

# TOWN CENTER PLAZA

FORT WORTH, TX.

BY

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## A THESIS IN ARCHITECTURE

Submitted to the Architecture Faculty  
of the College of Architecture  
of Texas Tech University in  
Partial Fulfillment for  
the degree of

## BACHELOR OF ARCHITECTURE

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Chairman of the Committee

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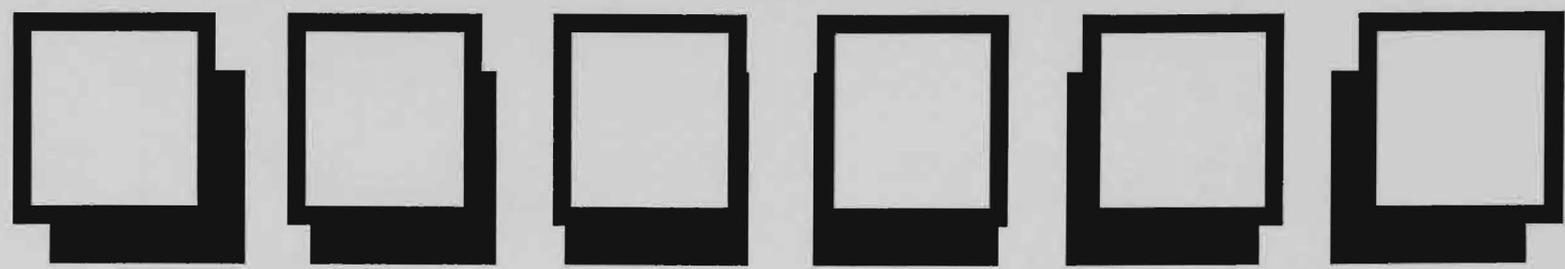
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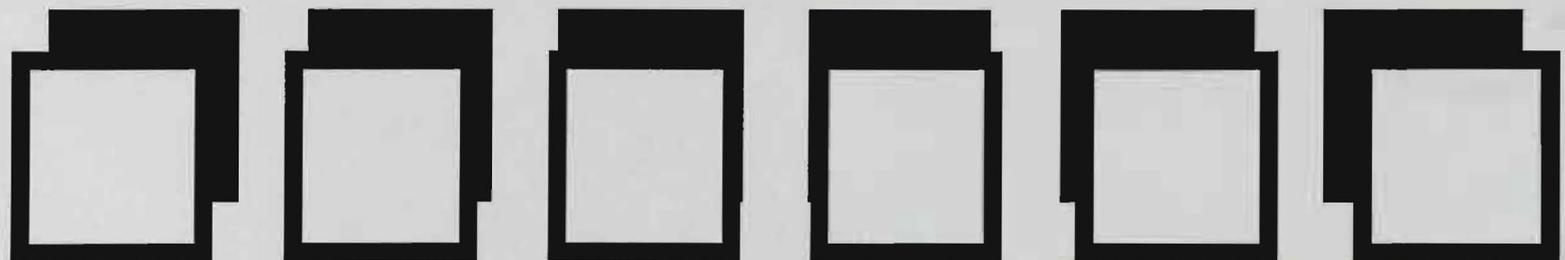
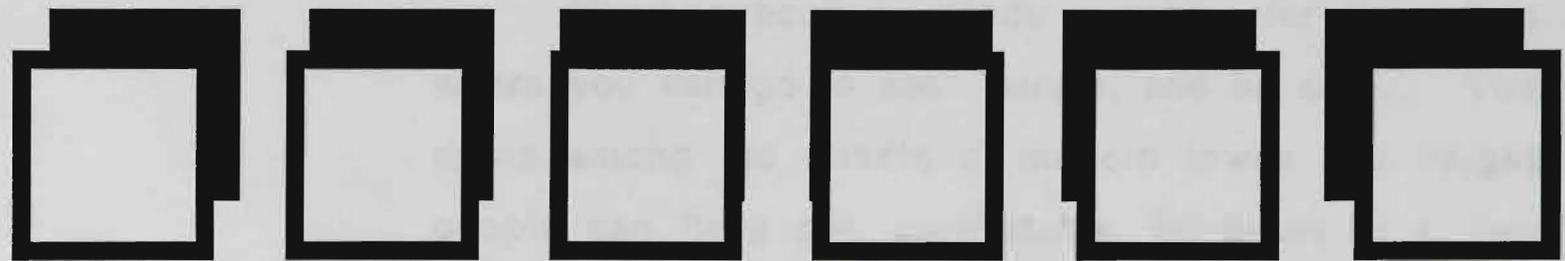
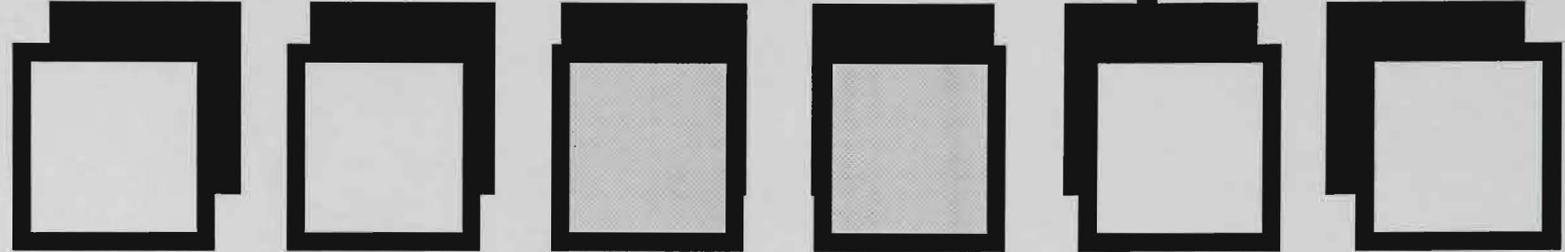
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Dean R. Wayne Drummond  
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**town center plaza**



thesis 88

j scott fisher

"Each subculture needs a center for its public life: a place where you can go to see people, and be seen... There are very few spots among the streets of modern towns and neighborhoods where people can hang out, comfortably, for hours at a time."

Christopher Alexander

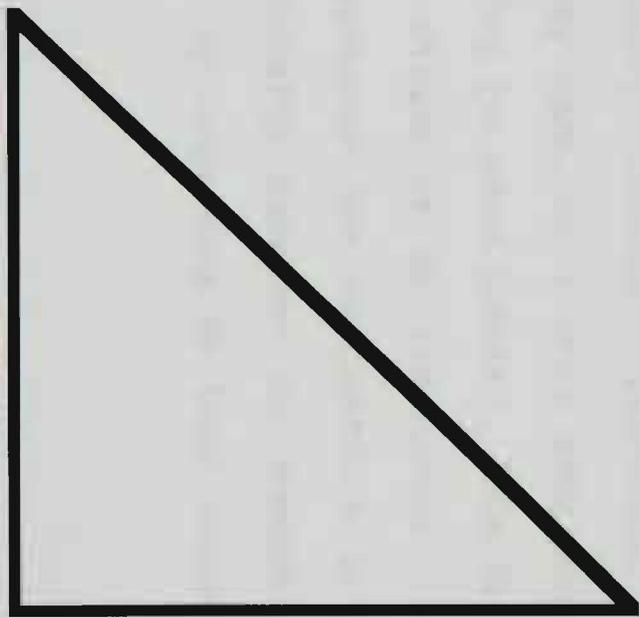
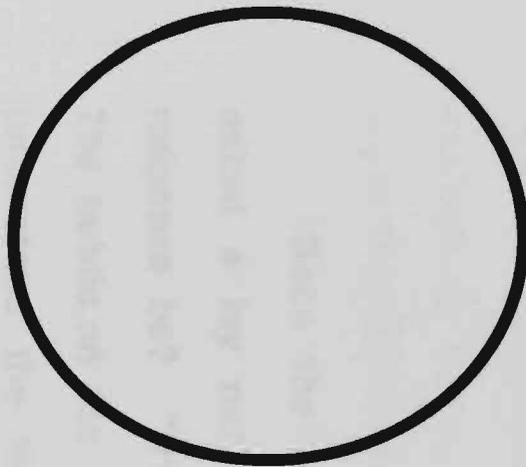
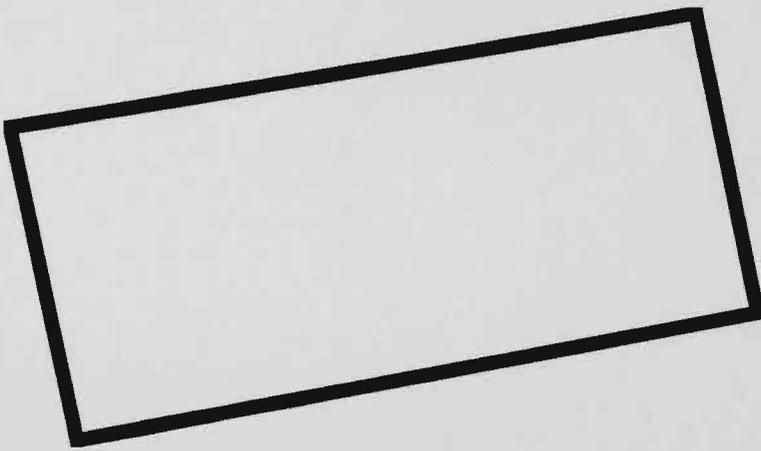
A Pattern Language



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■ ■ introduction



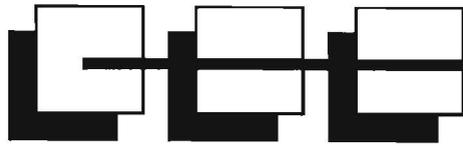
Does the public relate to a piece of architecture? If you asked a lay person their opinion of a building, what would their response be? "It's nice, I like it," "It's ugly", or "Oh, I don't know." The public, on the average, is unaware of good design. They do not understand the factors involved. Therefore, they cannot relate to a building. Do they care, or is their only concern of how they get in and where do they go once inside? This is wrong. I believe that architecture is, or should be an experience. In most cases, people do not really experience the architecture at all. I believe there should be a relationship between the people and the architecture. This can be done by appealing to their senses as they experience the space.

Appealing to one's senses should be done through the psychological and social patterns of people. By studying these patterns (Christopher Alexander's A Pattern Language), I hope to achieve a design that is exciting, and one to which people can experience and remember. These psychological and social patterns may include elements such as changes in levels, green spaces, water, foliage, plaza areas, activity nodes, terraces, paths, views, entertainment, and unconscious preferences of individuals in activity settings. These patterns will allow people to sense their surroundings during the activities. Therefore, it would have an exciting impact on their lives and make architectural space more important to them.

A good example of architecture that does not have an exciting impact on people's lives is the downtown setting. Downtown activities mostly include business, both governmental and retail. As far as entertainment, downtown activities are limited mostly to dining. Take for example downtown Fort Worth,

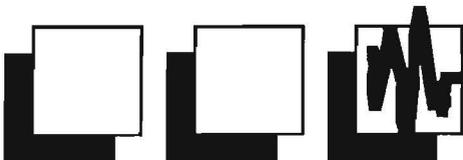
the downtown setting becomes a ghosttown after 5:00 p.m. Downtown's nightly activities are limited to a carriage ride, some lingering restaurants, ice skating, and on occasion some covention center activities. This lack of activity does not put forth a positive attitude on its visitors and the people who experience downtown on a daily basis. It is also a negative factor especially for the luxurious hotels in downtown Fort Worth. My project and goal is to design an exciting activity center for downtown Fort Worth. In order to achieve this goal, I need to provide places that will attract people to downtown and restore some life within it.

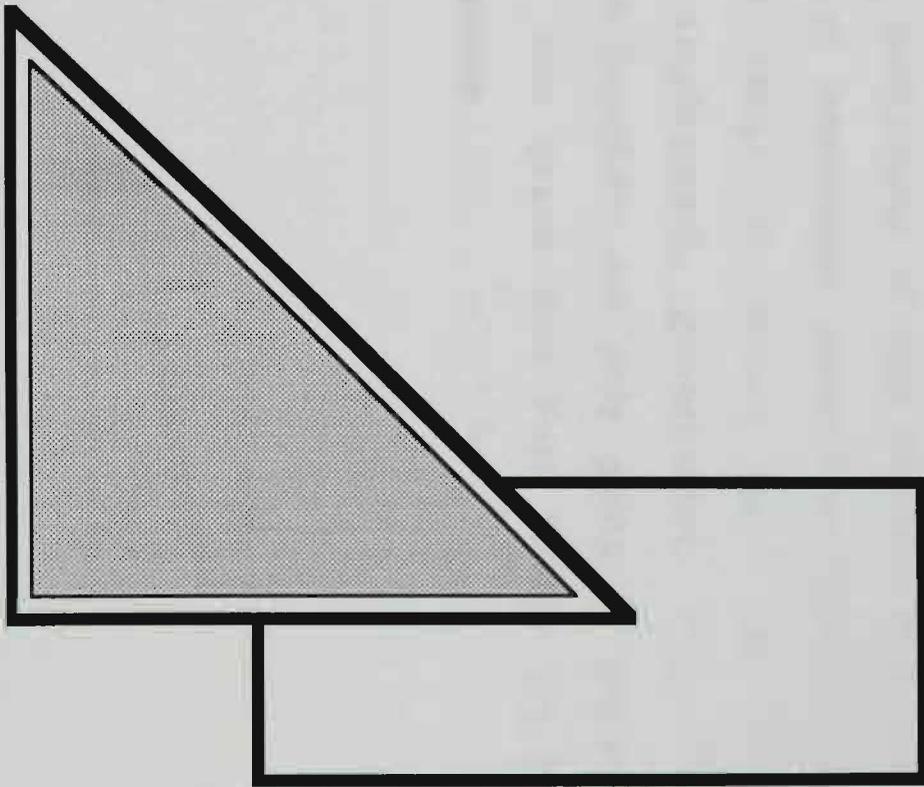
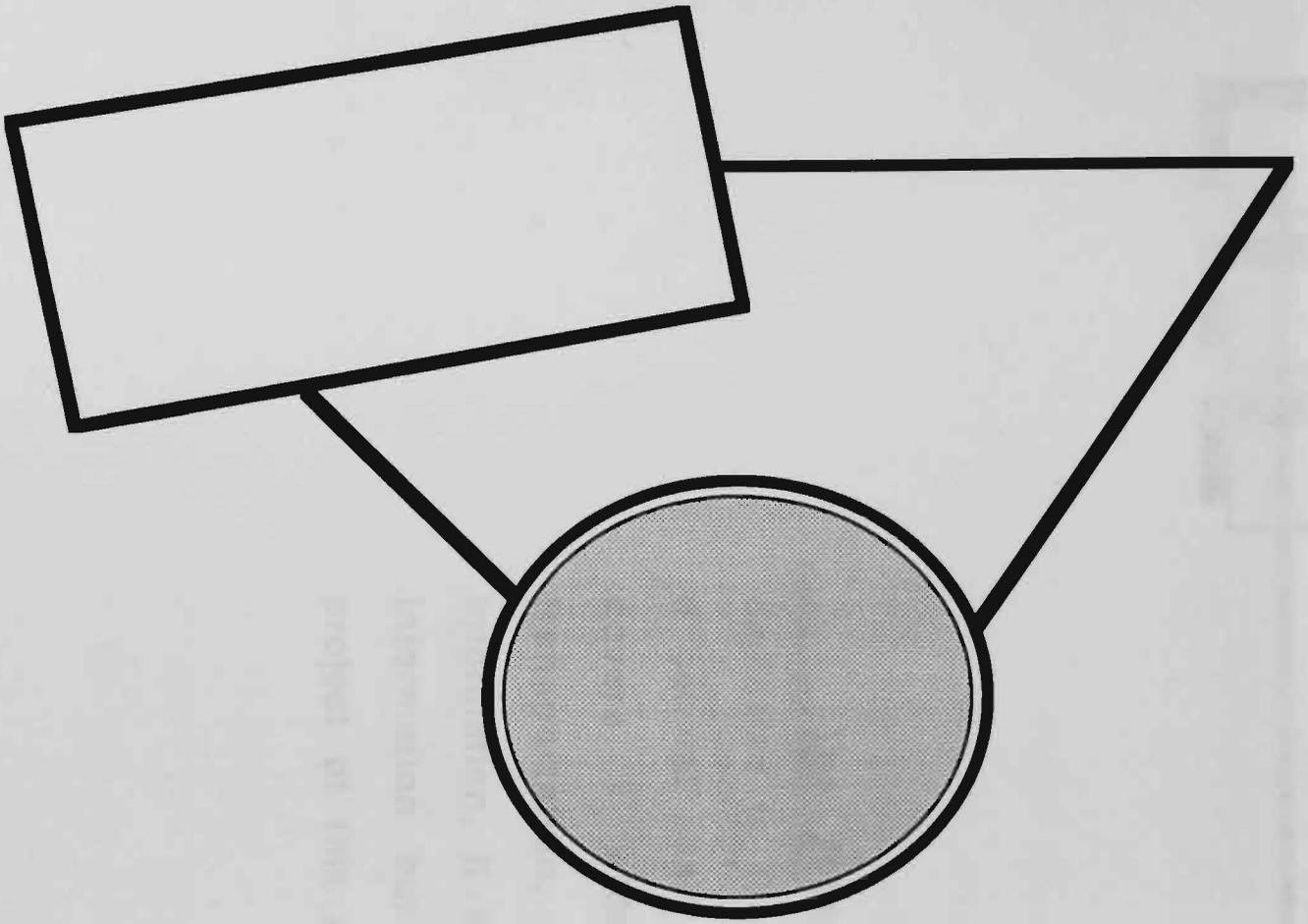
In order to make this activity center successful, I need to provide facilities that can be useful during business hours and evening hours. These facilities must work together. There must be a wide range of activities that can be used. These activities will include dining, shopping, dancing, relaxing, and cultural activities.



