete thing. A building which is personal, ownable, an entity to the strongest degree possible, will necessarily be made of smaller entities which share this quality. And these entities will be made of and supported by still smaller entities, and so on. The largest application of this

principle and the best starting point for a project is community repair. Although perhaps not as obvious, this hierarchy of mutually strengthening entities actually goes beyond the site. Just as a building potentially can be a very real entity, so can the neighboring buildings, streets, parks, and landscape. And yet the building will only have this quality of genuine alive thingness when it is made in such a way as to make these nearby buildings, streets into an even larger but equally alive entity.

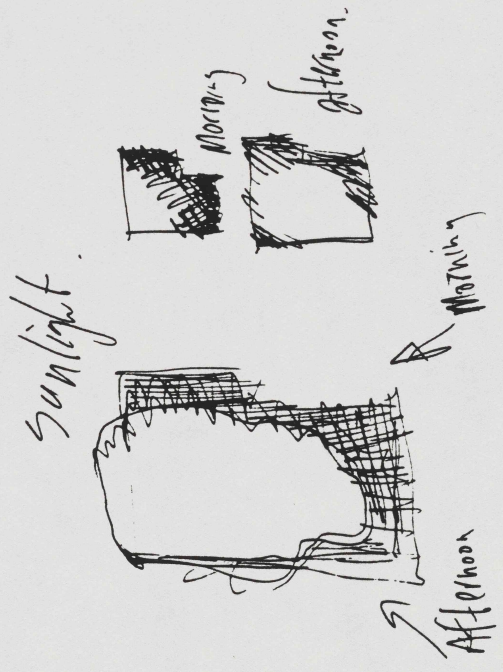
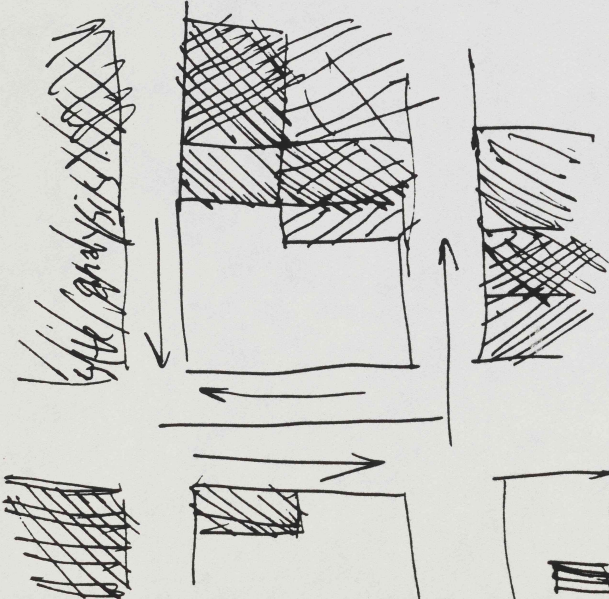
Ultimately because this principle operate across scales a building will succeed on the smaller and intermediate scales only if it succeeds at this largest scale.

It was during work on two final projects, an ideal work space, and a final building scheme, that I began to see a connection between the problem of alienation and the physical realness of a place. Eventually, the closest I could come to describing something I believe to be quite real and the solution to the alienation problem was a hierarchy of mutually strengthening entities. I worked late into the night driven by the excitement of discovery. At 6:00 a.m. I realized that this was actually the field of centers, the difference was that it was no longer just theory, it felt real.