## project statement

The activity center must include three restaurants providing a range of different cuisines for light lunches and evening dinners; A mix of 10 different variety shops to attract shoppers and downtown employees. A small art gallery would provide culture and a chance to purchase pieces of art (prints or sculptures). A dance club/bar would increase evening activities. Also included should be an indoor/outdoor theatre which can be enclosed for small theatrical plays or remain open to provide musical entertainment for an open activity plaza and green spaces. Also various vending stands, a carriage ride stop and a bus stop must be provided also.





■ ■ background 

The following information contained in this section is dedicated to the background of Fort Worth. It is meant to provide a general basis of information about Fort Worth. The information covers a wide range of issues such as people, history, transportation, employment, government, etc. Through this information, it is hopefully not only going to provide background information but also prove that Fort Worth is qualified for a project of this scope.

Fort Worth is ranked as one of the fastest-growing metropolitan areas and one of the most livable.

### population

Fort Worth's luring appeal is evidenced by its growing popularity in the sunbelt. According to sales and marketing management, the city's metropolitan area is ranked as the third-fastest growing area from 1983 and projected through 1988 out of the top 50 metro areas in the nation. The 1986 population totaled 424,000 persons with a projected growth to 509,000 by the year 2000.

Out of tarrant county's 380,000 households, over 26 percent of the populace is under the age of 18 and over 21 percent is over 50 years of age. The county ethnic breakdown reflects 78 percent white, 12 percent black and 8 percent hispanic.

### history

The city had a humble beginning in 1849. Established as a frontier outpost by Major Ripley Arnold, Fort Worth was built to protect area settlers from restless Indians. When the army left, merchants immediately used the vacant outpost to develop a settlement.

Fort Worth soon became the last stop on the old Chisholm Trail as cattle were driven north. With a heritage founded on the frontier, Fort Worth continues to be known as "cowtown" or "the city where the west begins."

### transportation

Fort Worth is located in north central Texas (32 deg. 36 min. N latitude and 97 deg. 55 min. W longitude, elevation 670 feet) and is the seat for Tarrant County. Only 17 miles from Dallas/Fort

Worth (DFW) international airport, Fort Worth is the major city in the western half of the booming Fort Worth/Dallas metroplex.

To the east, Dallas is 30 miles and Shreveport, Louisiana is 210 miles; 192 miles to the south is Austin; Houston is southeast at 258 miles; and Oklahoma City, Oklahoma is 198 miles north.

By air, Fort Worth is only hours away from any city in the world. One of the world's largest and most sophisticated airports, DFW has over 1,500 flights per day by 38 airlines.

Fort Worth's mass transportation service, called the T, offers 143 buses, including those equipped for the physically impaired. There is also passenger train service via amtrak as well as seven main lines; Intercity bus service by Greyhound and Trailways; and taxi service.

### industry

Fort Worth's economy is built on diversity. Major local industries include aerospace with General Dynamics and Bell Helicopter-Textron; education with seven colleges and universities within the county; transportation with 38 airlines serving DFW; and continued strength in agriculture with ranches dotting the surrounding rural areas.

When completed, the advanced robotics research institute will be a trendsetter in Fort Worth's growing high tech industry, and Fort Worth will soon welcome the new federal bureau of engraving currency plant.

### employment

According to the Texas Job Outlook 1990, published by the Texas Employment Commission, secretaries will occupy 15,950 of

the Tarrant County jobs by 1990. Semiskilled workers will account for 6300 jobs; assemblers for 3000; electrical engineers and drafters each will account for 2,550; and computer programmers will account for 1,950 jobs.

#### housing

With only 58 percent of the city's 272 square miles developed, Fort Worth offers a variety of housing opportunities: from historic dating to the turn of the century, to ultra-modern solar reflecting the future to areas of suburban ranch property for the "rough" life.

Housing costs range from \$50 to \$115 per square foot with the typical house made of brick or frame with no basement. The Texas housing affordability index ranks Fort Worth as the most affordable in Texas over the last 10 years.



education

The Fort Worth independent school district, provides public education through 92 schools with an enrollment of over 65,000 students: 61 elementary schools, 18 middle and 13 senior high schools with a teacher ratio from 1:16 to 1:25. Among the school system's many unique programs, adopt-a-school links students with business leaders as local businesses adopt a school serve as mentors for the youth.

There are also 30 parochial schools and 22 private schools, including learning disability institutions.

Fort Worth boasts seven colleges and universities within tarrant county and 29 additional campuses within a 50-mile radius.

### *lifestyles*

With 910 churches and synagogues of 72 denominations, Fort Worth's religious groups offer worship as well as stimulating lecture series, athletic recreation, and family projects like live nativities at Christmas or passion plays at Easter. The Tarrant County area community of churches offers a referral service.

Fort Worth's health is treated by over 2,000 doctors and dentists who staff 28 hospitals and 61 nursing homes. The Tarrant County Medical Society and the Fort Worth District Dental Society offer a free referral service.

### *government*

Fort Worth's city government operates under the council/manager system with an elected mayor and eight-member council and an appointed city manager.



The city provides protection for Fort Worth residents by employing 853 full-time police officers and 672 uniformed firemen.

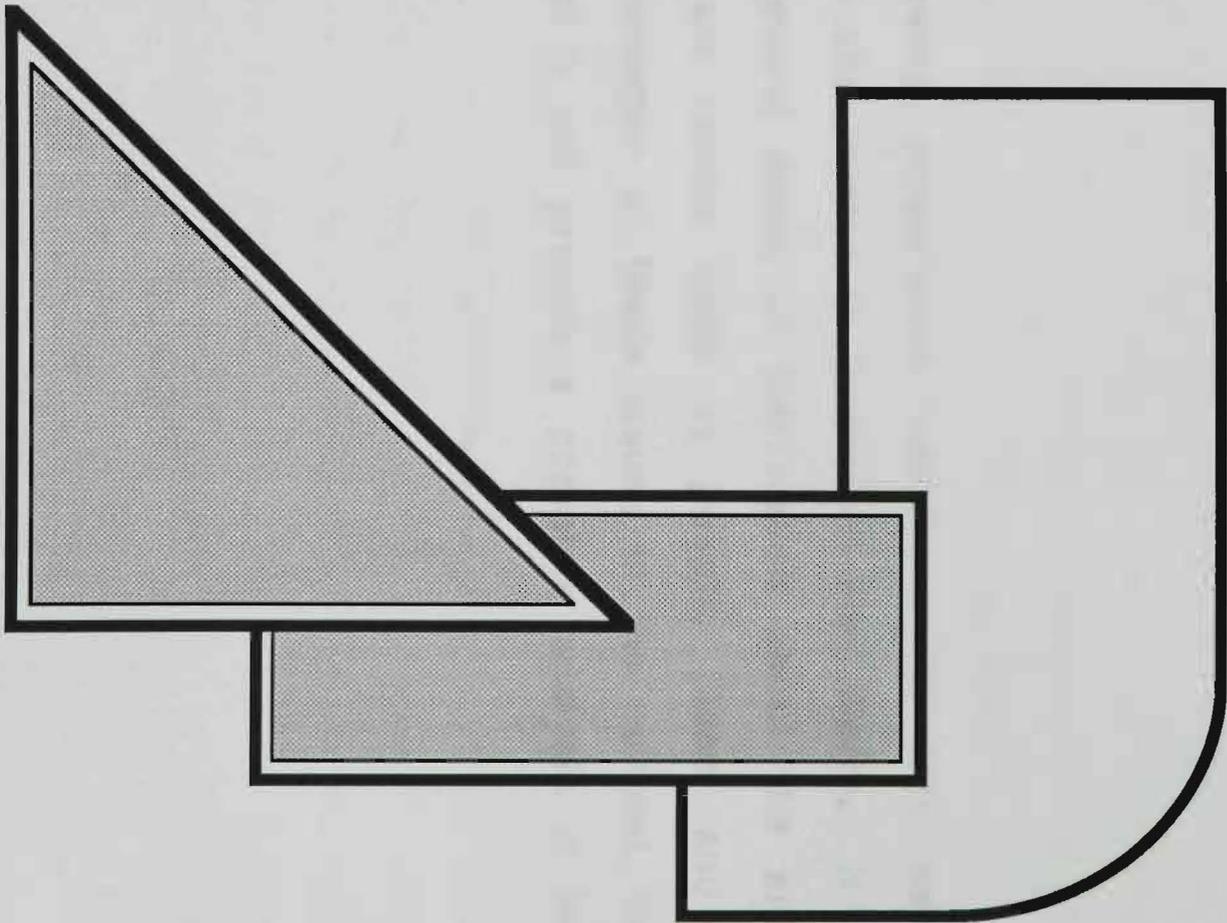
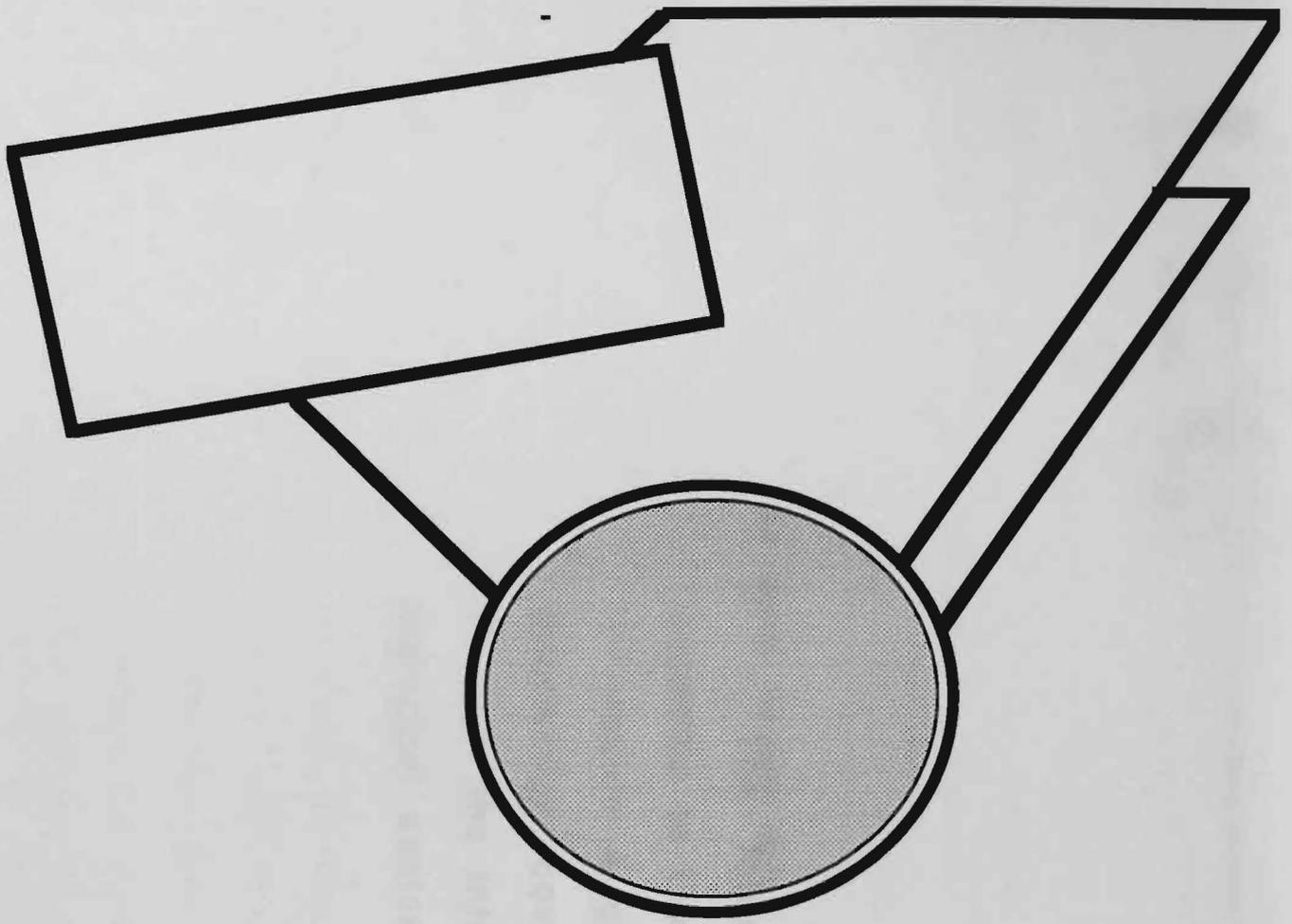
#### taxes

Retail tax in Fort Worth totals 6.5 percent: 1.0 percent city, 1.25 mass transit authority and 5.25 percent state. There is no corporate city or state income tax; no personal city or state income tax; no general use tax or payroll tax.

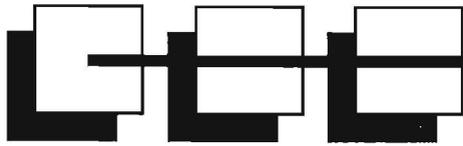
#### utilities

Perhaps Fort Worth's most valuable asset is its supply of water with resources to meet projected demand through the year 2030. Electric service is offered by TU Electric Service and gas service is provided by Lone Star Gas. Telephone service is available from 14 companies. (Newcomer's Guide p. 4-8)

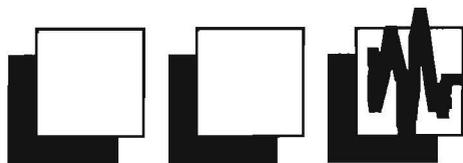
Therefore seeing Fort Worth as a continual rising metropolitan area and with its potential, there is no doubt that Fort Worth can handle this project. There is enough activity in Fort Worth and especially in downtown to where this project can add to its personality and flare. With its range of busy downtown activities, the project is needed and has a good chance for survival.

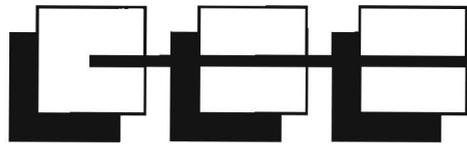


■ ■ site analysis 



The following information contained in this section is dedicated to the site located in downtown Fort Worth. It is meant to provide a general basis of information about the site. The information covers issues such as people, place, and climate. Through the information of these issues in the cultural, built, and biological context it will provide a complete analysis of the site.

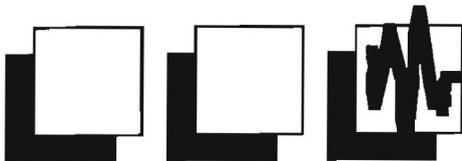


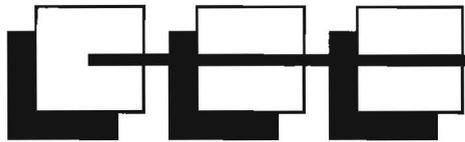


In the study of people on the site, the main issues involved are for example: What are the different types of people on the site or in the general vicinity? Who are they and of what social standing do they belong? When are these people in the vicinity of the site? Why are they there? What are they doing? How do all of these issues affect my site? In the following information I plan to study and answer these issues and to understand the people affecting my site.

### people

There are many different types of people around my site. They range from street people to corporate executives. Although because of the street people there must be a type of security system organization in the center for safety and to preserve a proper atmosphere. The greatest percentage of people around my site are the white collar workers. The people whom may visit the site are not only workers but visitors from out of town or merely

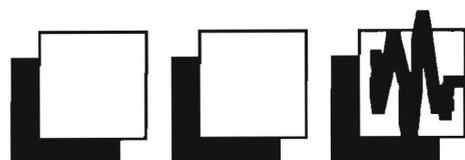




residents. The time frame in which these visitors may be on the site vary slightly. The working people will be on the site during business hours and slightly after; but mainly during the lunch time hours. Visitors to the city whom will be near the site will most likely be staying in one of the nearby hotels. They will be on the site during both the day and the night. The center must include entertainment for the visitors especially at night. The visitors that are from Fort Worth are mainly shopping during the day in downtown. All of these people are there to go shopping, dining, seek entertainment, or just to relax.

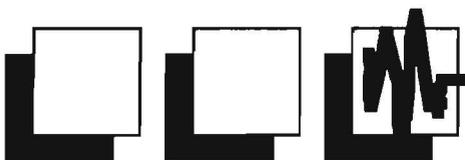
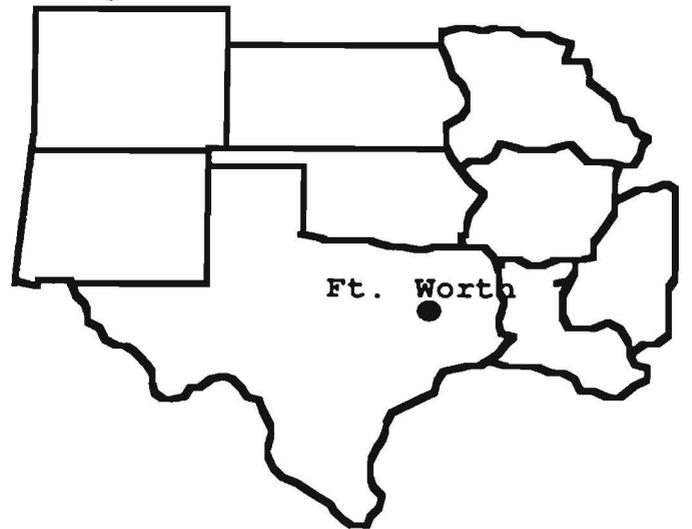
Therefore since there are many different types of people on my site seeking different ambitions there must be a range of different facilities provided.

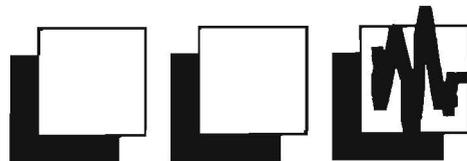
In the study of the built context, the main issues involved are for example location, surrounding buildings (condition and importance), zoning restrictions, transportation and circulation.





SITE LOCATION  
**FORT WORTH, TX**  
VICINITY  
**DOWNTOWN**

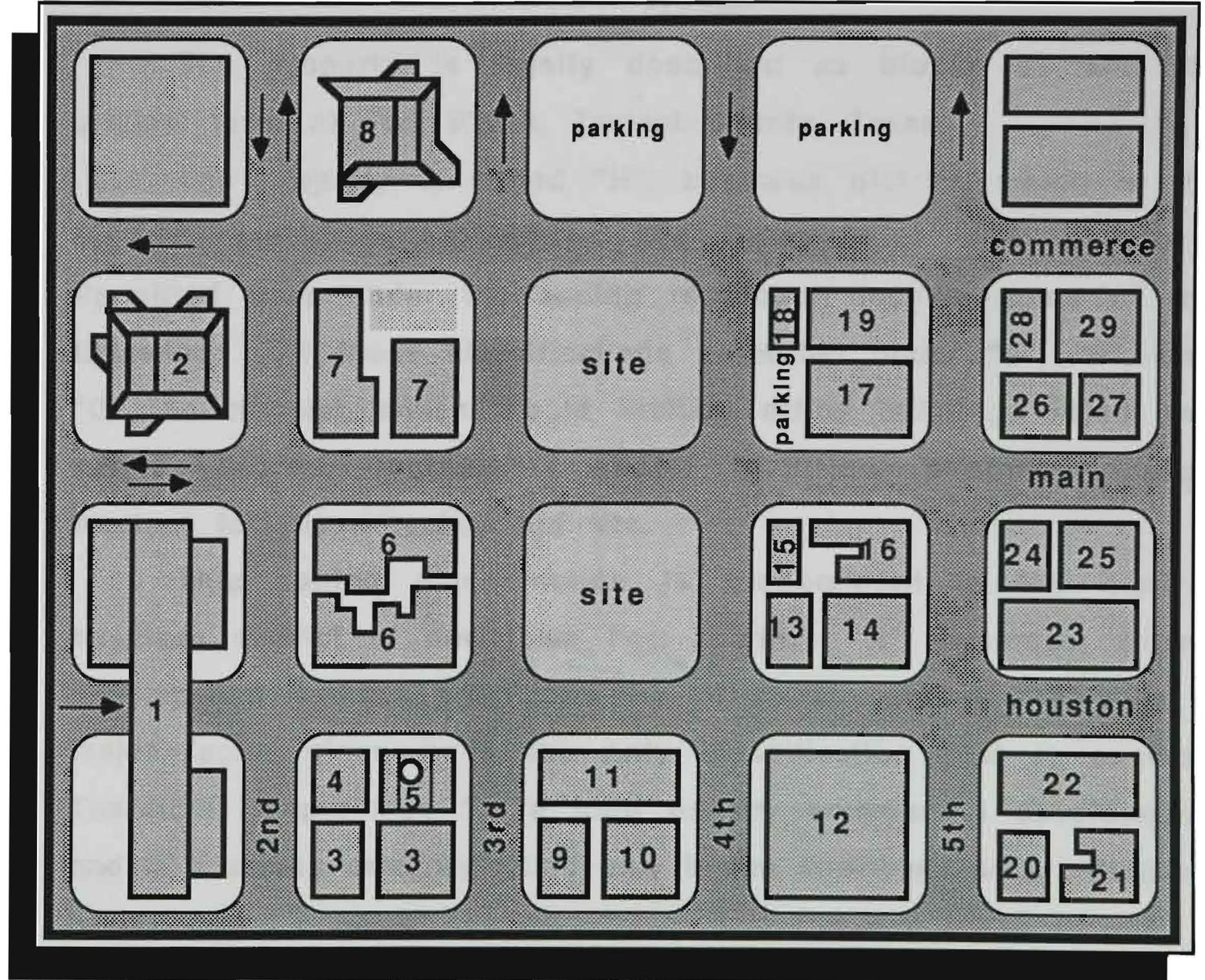




building index

- 1) Worthington Hotel
- 2) City Center I
- 3) food and retail
- 4) renovated
- 5) renovated + Caravan of Dreams
- 6) Sundance Square & Court (renovated)
- 7) Sundance renovation
- 8) City Center II
- 9) retail (Edison's)
- 10) retail (Nowlin Savings)
- 11) retail (Pier 1)
- 12) Monnig's Dept. Store
- 13) F.W. Woolworth
- 14) Meacham bldg. (Colortile)
- 15) Burnett bldg.
- 16) Sinclair bldg.
- 17) retail
- 18) 6th st. Parking Garage
- 19) food & retail
- 20) retail (Revco, McLeur's, Savon)
- 21) Executive Plaza (Ratikin Title co.)
- 22) 600 Houston st. Mall
- 23) retail (Margie's, jewelry, Eckerd)
- 24) retail (Lerner)
- 25) Mid Continent bldg.
- 26) Blackstone Hotel (historic)
- 27) Massie's Supply co.
- 28) retail
- 29) Metro Center Hotel

preliminary site



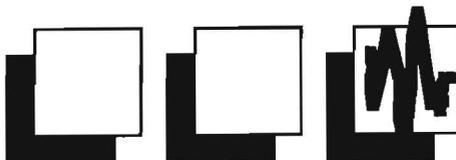


### zoning

The property is legally described as blocks 51 and 52, original town of Fort Worth, Tarrant County, Texas.

The property is zoned "H", business district, which is the highest classification under the commercial use category. Permitted uses under the zoning restriction include some of the following: all those classifications permitted under "E", "F", and "G", commercial, which would include office buildings retail and variety stores, restaurants, hotel facilities, business clubs, medical facilities, banks, and etc.

This zoning classification is predominant in the central business district of downtown Fort Worth. "H", business, allows development without provisions for off-street parking. This is a major factor since it is the only classification that is exempt. Therefore, it provides for a high density commercial development and is a zoning category found only in the downtown area. Building



restrictions under this zoning classification are as follows:  
height-none; front yard-none; side yard-none; parking-none.

site features

The site is a two block area located within the fort worth central business district between 3rd and 4th street, between Houston, Main, and Commerce. The site has good locational attributes within the central business district. To the northwest are the Bass brothers of Fort Worth developments including city center-- towers I and II-- 33 and 38 story office buildings (blocks 36 and 40). Directly to the north of the site is Sundance Square--a two-block area of renovated one and two story buildings leased primarily as retail space. Located four blocks north of the site is the Tarrant County courthouse. Located six blocks south is the Hyatt Regency Hotel and the Tarrant County Convention Center. Located two blocks north is the Tandy Center and the Worthington Hotel.

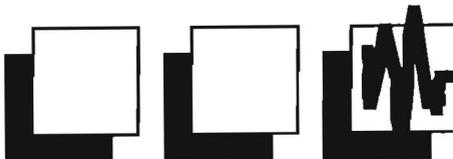


Main street, between the Tarrant County Convention Center and the Tarant County courthouse, was renovated in the early 1980's. Renovation includes brick paved sidewalks and streets, gas light replicas, trees, and planters.

The two square blocks site is level and at street grade. All public utilities including gas, water, sewer, electricity, and telephone are available and connected to the site. All utilities are considered to be available in adequate quantities. There are no adverse drainage conditions. The overall visibility, accessibility, and other locational attributes of the site are good. Easements on the site consist of normal utility easements. Fire hydrants exist on the southwest and northeast corners of the site. The site is presently occupied by a parking lot on both blocks

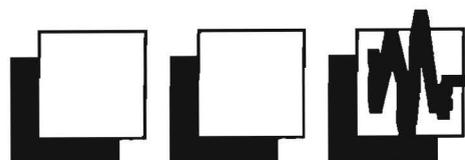
#### *circulation*

Pedestrian circulation is labeled average on all sides of the site except for on Houston street. Houston street occupies 3 to 4





times the pedestrian flow than on the other edges of the site. Vehicular circulation is as follows: on the map on the next page the numbers indicate the number of cars that pass by in a 24 hour period.





transportation

from Fort Worth to:

by air

New York,N.Y.	1338 mi. 3hr 15min.
Philadelphia,Pa.	1302 mi. 3hr 00min.
Chicago,Il.	0802 mi. 2hr 05min.
Detroit,MI.	0987 mi. 2hr 30min.
St. Louis,Mo.	0550 mi. 1hr 40min.
Atlanta,Ga.	0731 mi. 1hr 55min.
Jacksonville,Fl.	0916 mi. 2hr 07min.
Raleigh-Durham,N.C.	1056 mi. 2hr 28min.
Phoenix,Ar.	0868 mi. 2hr 20min.
Los Angeles,Ca.	1235 mi. 3hr 10min.
San Francisco,Ca.	1469 mi. 3hr 19min.
Denver,Co.	0645 mi. 1hr 55min.
Seattle,Wa.	1664 mi. 3hr 42min.
Portland,Or.	1621 mi. 3hr 52min.

by car

Dallas,Tx.	030 mi.
Austin,Tx.	192 mi.
Houston,Tx.	258 mi.



sensory

Views off the site are limited to across the street except for when looking down the street. Buildings surround the site on all sides except for on the east (Commerce st.) which contains a parking lot. Building conditions are displayed previously in the site analysis.

Therefore placing my site in the heart of the Central Business District is the most effective site for a project of this scope. The Central Business District is the best location to place the center on because of the other businesses, people (working and visisting), pedestrian flow, and in the heart of downtown Fort Worth.



In the study of the biological context, the main issue involved is to examine how the climate is going to affect the life of the plaza. Knowing this data will aid in designing adequate outdoor areas that respond comfortably to the climate.

### climate

Number of days maximum temperature reaches 90 degrees and above for any part of the day: 95

Number of days minimum temperature reaches 32 degrees and below for any part of the day: 41

Annual degree days: heating 2,407; cooling 2,809

Yearly relative humidity: 73% at 12:00 a.m.; 82% at 6:00 a.m.; 56% at noon; 53% at 6:00 p.m.

Extreme weather conditions: rare and always of short duration.

Coldest month--January-- average high 55.7 degrees and low 33.9 degrees



**Hottest month--August-- average high 96.1 degrees and low 73.7 degrees.**

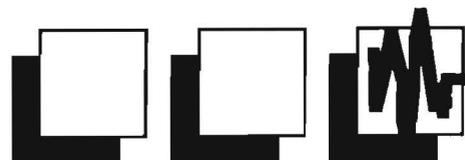
**Annual--average high 76.5 degrees and low 54.4 degrees.**

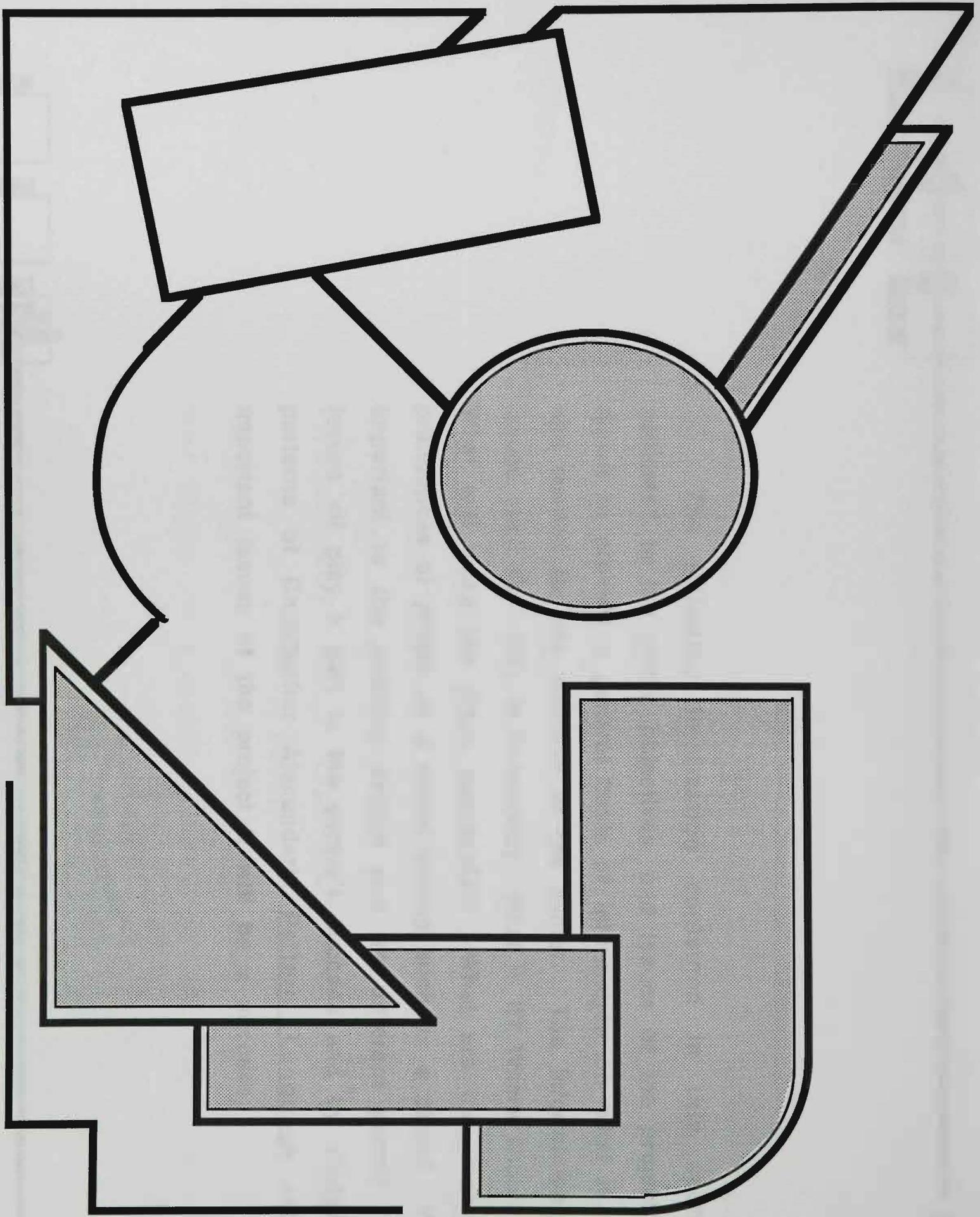
**Wettest month--May-- 4.27 inches.**

**Driest month--January--1.65 inches.**

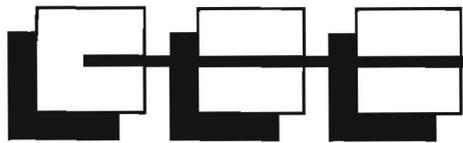
**Annual average--29.46 inches.**

Therefore the weather in Fort Worth is mostly pleasant for outdoor activities. This is a plus for the life of the plaza. It does not get too cold very often in Fort Worth and is comfortable most of the year. The main issue is to provide protection from the elements. For example shaded sitting areas when it is too hot; sunny sitting areas when it is fair to cool; covered areas for when it rains; and barrier protection against wind and noise.