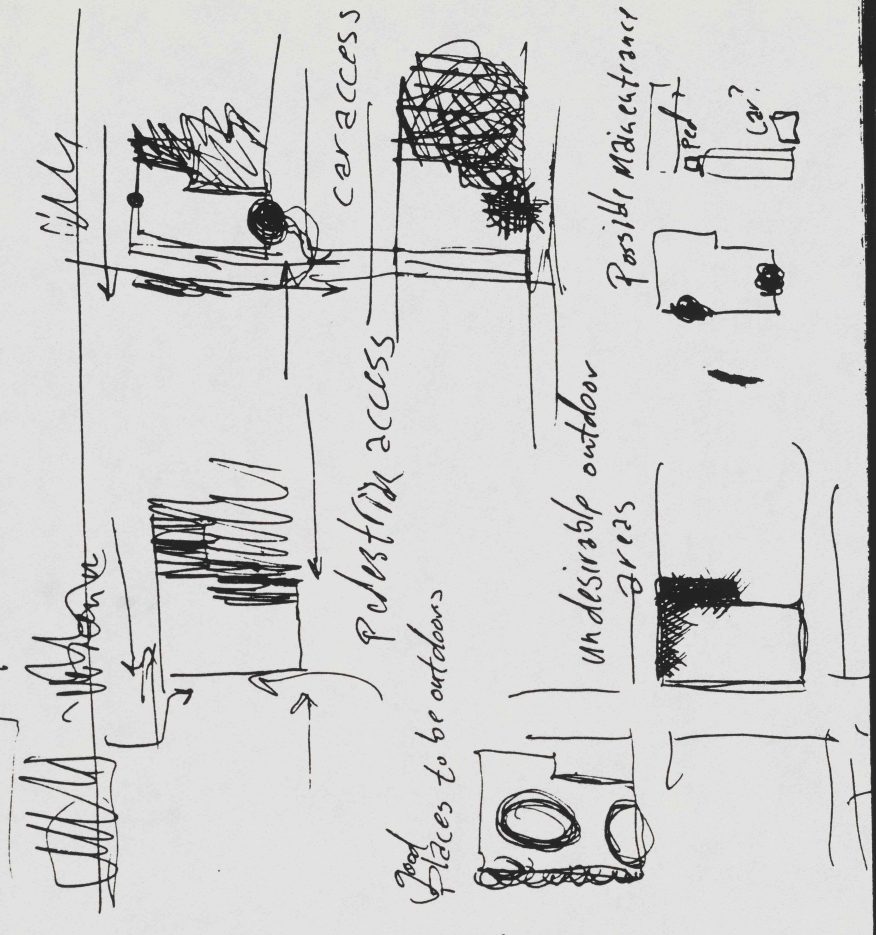
IDEAL WORKGROUP PLAN & SECTION

0 2 4 6 8 10 FEET

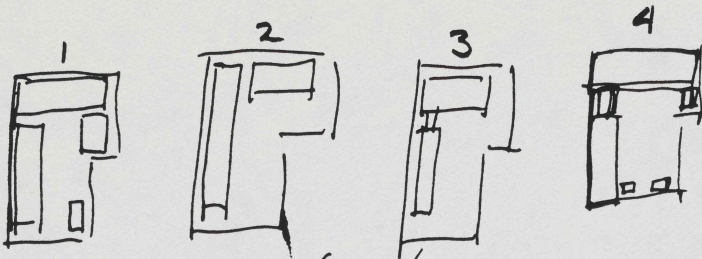


COMMENTS

two street edges in need of definition
 also needs to be clearly defined
 but not as high as other sides
 - allow sun in pedestrian access?



SITE ANALYSIS - FROM NOTES



site analysis

Locate general building Mass/Masses

Determine Main Center

Main entrance

* determine centers which support main center

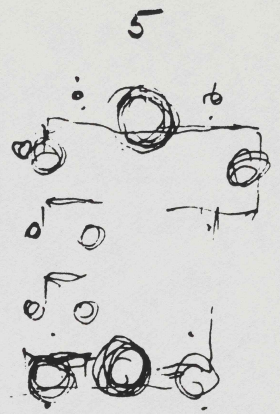
* determine - name ~~name~~ secondary centers
 ~ size
 ~ location
 interdepartment.

- locate ~~to~~ department scale

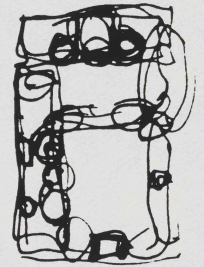
- entry + circulation - daylighting notions.

locate street entries.

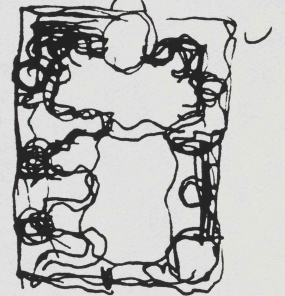
- locate work group realms.
 locate support locate core staff.



6



7



INITIAL PATTERN LIST

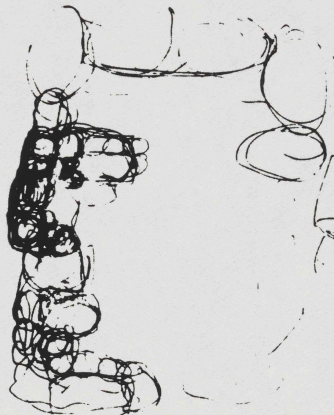
THUMB NAIL SKETCHES

APPROXIMATELY FULL SIZE

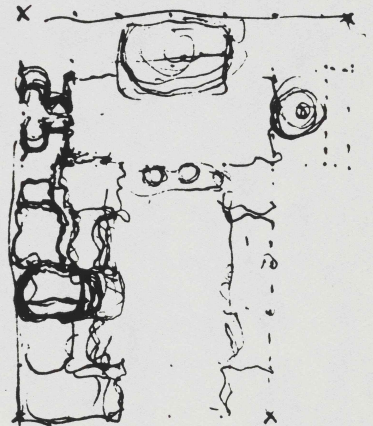
NUMBERED IN SEQUENCE

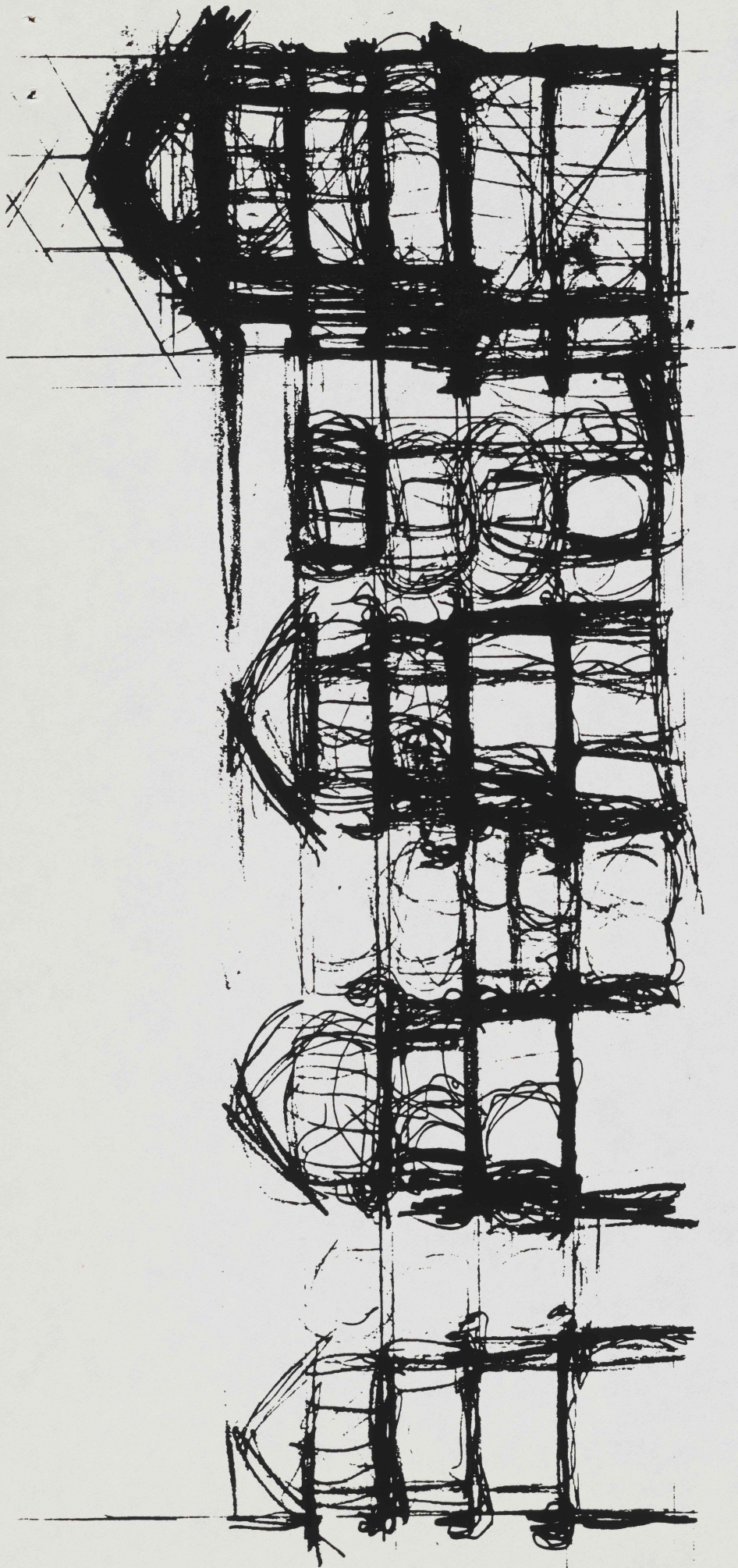
DRAWN

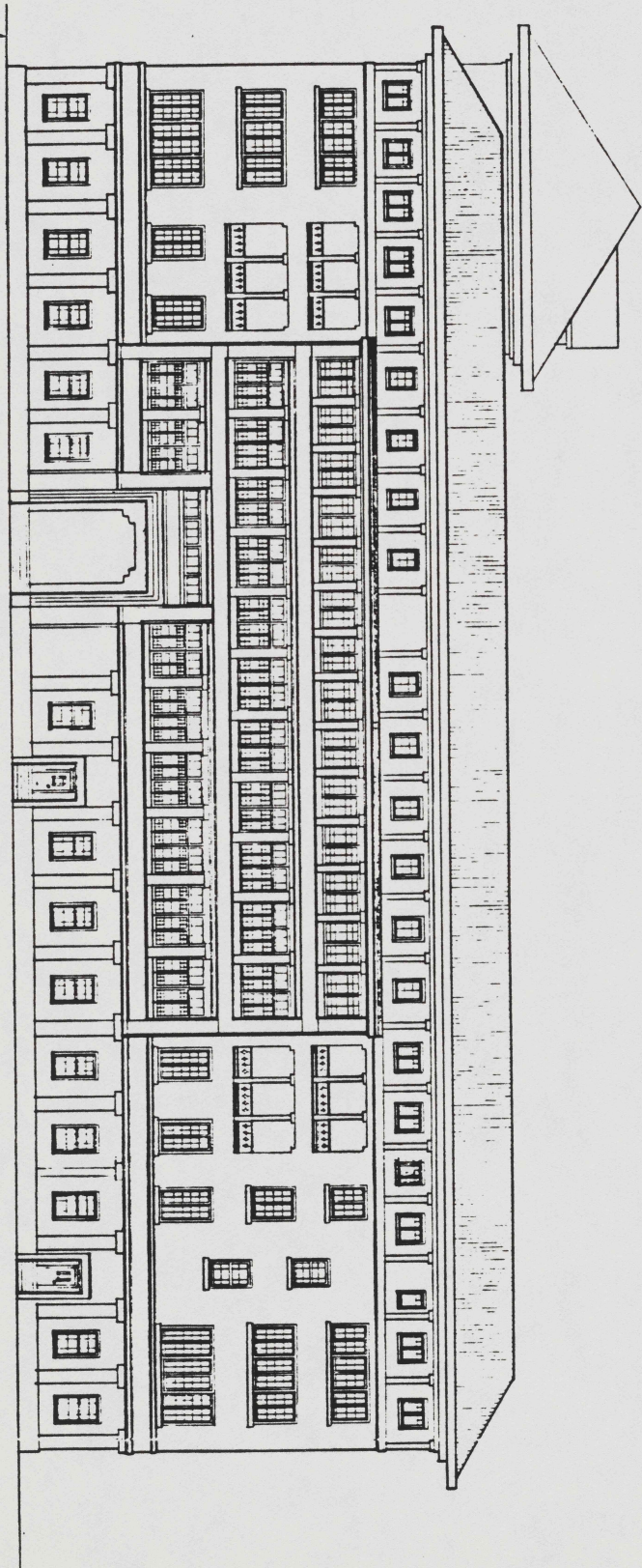
9



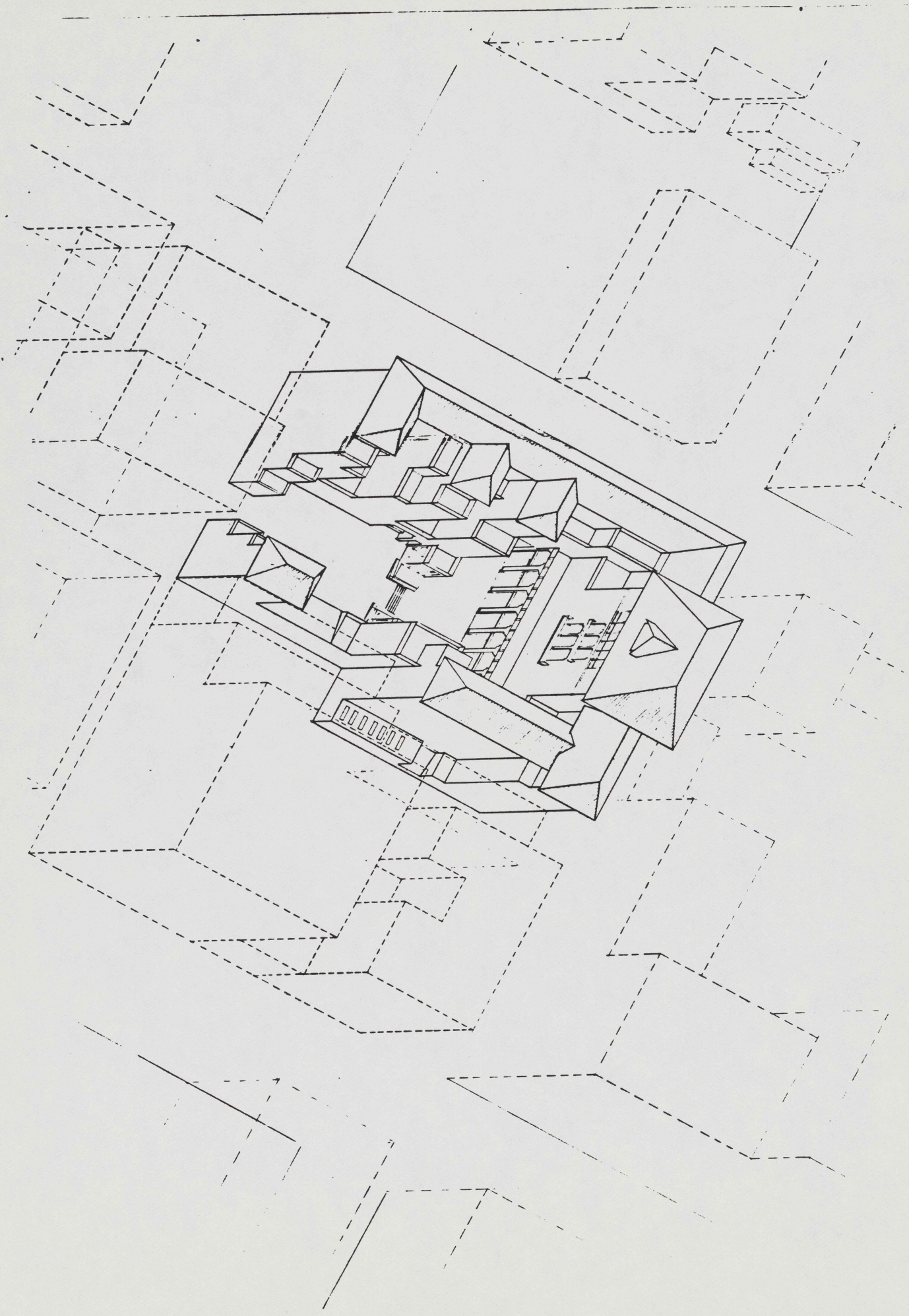
8

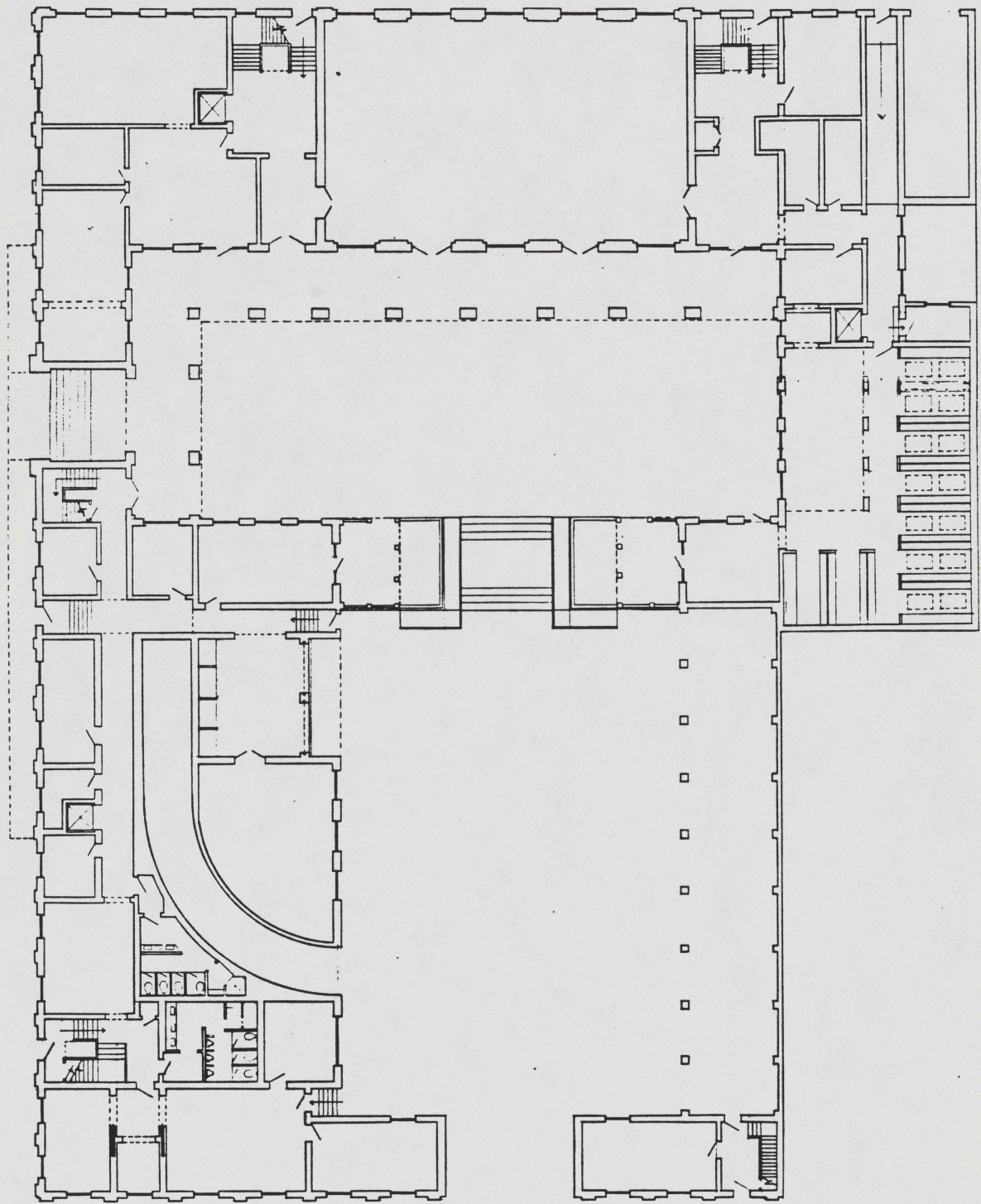




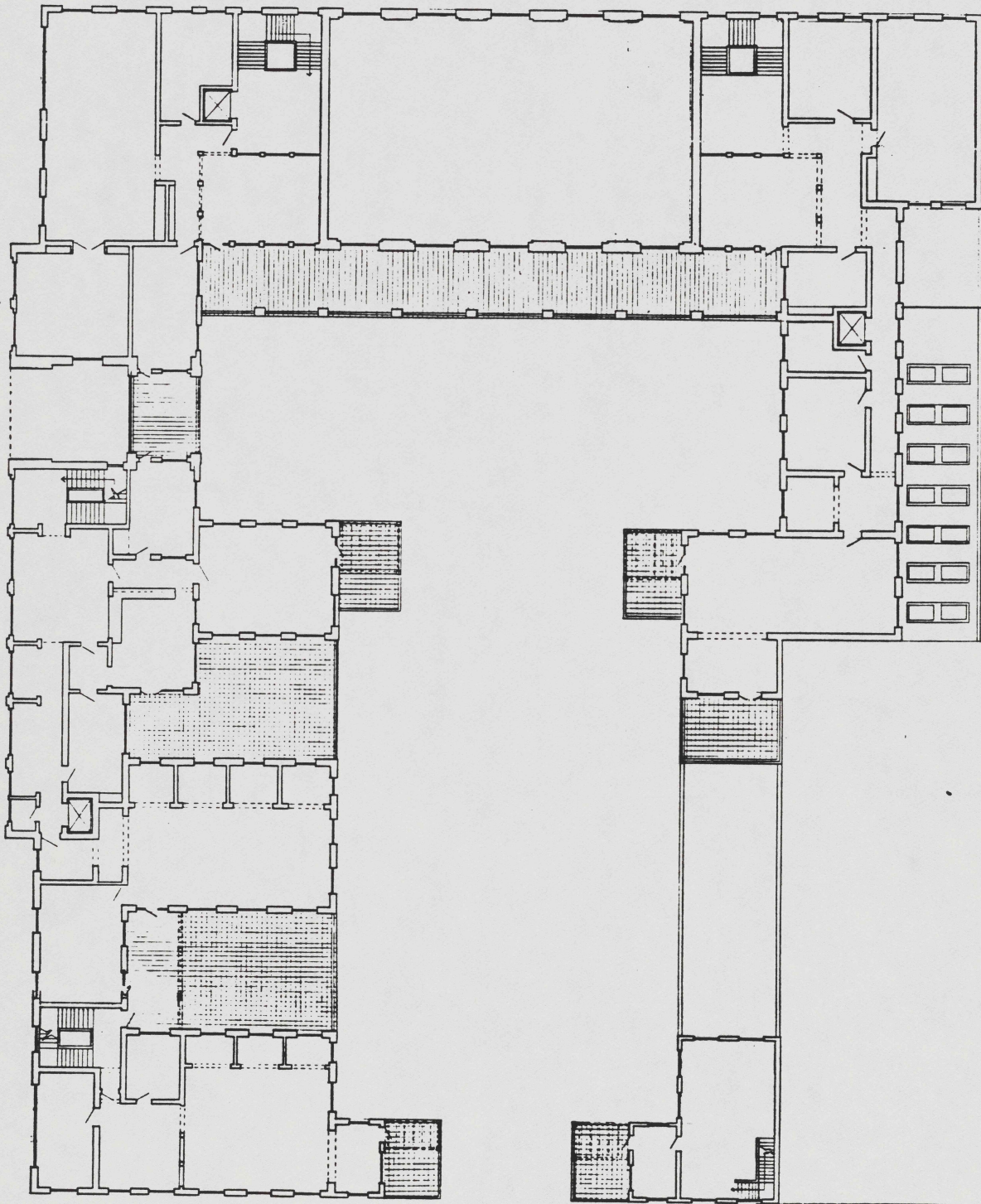




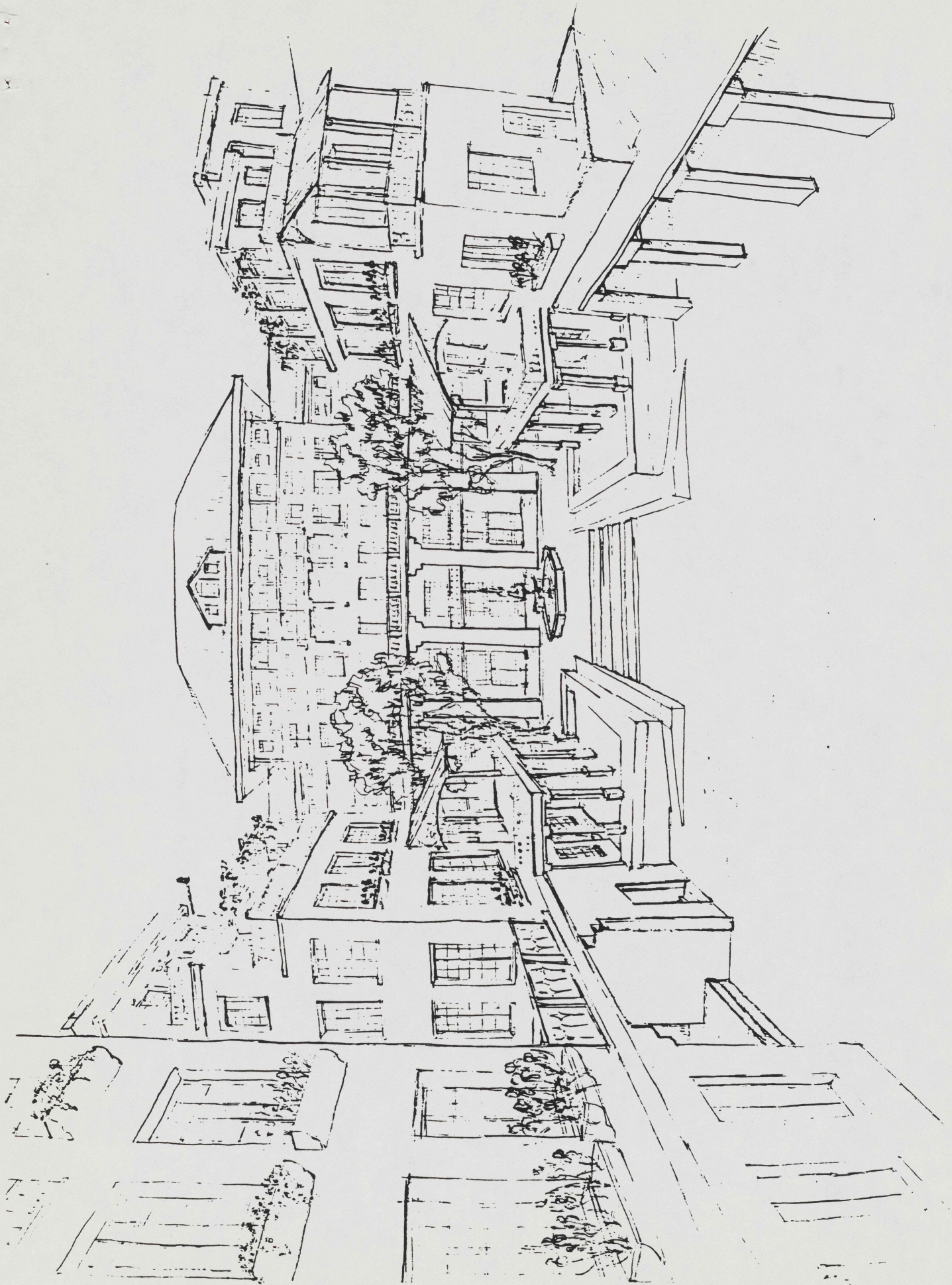


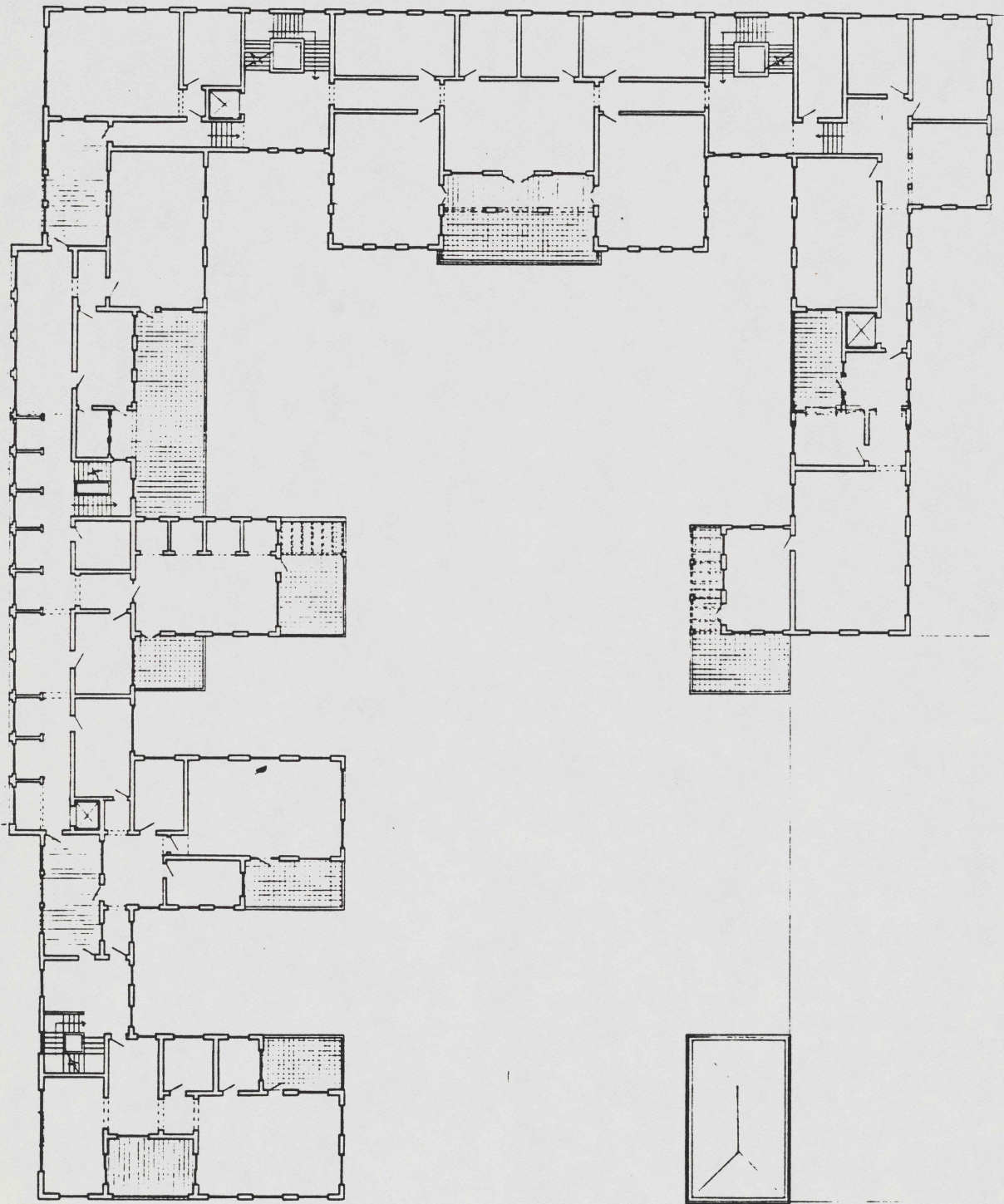