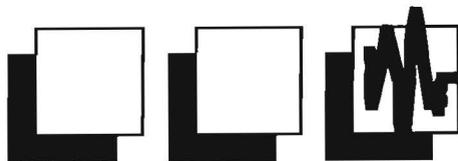




■ ■ goals, obj. & issues



The following information contained in this section is dedicated to the goals, objectives, and issues of the project. It is meant to provide a general basis of information on what is needed and wanted for the success of the center. The information covers issues such as: Why is it needed? What is it? Where should it be? What will make the plaza successful? What are the unconscious preferences of people in a social setting such as a plaza? What is important to the building design and its different parts? These issues all play a part in the center's success and by studying the patterns of Christopher Alexander's Pattern Language and other important issues of the project it will be a success.



*why*

There are very few spots along the streets of modern towns and neighborhoods where people can hang out, comfortably and safely, for hours at a time.

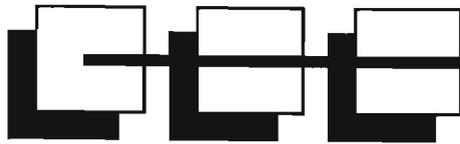
The city needs a space to release tension. Relaxation away from traffic, hecticness, and fast pace. People need green open places to go to; if close they will be used.

A public square or an outdoor room is a special sunny place to unwind, play, work, or rest. They are the largest, most public rooms, that the town has.

Each subculture needs a center for its public life: a place where you can go to see people, and to be seen. (promenade)

People need informal interaction with other people.

Most of the city's activities close down at night. Those which



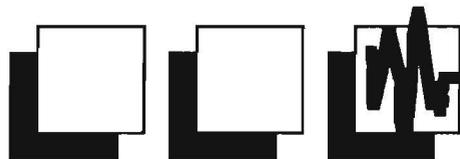
**stay open will not do much for the night life of the city unless they are together**

Therefore Fort Worth being a place of limited downtown activities, needing a public space that is close to business and in the heart of downtown where one may relax, shop, eat, see shows, art, music, people, etc. at the same place, it is obvious that this project is greatly needed and will improve the downtown setting immensely.

what

**A nucleus of activity.**

**Knit together shops, amusements, and services which are open at night, along with hotels, bars, and all-night diners to form centers of night life: well-lit, safe, and lively places that increase the intensity of pedestrian activity at night by**





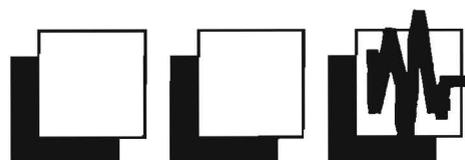
**drawing all the people who are out at night to the same spot in the downtown.**

Therefore this activity space needs to include shops, restaurants, entertainment, culture, and relaxation that is open both during the working hours and especially at night to add to a limited list of nightly downtown entertainment.

*where*

**Build or encourage the formation of courtyards within work communities for people to relax and enjoy.**

**People want to be close to shops and services, for excitement and convenience. And they want to be away from services for quiet and green. The exact balance of these 2 desires varies from person to person, but in the aggregate it is the balance**





of these 2 desires which determines...

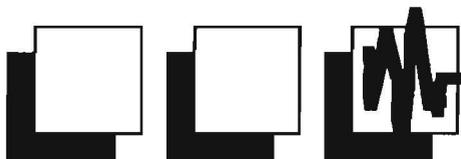
**Create a node of activity throughout the community, identify the location of activity and create paths that bring people to that node.**

Therefore this activity space should be located in the Central Business District where there are shops and people who need a courtyard and green spaces.

### plaza size

**Many of our modern public squares, though intended as lively plazas, are in fact deserted and dead.**

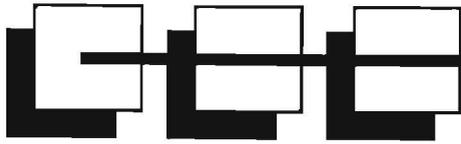
**Make a public square much smaller than you would first imagine. Usually no more than 45'-60' across, never more than 70' across. This applies only to its width in the short direction.**



In the long direction it can certainly be longer.  
Reduce the size of the plaza (150-300 sq. ft./person)  
When plazas are too large, they look and feel deserted. diameter of 60'; no more. 4 people 35' dia, 12 people 60' dia; voice carries 20'.  
There is too much hot hard asphalt in the world. Most of it can still be green. Restrict the size of vast pavement.  
Therefore the size of the plaza does not need to be very wide open except in its immediate center of major activity and then there should be minor areas that are for more personal interaction with small numbers of people branching off the center.

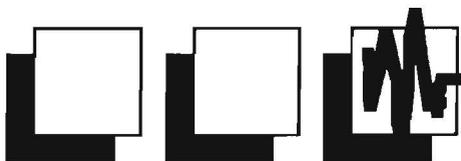
#### plaza design success

The courtyards built in modern buildings are very often dead. They



are intended to be private open spaces for people to use--but they end up unused, full of gravel and abstract sculptures. 3 reasons for failure: no relation between indoors and out, not enough doors, too enclosed. Place every courtyard in such a way that there is a view out of it to some larger open space; place it so that at least two or three doors open from the building into it and so that the natural paths which connect these doors pass across the courtyard. And a relationship between both the inside and the courtyard.

Whatever spaces you are shaping--whether it is a garden, terrace, street, park, public outdoor room, or courtyard, make sure of 2 things. First make at least one smaller space, which looks out it and forms a natural back for it. Second, place it, and its openings, so that it looks into at least one larger space.



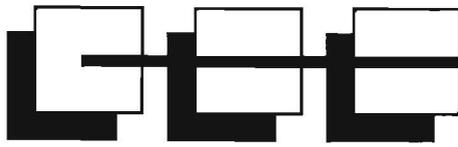
When you have done this every outdoor space will have a natural "back" and every person who takes up the natural position, with his back to this "back", will be looking out toward some larger distant view.

Therefore design the plaza so that it is a successful activity space and full of people because if the plaza is dead the whole center is dead and the project unsuccessful.

### plaza entry

The strength of the boundary is essential to a plaza. If the boundary is too weak the plaza will not be able to maintain its own identifiable character.

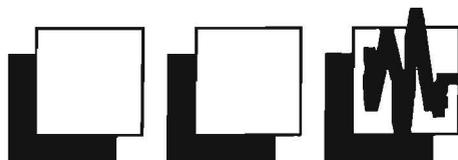
If a garden is too close to the street, people won't use it because it isn't private enough. But if it is too far from the street,



then it won't be used either, because it is too isolated. Half way position half hidden and half exposed. The sight of action is an incentive for action. When people can see into spaces from the street their world is enlarged. there is more of a possibility for communication.

A sneaky entry that gives a feeling of escape or that you are going into or coming out of something sacred or special or more likely a secret getaway.

Buildings, with a graceful transition between the street and the inside, are more tranquil than those which open directly off the street. Make a transition space between the street and entry. Bring the path which connects through this transition space, and mark it with a change of direction, change of surface, a change of level, perhaps by gateways which make a change of enclosure, and a change of view.



Any part of a town-- large or small-- which is to be identified by its inhabitants as a precinct of some kind, will be reinforced, helped in its distinctness, marked, and made more vivid, if the paths which enter it are marked by gateways where they cross the boundary. (to Sundance Square)

Use some type of barrier to keep noise out of the plaza.

When a person arrives, there is a good chance he will experience confusion unless the whole collection is laid out before him, so that he can see the entrance of the place he is going. Visible together with similar entrances (family of entrances).

Therefore the entry into the plaza must be distinctly marked, important in transition, public yet private and exciting. The bounding edge of the plaza is important in seclusion, and in boundary because it needs to be



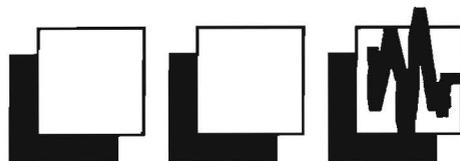
a hideaway and to keep the hecticness of the city life out.

### plaza focal point

A complex of buildings with no center is like a man with no head. Spire in center as landmark for spaces around.

A public space without a middle is quite likely to stay empty between the natural paths which cross the plaza, choose something to stand roughly in the middle: fountain, tree, statue, tower, bandstand, art, etc. Make it something to give a strong, steady pulse to the square, drawing people in toward the center. Place at the crossing and not directly in the center.

Establish a promenade at the heart to link activities place centrally. (put activities at the ends to keep a constant





movement up and down)

**Don't let people feel they are too small and swallowed up.**

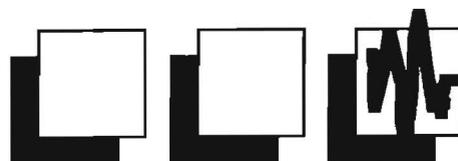
Therefore the focal point of the plaza should be large enough to be seen and mark the plaza. The major pedestrian flows should enter the site from busy pedestrian flows and run through the center along the focal point.

plaza paths

**Develop safe pedestrian paths.**

**Social intercourse created when people rub shoulders in public is one of the most essential kinds of social "glue" in society.**

**Layout paths that connect a series of goals at shortest but most interesting paths; compatible with the process of walking. Straight or gently curved ( but that is not too exciting).**



**Make people experience things along the path could be water (river, pool, fountain, island), changes in elevation, materials, view, direction, surroundings, atmosphere, areas, or experience a maze, gateways, etc.**

**Bubble a path in the middle and make ends narrower, so the path forms an enclosure which is a place to stay, not just a place to pass through.**

**Covered walkway arcades against building (indoors, outdoors, protected)**

Therefore the paths should be safe and connect major points but also they should bring the pedestrian to different experiences and activities within the plaza.

personal areas & seating

**The creation of intimate pockets of space.**

Articulation of these public spaces into corners for sitting, niches, alcoves, etc. Allows opportunity for social intercourse or for individual retreat from the crowds.

The life of a public square forms naturally around its edge. If the edge fails, then the space never becomes alive. surround public squares with pockets of activity--small, partly enclosed areas at the edges, which jut forward into the open space between the paths, and contain activities which make it natural for people to pause and get involved.

Pass through series of gateways (smaller and smaller) to deeper more secluded areas

People are particular about where they stay.

People are not comfortable in unfamiliar environments. Make them feel at home and want to be there.

Outdoors, people always try to find a spot where they can have

their backs protected, looking out toward some larger opening, beyond the space immediately in front of them.

People use open space if it is sunny, and do not use it if it is not, in all but desert climates. (never leave a deep band of shade between the building and sunny part of the outdoors(buildings on north, their plazas on south, nothing between))

Seating in hot climates in shade and open to breezes.

Weather protection (stretched canvas) wind, noise, rain, hail, snow, sleet , and sun. Factors to aid against bad environment: berms, trees, foliage, tarps, or canvas, parasols, indoor/outdoor spaces.

The instinct to climb up to come high place from which you can look down and survey your world seems to be a fundamental instinct.

**Spaces for personal relaxation: quiet, natural**

**It is a mark of success in a park when people can come there and fall asleep. Lie in comfort sand, benches, nitches. Set stages in which there is a balance of people.**

Therefore personal areas must be exciting to get to and must be back away from major center in smaller alcoves which are quiet and restful surrounded by built up landscaping.

### plaza activities

**Encourage mix of people's activities interest in age, sex, etc.**

**To make the plaza exciting, there must be a range of excitement for people's interaction -water (river, fountain, poring, sound, pool, island), changes in level (major and minor), view (look up at, down at, over into, accross), direction,**

atmosphere, focal points, attractions, etc.

Everywhere in cities water is out of reach. We need access to water, all around us; and we cannot have it without reverence for water in all its forms. People like to watch water move. Children are fascinated.

Allow streams to run through the city (complex) people walk along them. Use them as natural barriers with bridges to cross over (to experience). Fountains on flat ground. Let the water seclude different areas.

Dancing: along promenades in squares and evening centers, make a slightly raised platform to form a bandstand, where street musicians and local bands can play. Cover it and perhaps build in at ground level, tiny stalls for refreshment. Surround the bandstand with paved surface for dancing-- no admission charge.

Whenever there is action in a place (music) the spots which are the most inviting are those high enough to give people a vantage point, and low enough to put them in action (stairs to loiter) add a few steps at the edge with immediate access from below to congregate and watch the goings on.

Make a piece of the common land into an outdoor room--a partly enclosed place with some roof, columns, without walls, perhaps with a trellis; place it beside an important path and with a view. (theatre)

Therefore plaza activities are not only restricted to shopping, eating, and culture but also for public outdoor festivities. Such as festivals, dancing, music, art shows, theatrical events, etc. and these activities should be exciting in their relation between the physical plaza and people.

## people

Activities should pertain to people of all ages.

Older people need society around them.

Old people need old people, but they need the young and the young need contact with the old.

Couples need romantic privacy. small alcoves.

Areas for children to play and release energy. (playing)

For children's activities an adventurous playground, to crawl through, up, down, around, and experience, a maze, a cave.

Children like very small spaces with a cave effect to play in.

Children be able to explore freely and safely by themselves in order to grow and learn.

Therefore the plaza itself and its activities are to be for a range of different people of all ages.

## building layout

**A package of buildings juxtaposed against a historic context.**

**The excitement of seeing a building and experiencing it at a human scale is totally different than just imagining it from a large scaled site plan.**

**Experience is what makes an exciting relationship between people and architecture (landscape and building forms)**

**Bigger, important, significant spaces should have taller heights than smaller ones.**

**Arrange buildings so that they form pedestrian streets with many entrances and open stairs directly from the upper storys to the street, so that even movement between rooms is outdoors. Not just movement between buildings.**

**Buildings are too often oriented inside when they should be**

oriented outside.

Light up at night not only the interior but the exterior to display the sculptural aspects of the building's shape and form.

Therefore the building layout needs to produce excitement to a visitor in the plaza, through shape, transition, location, height and size, etc.

### interior layout

A building cannot be human unless it is a complex of still smaller building (parts) which manifest its own internal social facts. Connect by arcades, paths, bridges, shared gardens, and walls.

Arrange the spaces in the building to their degree of privateness, which make visitors and clients feel at ease. entrance--public--semi-public--private.

A building in which the ceiling heights are all the same is virtually incapable of making people comfortable. Intimacy of different spaces can be felt.

Rooms that are smaller produce a better turnout then and later.

A workspace cannot be too enclosed or exposed but between.

There will be no communication if things are too far apart from each other (especially 1 floor apart)

Not only outdoor corridor must provided but indoor also. density or climate force indoor main throughfares: a shortcut, as continuous as possible with public street outside, wide open entrance, windows, seating, counters, projected entrances attached to corridor, high ceiling, glass roof. (other circulation use)

"...long, sterile corridors set the scene for everything bad about modern architecture." Make the paths short and looking as

much like a room as possible (long windows, light, furniture, views, sitting spaces)

Each corner of a building is a potential sitting space (inside) depending on comfort and position of intimacy. formal--enclosed, informal--open and active.

Therefore the interior building should be laid out in its degree of privacy and function and also that it is an exciting experience too, just like the exterior.

### lobby

Place the main entrance of the building at a point where it can be seen immediately from the main avenues of approach and give it a bold, visible, shape which stands out in front of the building.

Lobby in which dominant paths pass through to create life and make this lobby its main entrance and exit. Make it light-filled and with a sense of indoors and outdoors.

Commonly used rooms should look out onto terraces which are raised and look down on streets, walks, or plazas.

Let the receptionist desk be placed off to the side and not between the path as a barrier. People feel uneasy.

The lobby should not be vast and sterile. Make it exciting also with views, decks, sitting areas, displays, level changes, focal point, entry from parking below in garage, sky lights, etc.

A commonly shared and centrally lit main lobby (core) will provide a sense of community while suggesting semi-private shops and restaurant spaces growing from the core. A place where everyone would feel at home.

Lobby windows to let outside light penetrate in the heart of the

building (core lobby) bringing the outdoors in.

Make sure that the lobby is lit up at night and can be seen through the window walls.

Therefore the main lobby should be the gateway and core of the plaza. Every building should focus on or branch off the lobby. It should be a positive and exciting place that the visitor must use.

### restaurant

Various sizes of restaurants.

Restaurants that provide a variety of cuisines and offer light lunches and happy hour.

A pub (RESTAURANT/BAR) to let people sing, talk, communicate, shout, and let go of their sorrows. Separate from activity plazas. different activity (night).

The restaurant should contain exterior eating areas or balconies.

Balconies allow the people on them and the people below to feel the building or the outdoor space around.

The street cafe provides a unique setting, special to cities: a place where people can sit lazily, legitimately, be on view, and watch the world go by. Intimate with several rooms. Overhanging terraces.

Therefore the restaurants should provide different food and atmosphere and contain balconies for eating because Ft. Worth has pleasant evening weather and it is a positive to view downtown activities & the plaza.

### shops

Shops of various sizes.

Shops need position to serve and guarantee survival.

**Shops do best at arteries of traffic, but shoppers need quiet, comfort, and convenience. And access to pedestrian paths. With ease access.**

**It is bland and unenjoyable when the market has everything you need under one roof.**

**Individual stores create their own individual look.**

Therefore the shops are in a good location in downtown (within the heart of activity) and it should be easy to travel from one to the other. They should offer different merchandise and be of different sizes.

### *art gallery*

**The gallery should flow with a natural progression.**

Therefore the art gallery should portray not only the style of art but the theme of the plaza. It itself is the guide to the modern architecture



of the plaza.

### windows

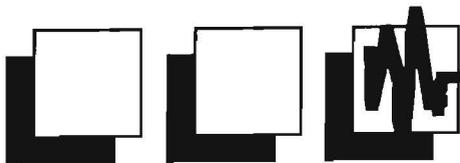
**Modern buildings are often shaped with no concern for natural light--they depend almost entirely on artificial light. But buildings which displace natural light as the major source of illumination are not fit places to spend the day.**

**Create buildings with a lot of surface material for use of creating light.**

**If the right rooms face south the space is bright; if not it is dark and gloomy.**

**People prefer light on 2 sides of a room and an outdoor space on 2 sides also.**

**Rooms without a view are prisons for the people who stay in them.**





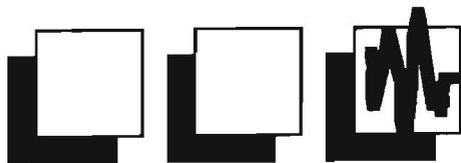
**Windows cannot only give communication between indoors and out but also room to room.**

Therefore windows are an important aspect in the atmosphere and relation between the interiors and the exterior plaza. The placement and shape provide an exciting modern look to the exterior.

### balconies

**A vast part of the earth's surface, in a town, consists of roofs. Couple this with the fact that the total area of a town which can be exposed to the sun is finite, and you will realize that it is natural, and indeed essential, to make roofs which take advantage of the sun and air.**

**Roof gardens flat terraced for plants, sitting and sleeping places and private spaces at various stories and accessed from a**



**lived-in space.**

**Balconies which are less than 6' deep are hardly ever used and recess partly into the building allowing more spaces and protection.**

Therefore balconies should not only be used at the restaurants but also in various places throughout the plaza that portray a positive view.

#### *vehicles*

**Cars give people wonderful freedom and increase their opportunities, but they also destroy the environment, to an extent so drastic that they kill all social life.. air pollution, noise, danger, ill health, congestion, parking problem, eyesore.**

**Large parking structures full of cars are inhuman and dead buildings. no one wants to see them. but the entrance needs**

to be clearly marked.

Car building connections (used often) should be beautiful and not neglected.

Behind a natural wall, connected with buildings not seen from the outside.

If parking area is too great, it destroys the land.

Therefore the parking should be hidden underground but also given a good transition between it and the surface above. The entrance for the garage must be marked clearly but also be discrete.

### bus stop

A bus stop-- pleasant (watch people) recognizable and enough activities around them. A tiny center of public life. locate stops with several other activities: shelter, seats, shops,

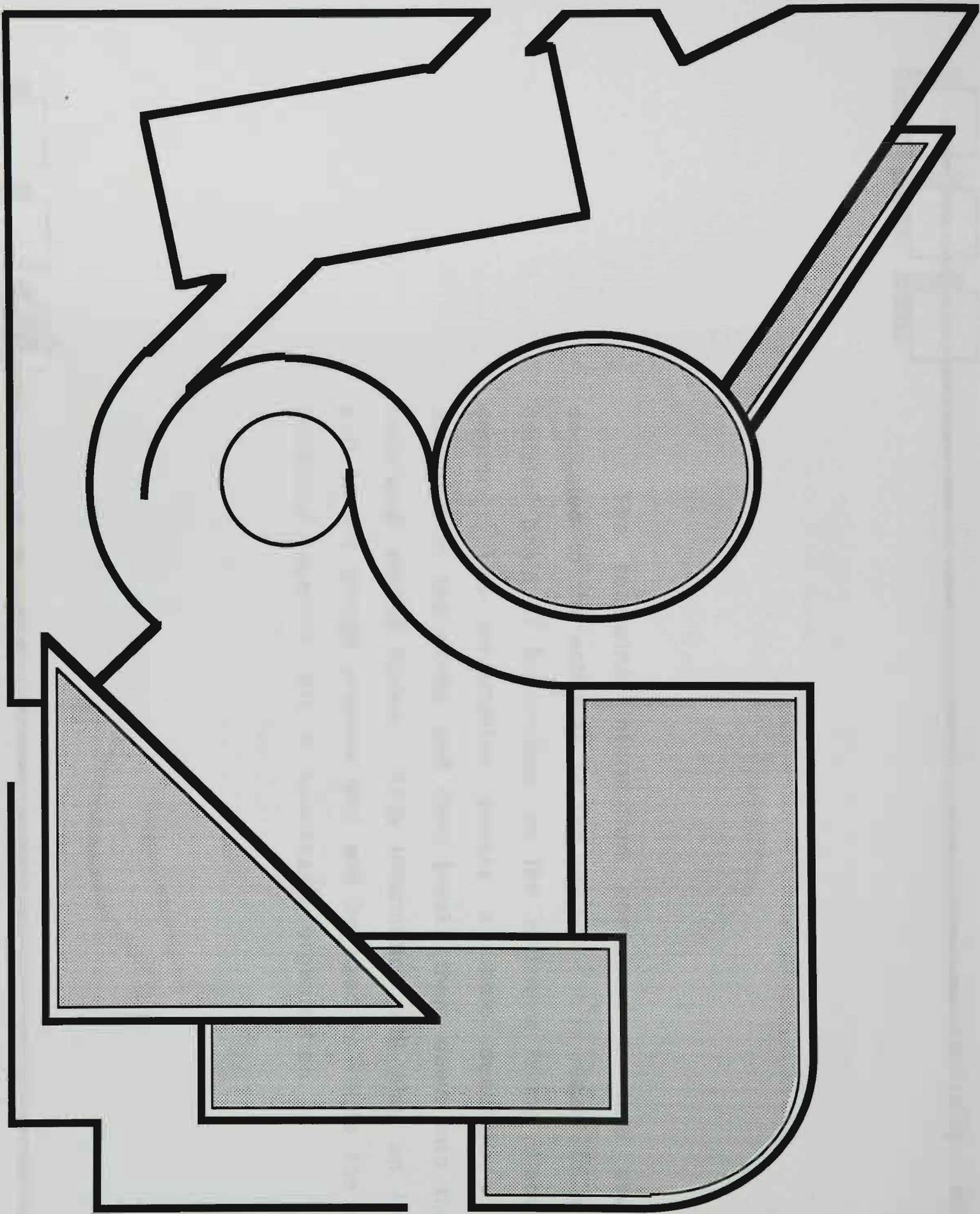
**trees, crossings, bathrooms, and squares.**

Therefore a bus stop should be provided in order to help attract people.

*miscellaneous*

**4 story limit and cover only 50% of site with building. Stairs should open up to the exterior of the building. Need for simplicity.**

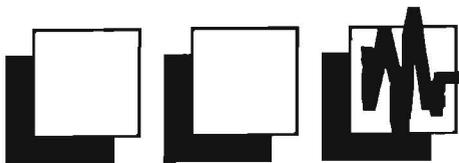
Therefore all of these goals must be addressed and not just a percentage of them. These issues work off of one another and by no means are they an end to the design issues of the project. This is a very important concern in the design phase.

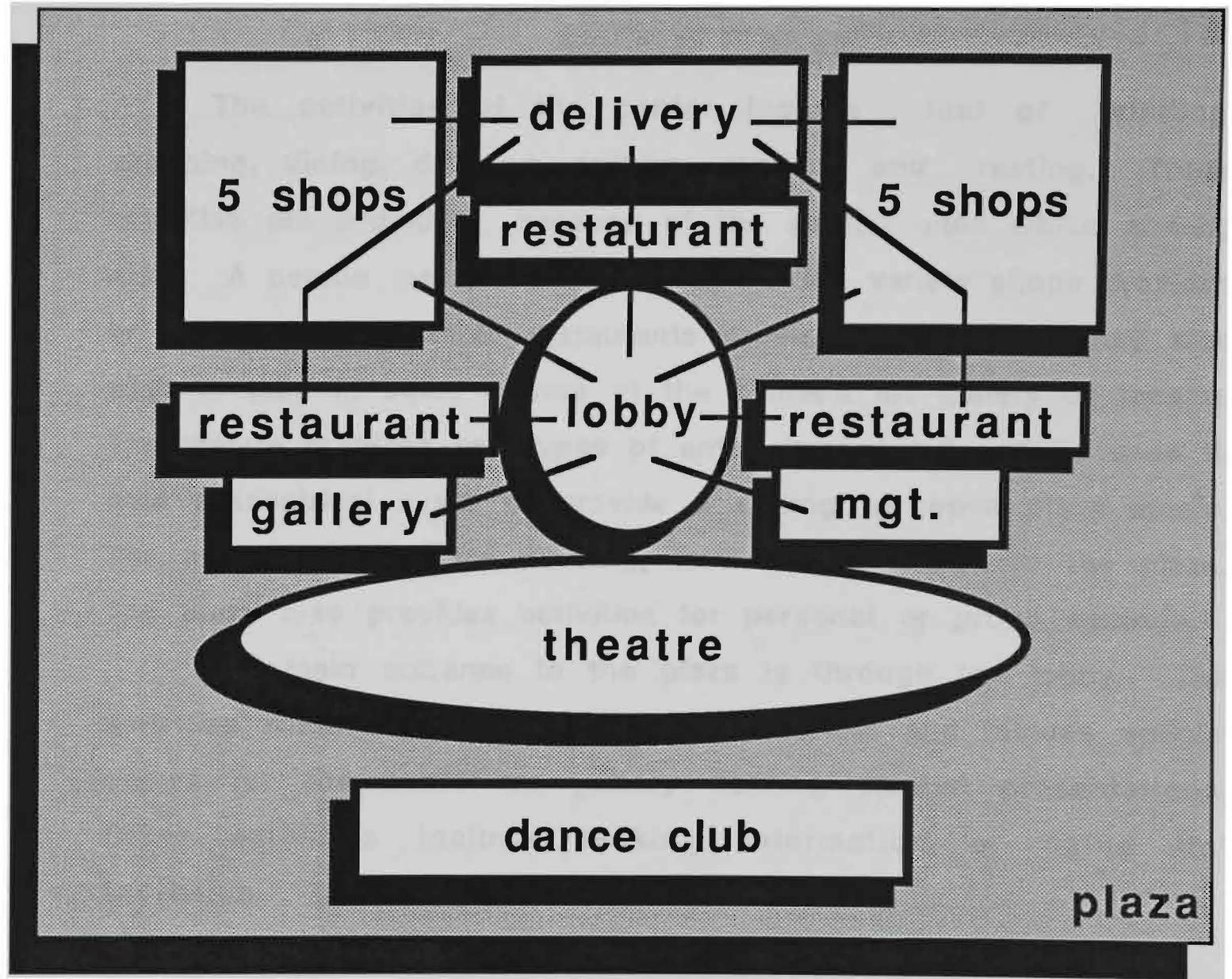


■ ■ activity analysis ■



The following information contained in this section is dedicated to the activities of the project. It is meant to provide a general basis of information on the activities taking place in the center. The information covers a basic description of the activities in the center and then breaks them down into their own individual spatial nodes. This information will play an important part in the design process and will be used to relate the different activities together into a successful organization.



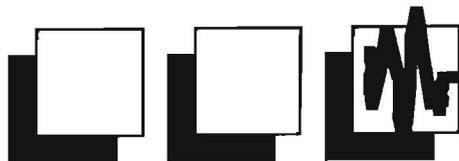




## activity analysis

The activities of the center include that of visiting, shopping, dining, drinking, culture, dancing, and resting. These activities are provided because of the limited ones which already exist. A person may shop at any of the ten variety shops provided or dine at one of three restaurants provided. A person may also wish to take in some culture at the center's art gallery or theatre. The theatre provides two types of entertainment. It can be used to hold a theatrical event or provide a setting for open plaza music. The music provides for dancing, festivals, or shows in the plaza. The plaza also provides activities for personal or group settings.

The main entrance to the plaza is through the lobby. The activities within the lobby are mainly informal and include special shows for the center or gallery holding special presentations. Other activities include seeking information or using its' facilities.





The shops will be connected by the lobby core such as that of a heart. The activities within the shops will vary with the type of merchandise sold. The activity within will not only be buying, selling, and displays, also there will be circulation activity from within the stores. The major activity to be concerned with in function is the storage and delivery.

The delivery activity is very complex but must be made simple. The delivery driveway should be discrete and out of the way. Once the delivery truck arrives at the center, he must back into the delivery driveway which is located on a side of the center which has the least traffic and pedestrian activity. The merchandise is unloaded into a receiving/shipping warehouse. Inside the warehouse the merchandise can be sorted and set for stocking. Attached behind each of the shops, restaurant and gallery is a delivery hallway in which goods can be transported upstairs by freight elevators. These freight elevators are directly connected to the receiving/shipping warehouse.



Besides the activity of delivering of food and utensils to the restaurant, there are other activities such as food washing, preparing and clean up in the kitchen and dining activity in the dining area. Guests are welcomed and seated. Then they must be served.

The art gallery also receives delivery of materials, tools, art work, etc. from the warehouse. These goods are sent to a display space or to a studio workroom. The workroom activity includes the creation of art (sculpture and prints), storage and clean up. The art gallery is also used for purchasing and selling works or just the observative visitation to the gallery.

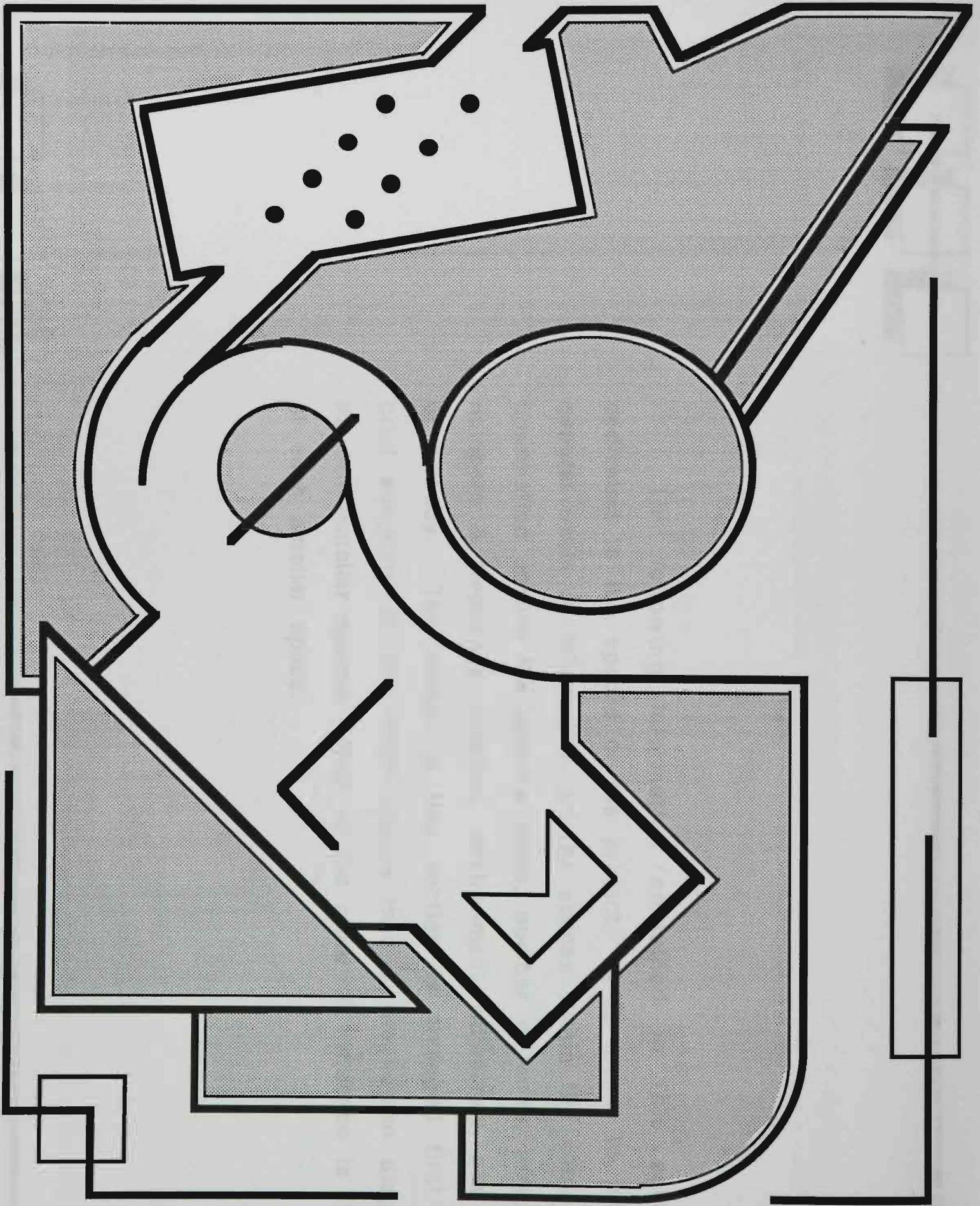
The dance club activities are limited mostly to the afternoon and evening. The club will provide a happy hour/buffet just as the restaurant/bars will. Then the nightly activities include drinking, dancing, and socializing. This may take place in many different areas inside the club and possibly on an open deck that connects to overlook the plaza.