GROUND FLOOR



SECOND FLOOR





FOURTH FLOOR

Conclusion: How to Make a Personal Office Building

1. Choosing a Site

Find a site which needs a building of the scale you are proposing to become a better place. This is an integral step in the success of this building as a way of repairing a community. If it isn't broken, don't fix it.

2. Site Evaluation

Get to know the site very well. In a city this includes areas not even visible from the site, but still within a short walking distance. Take note of the movement and location of sunlight. Examine the existing traffic patterns, both pedestrian and auto. Take note of areas of site most in need of help; also note areas to be left alone. In general, get to know the life of the site with all its daily and seasonal changes.

3. Building Layout

Essentially this is a process of repairing the problems identified by Step 2. With an eye toward repairing the community at large, determine approximate building volume. Locate main entrance, entry sequence and main public rooms. Locate work group wings, knowing approximate width and room distribution.

4. Further Development

Establish circulation and hierarchy of work spaces.

Locate work group rooms and core staff areas in best daylight areas. locate smaller spaces within each work group realm such that they strengthen the larger work group spaces. Be sure to include an outdoor room or garden space which is central to the work realm. Locate the physical structure to accommodate the unique variations bound to occur in each work group realm. Pay special attention to good daylighting

During this process keep in mind that it is one of differentiation where larger wholes will become defined progressively more and more as the subsidiary wholes become more defined. A repeated decision making process can produce coherent, viable, unique workplaces. Modular design methods will not produce worthwhile workplaces.

5. Actual Construction

Have hands-on control throughout the process so that when insight or oversight dictates a change, it can be implemented in a timely fashion. As the building develops *direct* attention to the fact that this is one building needs to be maintained.

6. Have Fun

All stages of the project, though quite serious, should also be fun. If it is fun to make this building it is more likely to be fun to use it.