The theatre's activities include a range of theatrical shows to musical entertainment. The music will be provided on stage for the plaza at lunch through early evening. The guest may listen underneath the covered theatre or out in the main plaza space. The theatrical activities include rehearsal and play production. Which entails directing, dressing, costume and stage preparation, building and construction of props and backdrops, and receiving on occasion. The visitor's activities to the theatre include not only seeing the show, but socializing in the lobby.

The activities in the plaza are open to most anything. From resting and contemplation to social groups.

Therefore all of the activities in the plaza are run basically by themselves except for a delivery unit. The activities are meant to conteract off of one another and that the attraction to one activity in the center will provide activity with the others.

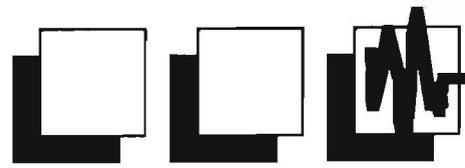
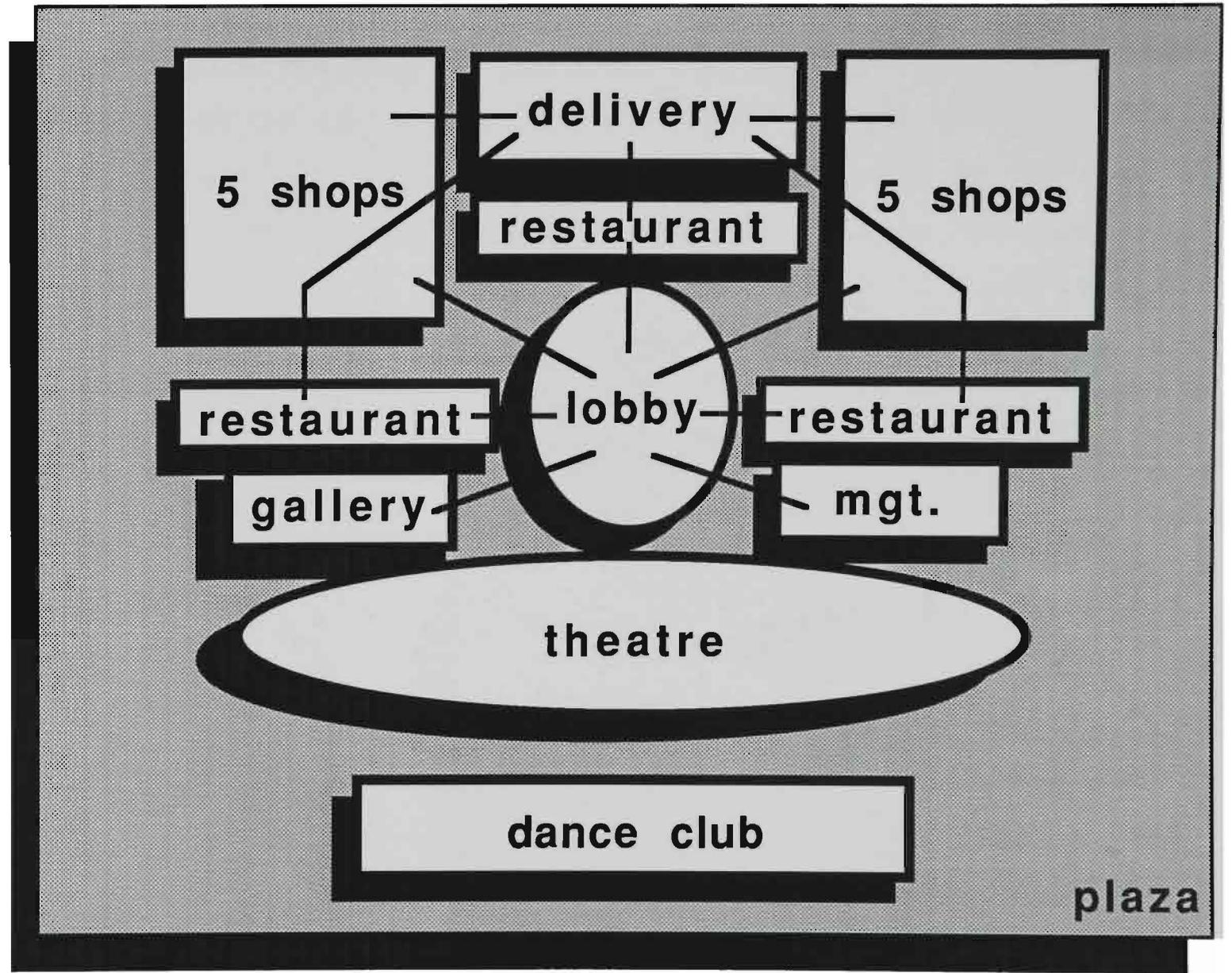


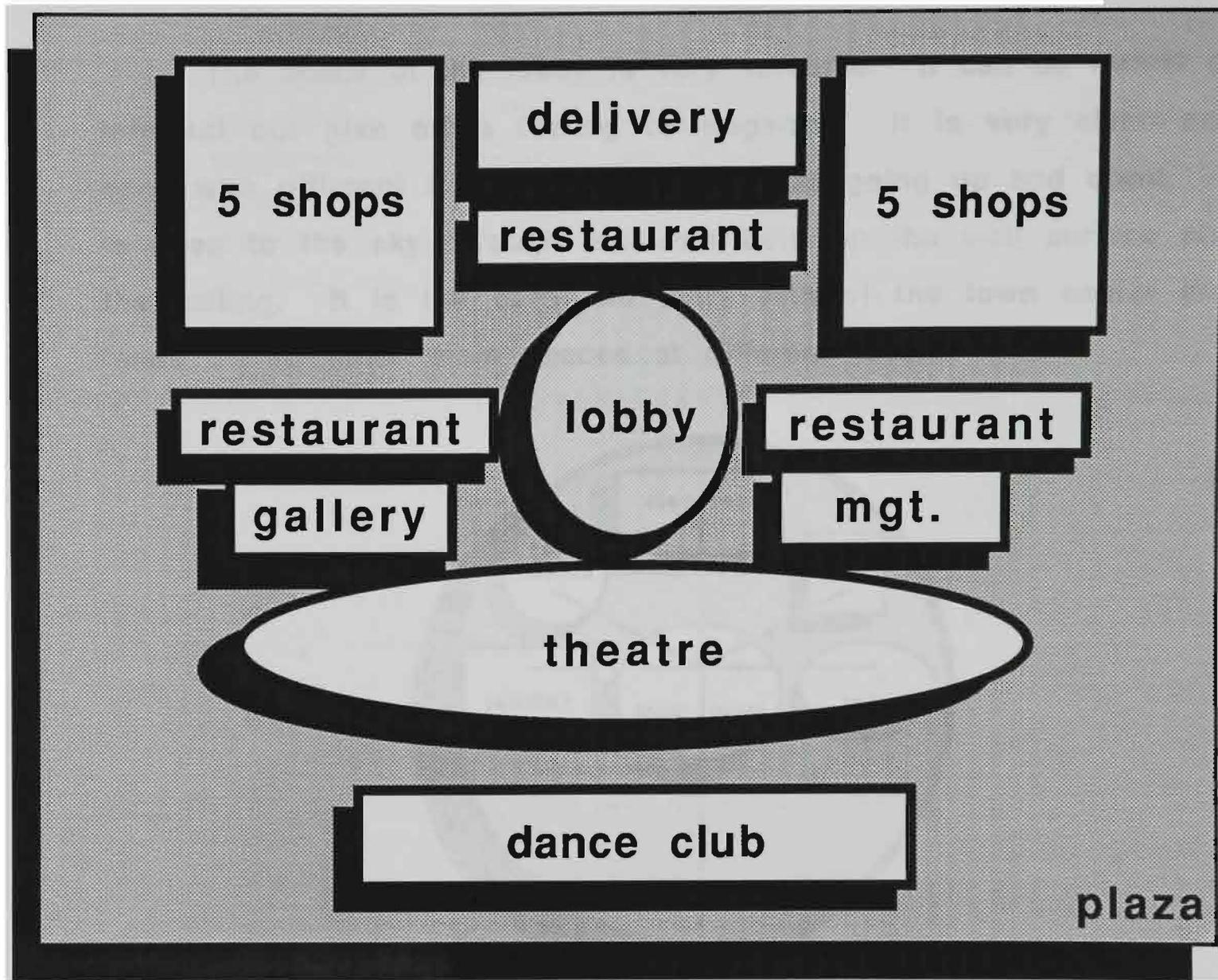
■ ■ space allocation



The following information contained in this section is dedicated to the spaces of the project. It is meant to provide a general basis of information on the spaces within the center. The information covers the space's name, number of units, area, users, numbers & frequency, function, environment, adjacency, and degree of privacy. The format of this section is arranged first with a brief summary of the major spaces then a breakdown diagram of its own smaller spaces. Next in the order of sequence is the data of each smaller space.

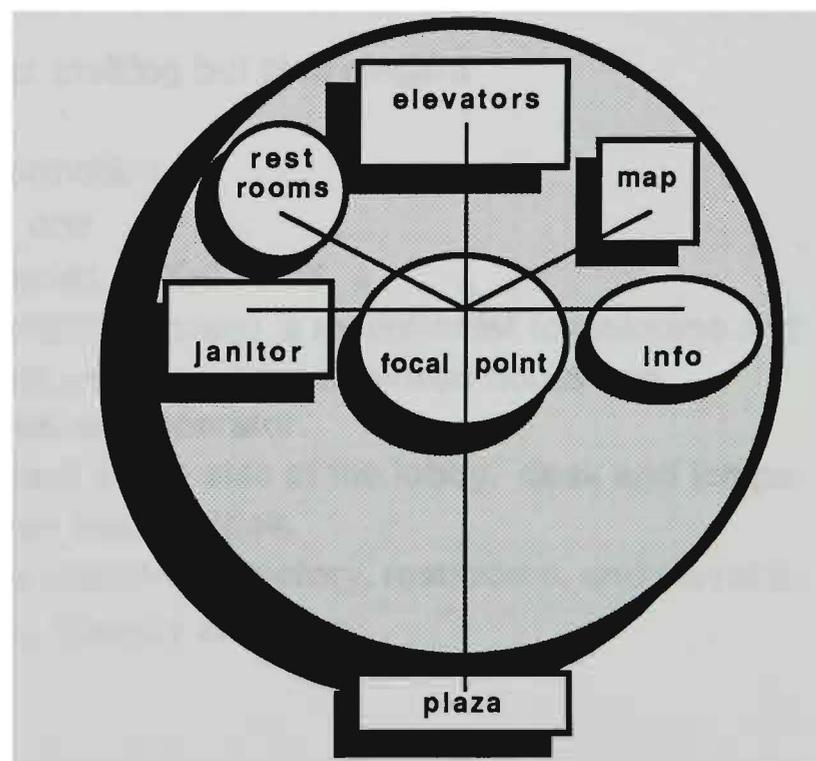






## lobby

The space of the lobby is very versatile. It can be formal or informal but give off a feeling of elegance. It is very clean and open with different levels and level changes going up and down. It is open to the sky through windows both on the wall surface and the ceiling. It is the core and main vein of the town center and feeds off to other main spaces at different levels.





space name: **lobby**

number of units: **one**

assignable floor area: **1600'= 40'x40'**

users numbers and frequency: **an undetermined number of employees and visitors open from 10:00 a.m. to 10:00 p.m.**

functional description: **to welcome people to the center and provide a visual interior pedestrian pathway to shops.**

environment: **a clean, wide, open, sunlit atrium that portrays a positive atmosphere. views, sitting areas, stairs, graphics, modern night lighting system, etc. must be provided.**

adjacency: **shops, restaurants, art gallery, center management, plaza**

degree of privacy: **inviting but also elegant**

space name: **information**

number of units: **one**

assignable floor area: **100'=10'x10'**

users, numbers and frequency: **a receptionist to welcome and inform visitors throughout business hours and communications operator.**

environment: **a desk at the side of the lobby. desk and lamps with a clean modern look.**

adjacency: **lobby, mapping directory, restrooms, and elevator**

degree of privacy: **friendly and open**





space name: **mapping directory**

number of units: **one**

assignable floor area: **25'=5'x5'**

assignable volume area: **150'=5'x5'x6'**

users, numbers, and frequency: **all visitors whom inquire  
information between 10:00 a.m. and 10:00 p.m. especially  
after 5:00 p.m.**

functional description: **to provide information**

environment: **clean and modern**

adjacency: **lobby, information desk, restrooms, and elevator**

degree of privacy: **inviting**

space name: **restrooms**

number of units: **one for each sex**

assignable floor area: **2 at 180'=9'x20'**

users, numbers, and frequency: **persons in lobby, management,  
shops, gallery, plaza from 10:00 a.m. to 10:00 p.m.**

functional description: **to relieve**

environment: **cleanliness, tile, water closets, urinals, sinks,  
hand dryers, mirror, lighting, room temperature, etc.**

adjacency: **information, lobby, management, shops, gallery,  
plaza and elevators.**

degree of privacy: **public but personal**





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space name: **janitor's room**

number of units: **one**

assignable floor area: **100'=10'x10'**

assignable volume area: **1,000'=10'x10'x10'**

users, numbers, and frequency: **maintenance during day but mostly at night for clean up.**

functional description: **storage and preparation for cleaning tools and products**

environment: **sink, storage racks, cleaning equipment**

adjacency: **lobby, management, shops, and gallery**

degree of privacy: **hidden and discrete**

space name: **elevators**

number of units: **two**

assignable floor area: **2 at 45'=7.5'x6'**

assignable volume area: **2 at 450'=7.5'x6'x10'**

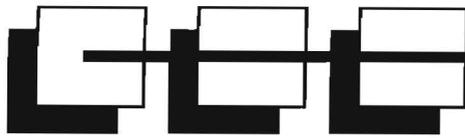
users, numbers, and frequency: **persons traveling from lobby to shops, restaurants and gallery**

functional description: **to carry people from level to level**

environment: **low noise, clean, comfortable, space for mechanics**

adjacency: **lobby, information, restrooms, janitor**

degree of privacy: **easily located**



space name: **focal points**

number of units: **two**

size: **design will tell**

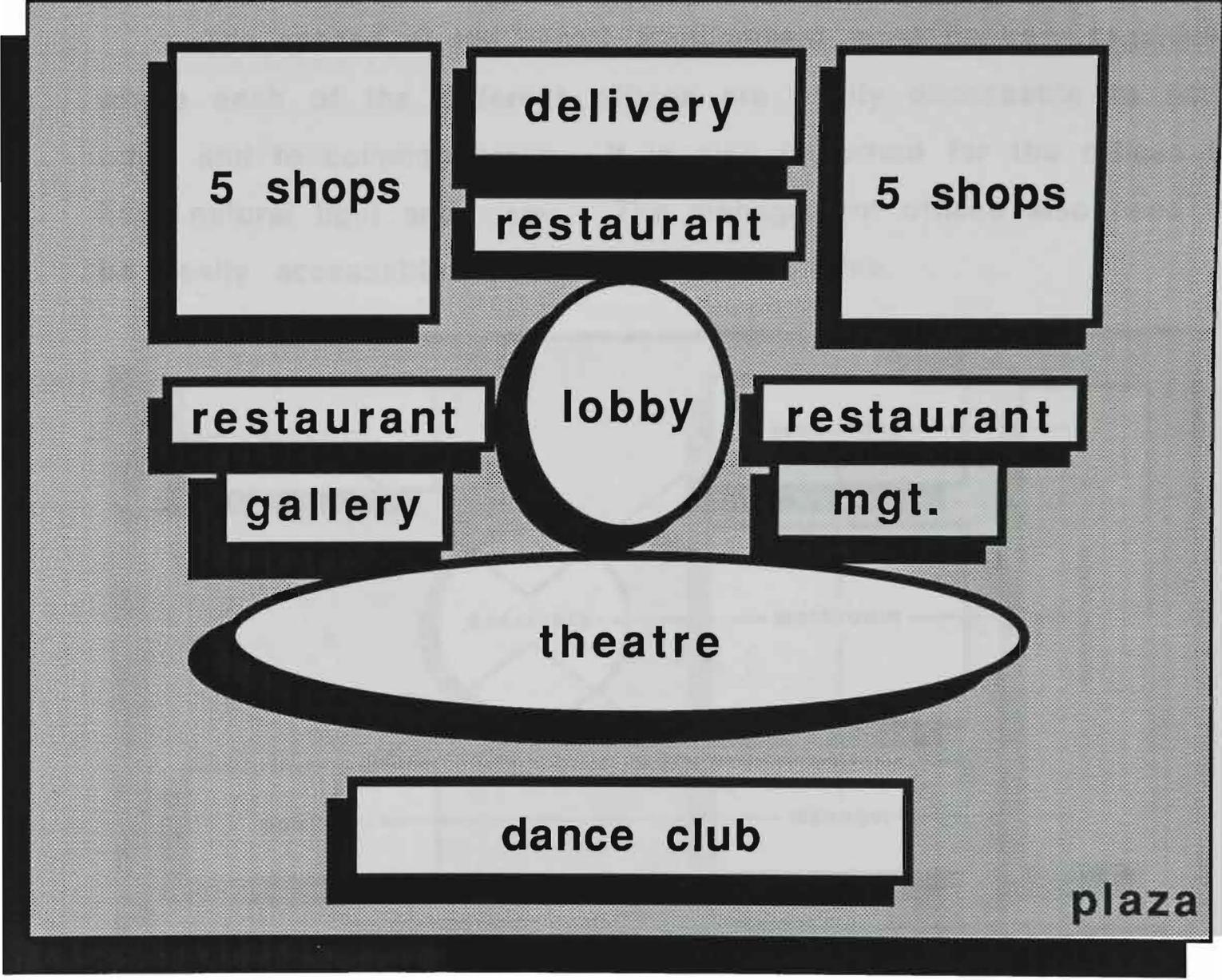
users, numbers, and frequency: **visitors in lobby and plaza areas during hours of 10:00 a.m. to 10:00 p.m.**

functional description: **to provide a whole. to give these spaces a finishing touch, a point of reference, and focalpoint**

environment: **dominant, lit, up at night the one in lobby and the one in plaza, and very inviting**

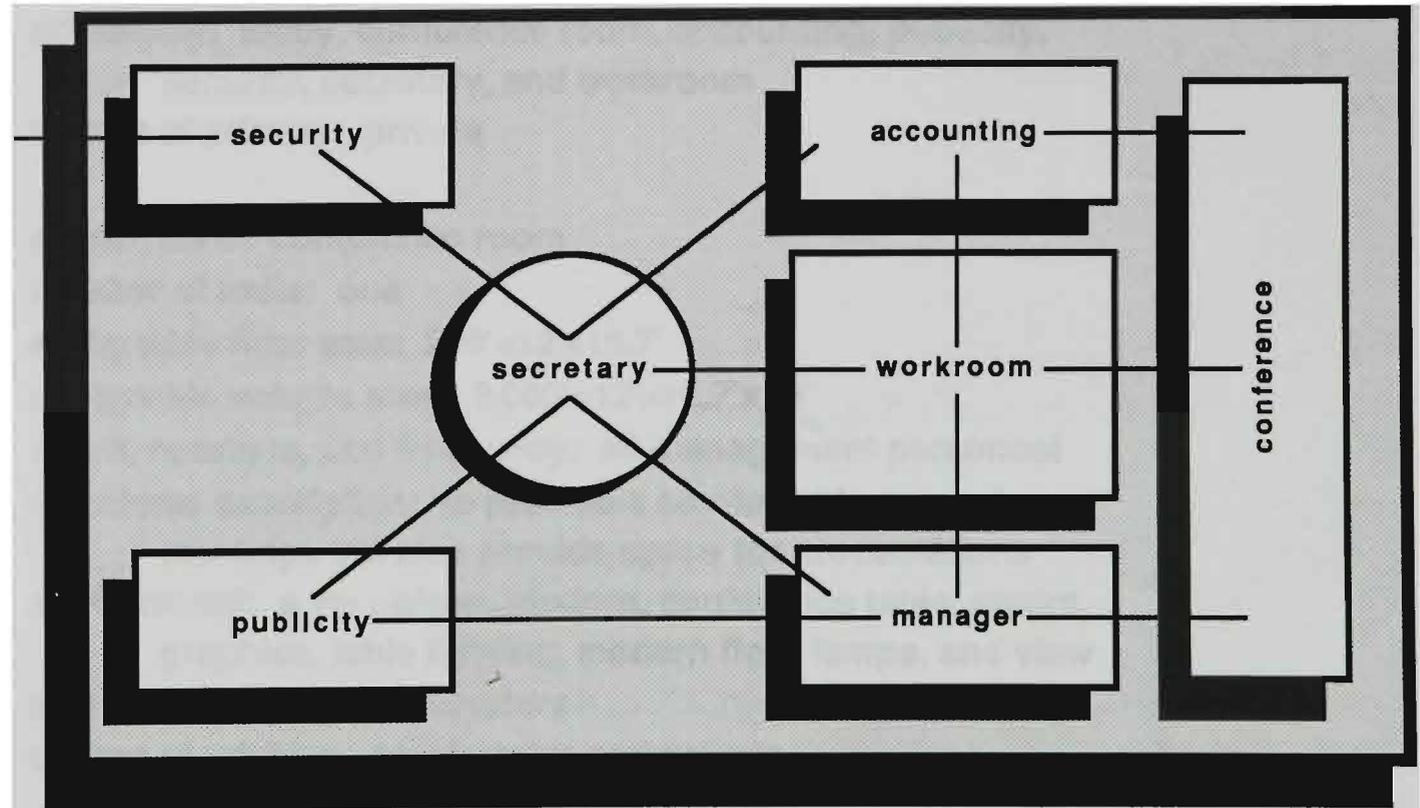
degree of privacy: **very public and open**





### center management

The spaces of the center management must be very organized where each of the different offices are easily accessible to each other and to common areas. It is also important for the offices to have natural light and views. The management offices also need to be easily accessible to other center facilities.



space name: **manager's office**

assignable floor area: **225'=15'x15'**

assignable volume area: **2,250'=15'x15'x10'**

users, numbers, and frequency: **manager and visitors from employees during business hours**

functional description: **to look after rent for lease spaces (shops, restaurant, gallery, club, and parking) & to organize**

environment: **clean, less is more, modern office including: desk, chairs, personal file, table, lamps, personal computer, etc.**

adjacency: **lobby, conference room, accounting, publicity, security, secretary, and workroom**

degree of privacy: **private**

space name: **conference room**

number of units: **one**

assignable floor area: **200'=12'x16.7'**

assignable volume area: **2,000'=12'x16.7'x10'**

users, numbers, and frequency: **all management personnel**

functional description: **to provide a comfortable space for meetings but also provide space for presentations**

environment: **a very clean, modern, conference table, chairs, graphics, table lighting, modern floor lamps, and view**

adjacency: **manager, secretary**

degree of privacy: **comfortable and private**



space name: **accounting office**

number of units: **one**

assignable floor area: **225'=15'x15'**

assignable volume area: **2,250'=15'x15'x10'**

users, numbers, and frequency: **2 employees, during hours**

functional description: **to tend to bookkeeping & accounting**

environment: **desks, chairs(desk & waiting), filing, ceiling**

**lighting, view, computer, work table, bookshelf**

adjacency: **manager, secretary**

degree of privacy: **private**

space name: **publicity office**

number of units: **one**

assignable floor area: **150'=10'x15'**

assignable volume area: **1,500'=10'x15'x10'**

users, numbers, and frequency: **p.r., personnel plus visits from**

**all departments when inquiring about business**

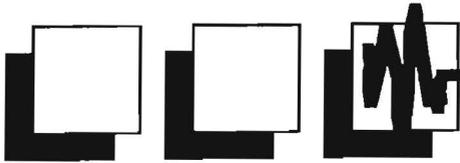
functional description: **to handle public relations of center**

environment: **desk, chairs, layout table, file, computer, ceiling**

**lighting, clean**

adjacency: **manager, secretary**

degree of privacy: **private**





space name: **security office**

number of spaces: **one**

assignable floor area: **250'=15'x16.7**

assignable volume area: **2,500'=15'x16.7'x10'**

users, numbers, and frequency: **security, personal staff, 24  
hours a day**

functional description: **to protect the center's environment**

environment: **televisual scanning board, desk, chairs, view,  
ceiling lighting, computer**

adjacency: **lobby**

degree of privacy: **discrete**

space name: **secretarial area**

number of spaces: **one**

assignable floor area: **200'=12'x16.7'**

assignable volume area: **2,000'=12'x16.7'x10'**

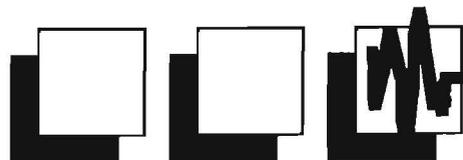
users, numbers, and frequency: **secretary plus management  
personnel and their visitors during business hours**

functional description: **to handle appointments, phone, typing**

environment: **open, desk, chairs (waiting and work), computer,  
typewriter, worktable, partial ceiling and area lighting,  
modern and clean**

adjacency: **lobby, manager and other offices**

degree of privacy: **semi-public**





space name: **workroom**

number of units: **one**

assignable floor area: **150'=10'x15'**

assignable volume area: **1,500'=10'x15'x10'**

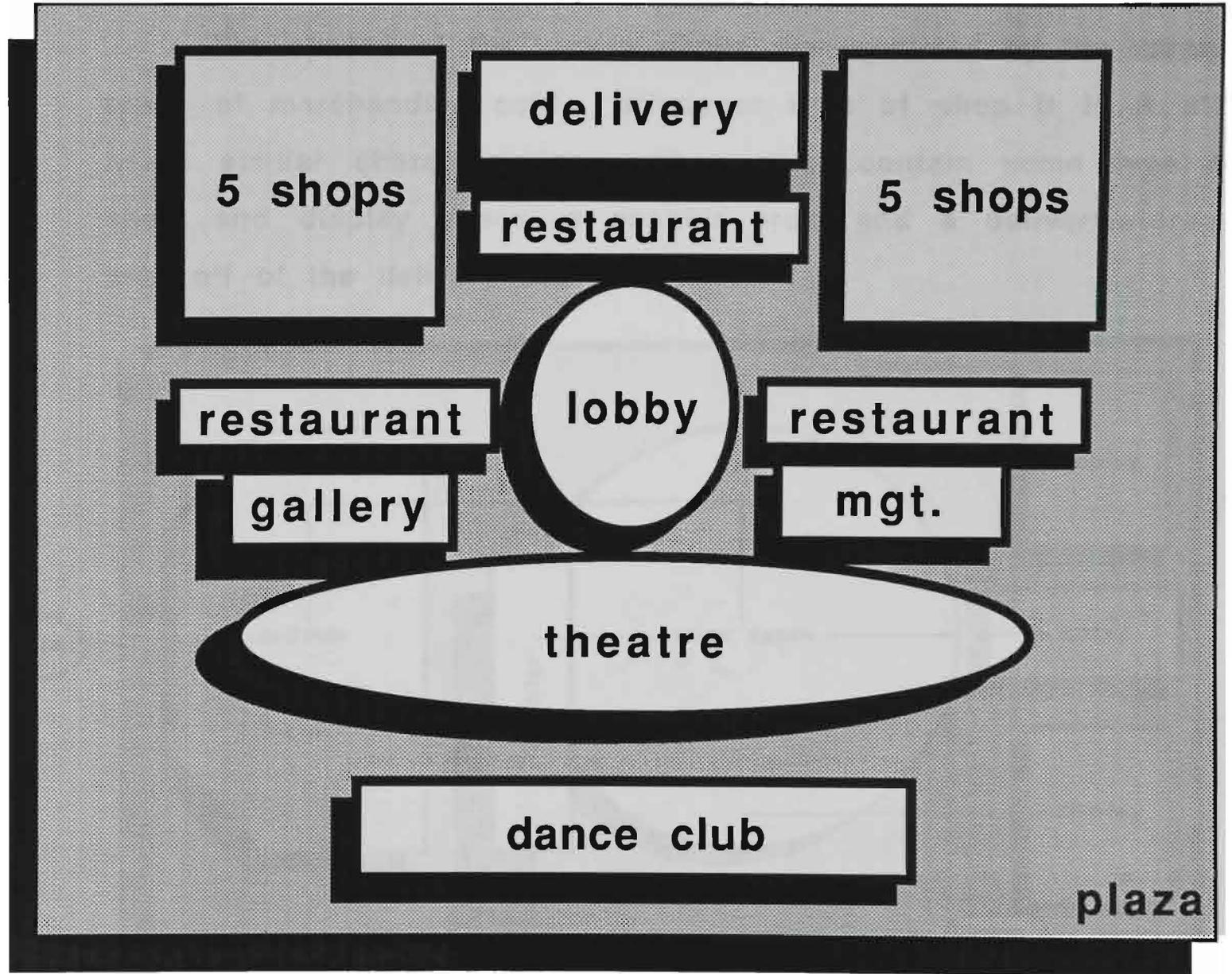
users, numbers, and frequency: **secretary and other  
management personnel during business hours**

functional description: **organize, copy, file, drinks and snacks**

environment: **ceiling lighting, copiers, files, food counter space,  
and storage, coke machine, and layout tables**

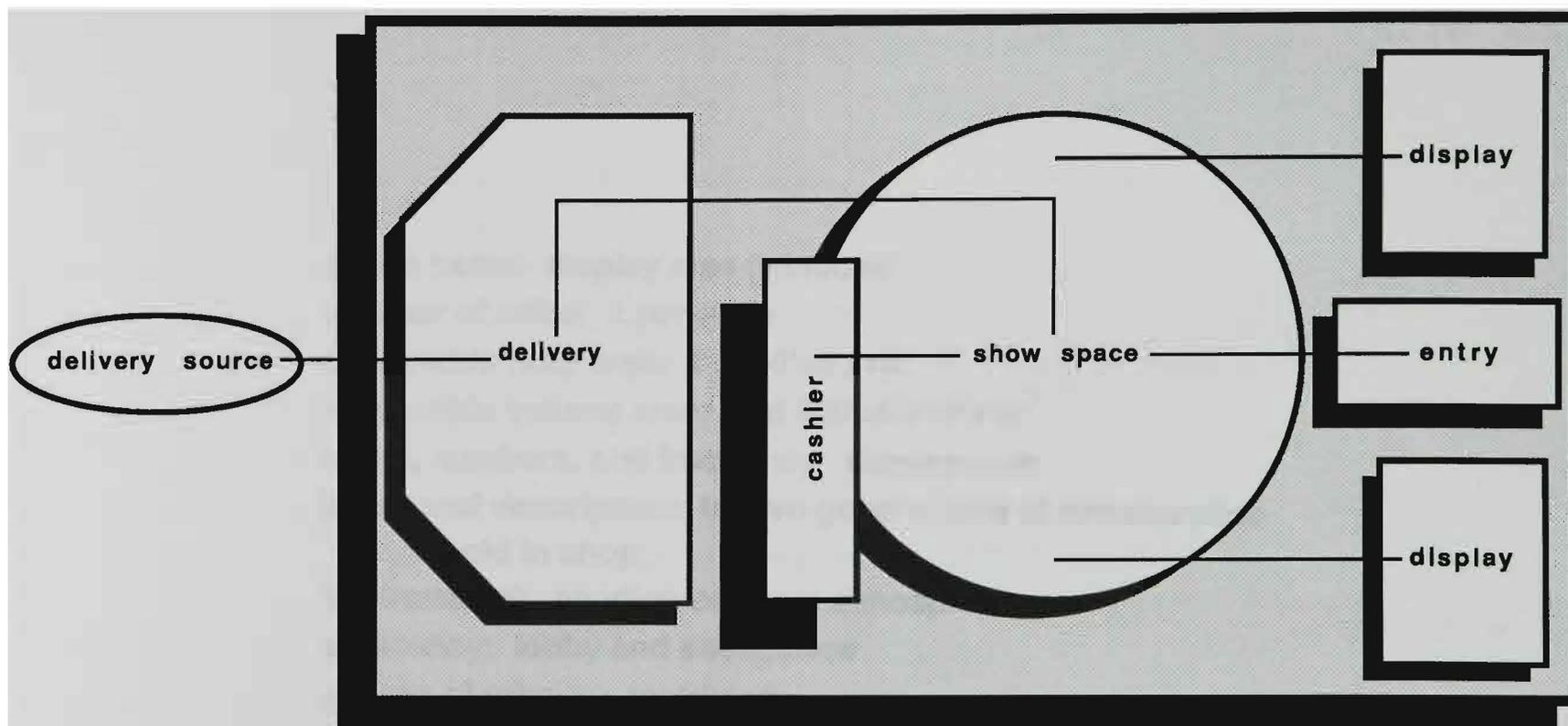
adjacency: **secretary and other offices**

degree of privacy: **very private**



## variety shops

The spaces of the variety shops are predicted by the various types of merchandise sold. Whatever type of shop it is it still holds similar characteristics. They must contain some type of show and display space, a cashier area, and a delivery/storage area off of the delivery source.





space name: **show space**

number of units: **ten**

assignable floor area: **varies; usually 1,500'=30'x50'**

assignable volume area: **18,000'=30'x50'x12' users, numbers,  
and frequency: visitors and employees during business hours**

functional description: **to display merchandise for sale**

environment: **pending on store atmosphere and theme**

adjacency: **lobby**

degree of privacy: **inviting**

space name: **display area (window)**

number of units: **2 per store**

assignable floor area: **2 at 50'=5'x10'**

assignable volume area: **2 at 600'=5'x10'x12'**

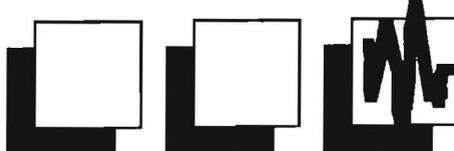
users, numbers, and frequency: **display only**

functional description: **to give general idea of merchandise  
sold in shop**

environment: **pending on store atmosphere**

adjacency: **lobby and showspace**

degree of privacy: **restricted**





space name: **cashier desk**

number of units: **ten**

assignable floor area: **50'=5'x10'**

assignable volume area: **500'=5'x10'x8'**

users, numbers, and frequency: **employees, 1 to 4 during  
business hours**

functional description: **purchasing**

environment: **desk, cash registers, workspace, undercounter  
display**

adjacency: **located within showspace**

degree of privacy: **secure**

space name: **receiving/storage**

number of units: **ten**

assignable floor area: **380'x20'x19'**

assignable volume area: **4,560'=20'x19'x12'**

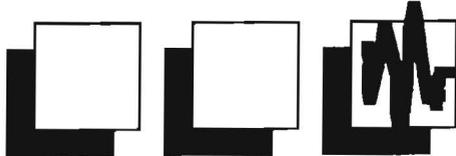
users, numbers, and frequency: **employees and delivery  
personnel during business hours**

functional description: **to move products out of freight  
elevators and to properly store merchandise**

environment: **storage, facilities being weather clothes rack,  
shelves, refrigeration, etc., fluorescent tube ceiling lighting**

adjacency: **showspace and delivery space**

degree of privacy: **private and secure**



space name: **cashier desk**

number of units: **ten**

assignable floor area: **50'=5'x10'**

assignable volume area: **500'=5'x10'x8'**

users, numbers, and frequency: **employees, 1 to 4 during  
business hours**

functional description: **purchasing**

environment: **desk, cash registers, workspace, undercounter  
display**

adjacency: **located within showspace**

degree of privacy: **secure**

space name: **receiving/storage**

number of units: **ten**

assignable floor area: **380'x20'x19'**

assignable volume area: **4,560'=20'x19'x12'**

users, numbers, and frequency: **employees and delivery  
personnel during business hours**

functional description: **to move products out of freight  
elevators and to properly store merchandise**

environment: **storage, facilities being weather clothes rack,  
shelves, refrigeration,etc., fluorescent tube ceiling lighting**

adjacency: **showspace and delivery space**

degree of privacy: **private and secure**

space name: **dressng room (if clothing store)**

number of units: **10 stalls per store**

assignable floor area: **220'=10'x4'x4'+3'x20'**

assignable volume area: **2,200'=220'x10'**

users, numbers, and frequency: **customers and employees  
during business hours**

functional description: **to allow customers to sample clothing  
for comfort, fit, etc.**

environment: **each stall should be able to be closed and contain a  
bench and hanger rack (plus checkin outside)**

adjacency: **showspace**

degree of privacy: **private and secure**

space name: **manager/employee area**

number of units: **ten**

assignable floor area: **100'=10'x10'**

assignable volume area: **1,000'=10'x10'x10'**

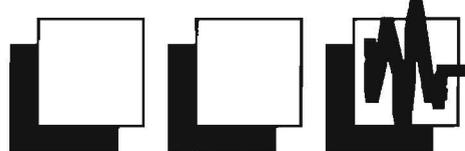
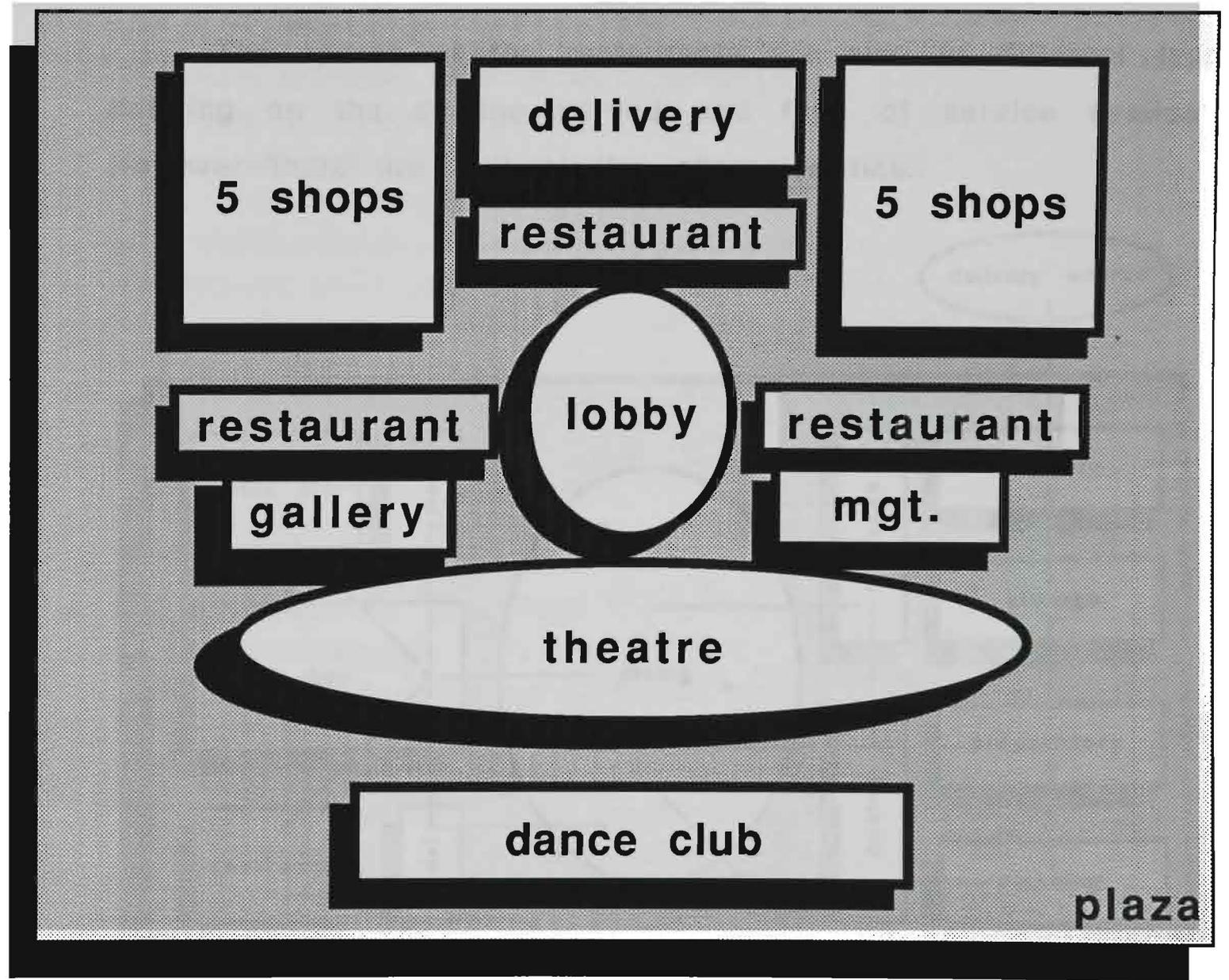
users, numbers, and frequency: **employees and managers**

functional description: **provide a space for breaks and to  
display schedules**

environment: **desk, tackboard, telephone, files, chairs, desk,  
couch, and table**

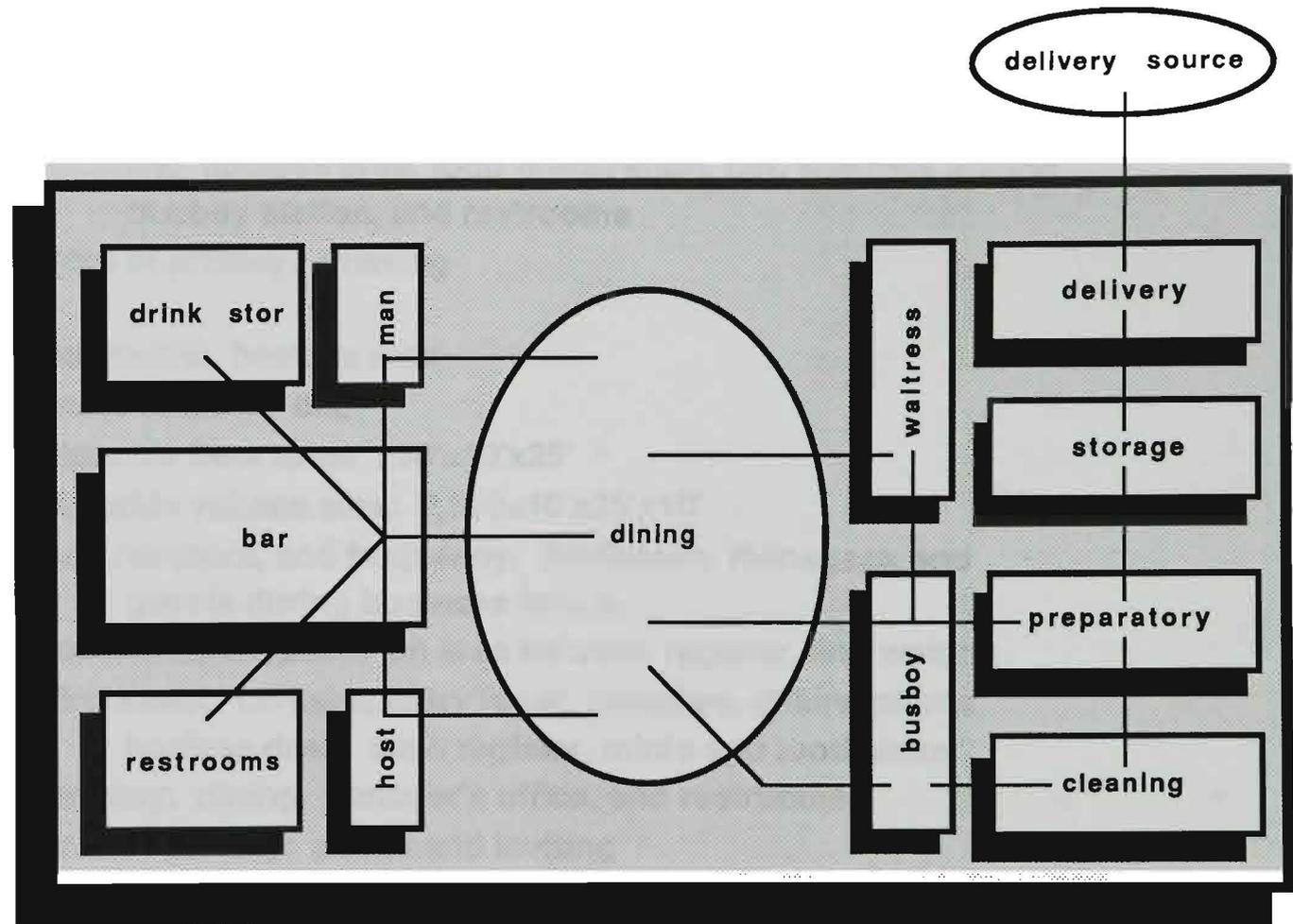
adjacency: **within receiving/ storage**

degree of privacy: **open to storage**



## restaurants

The spaces of the restaurants are also of different types pending on the cuisine served and type of service available. However there are still similar characteristics.





space name: **dining**

number of units: **one**

assignable floor area: **2,400'=20 sq. ft./person (120)**

assignable volume area: **varies**

users, numbers, and frequency: **employees, guests during  
business hours**

functional description: **to provide a pleasant dining space**

environment: **low lighting, approximately 30 tables, chairs,  
raised areas, low lamps, bar, views, and modern look**

adjacency: **hostess area, food preparation, bar, waitress station,  
busboy station, and restrooms**

degree of privacy: **relaxing**

space name: **hostess area**

number of units: **one**

assignable floor area: **250'=10'x25'**

assignable volume area: **2,500=10'x25'x10'**

users, numbers, and frequency: **hostesses, managers, and  
guests during business hours**

functional description: **an area for cash register, and waiting**

environment: **contains entry foyer, benches, chairs, plants,  
hostess desk, cash register, mints and toothpicks**

adjacency: **dining, manager's office, and restrooms**

degree of privacy: **public and inviting**



space name: **manager's office**

number of units: **one**

assignable floor area: **144'=12'x12'**

assignable volume area: **1,440'=12'x12'x10'**

users, numbers, and frequency: **managers and employees  
during business hours**

functional description: **to handle paperwork, schedules,  
deliveries, conduct interviews, and personal meetings**

environment: **desk, chairs, telephone, computer, plants, and  
ceiling lighting**

adjacency: **dining, hostess area, and employee breakroom**

degree of privacy: **private**

space name: **employee breakroom**

number of units: **one**

assignable floor area: **144'=12'x12'**

assignable volume area: **1,440'x12'x12'x10'**

users, numbers, and frequency: **employees and managers**

functional description: **to provide a relaxing area for  
employees and managers**

environment: **tables, chairs, couches, coke machines,  
plants,lamps, ceiling lighting, stereo, and coat rack**

adjacency: **managers' office, hostess area, restrooms, and dining**

degree of privacy: **relaxing**



space name: **restrooms**

number of units: **two**

assignable floor area: **2 at 160'=8'x20'**

assignable volume area: **2 at 1,600'=8'x20'x10'**

users, numbers, and frequency: **employees and guests during  
business hours**

functional description: **to relieve**

environment: **cleanliness, tile, water closets, urinals, sinks,  
hand dryers, mirror, lighting, room temperature, etc.**

adjacency: **hostess area, dining, and employee breakroom**

degree of privacy: **public but personal**

space name: **bar**

number of units: **one**

assignable floor area: **440'=20'x20'**

assignable volume area: **4,400'=20'x20'x10' (varies)**

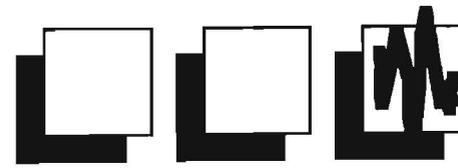
users, numbers, and frequency: **employees and guests**

functional description: **place to prepare alcoholic beverages**

environment: **low lighting, barstools, bar counter, glass racks,  
bottle racks, taps, sink, tables and booths, chairs, and low  
hanging lamps**

adjacency: **dining, restrooms, and hostess area**

degree of privacy: **relaxing**





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space name: **waitress station**

number of units: **one to two**

assignable floor area: **100'=5'x20'**

assignable volume area: **1,000=5'x20'x10'**

users, numbers, and frequency: **employees and managers during business hours**

functional description: **an area to supply tea, ice, water, glasses, lemons, straws, condiments, and silverware**

environment: **counter containing the above, ceiling lighting**

adjacency: **dining and kitchen area**

degree of privacy: **private and discrete**

space name: **busboy station**

number of units: **one**

assignable floor area: **35'=5'x7'**

assignable volume area: **350'=5'x7'x10'**

users, numbers, and frequency: **employees during hours**

functional description: **an area to dump dirty dishes**

environment: **carts, dish towels, and tubs**

adjacency: **dining and cleaning area**



degree of privacy: **discrete**

space name: **food preparation**

number of units: **one**

assignable floor area: **1,296' (layout varies)**

assignable volume area: **15,552'**

numbers, users, and frequency: **employees during business hours**

functional description: **to provide an area for washing and cooking food**

environment: **(preparation and cooking 868', traffic 428') meat, vegetable, salad preparation, broiler, fryer, steamtable, cook's table, ovens, sinks, cutting boards**

adjacency: **waitress station, food storage, cleaning area**

degree of privacy: **private**

space name: **food storage**

number of units: **one**

assignable floor area: **384' (layout varies)**

assignable volume area: **3,840'**

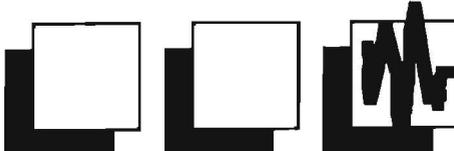
users, numbers, and frequency: **employees during hours**

functional description: **to provide a place to store food**

environment: **ventilated, refrigerated, and frozen storage,**

adjacency: **food preparation, and cleaning area**

degree of privacy: **private**





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space name: **cleaning area**

number of units: **one**

assignable floor area: **360' (layout varies)**

assignable volume area: **3,600'**

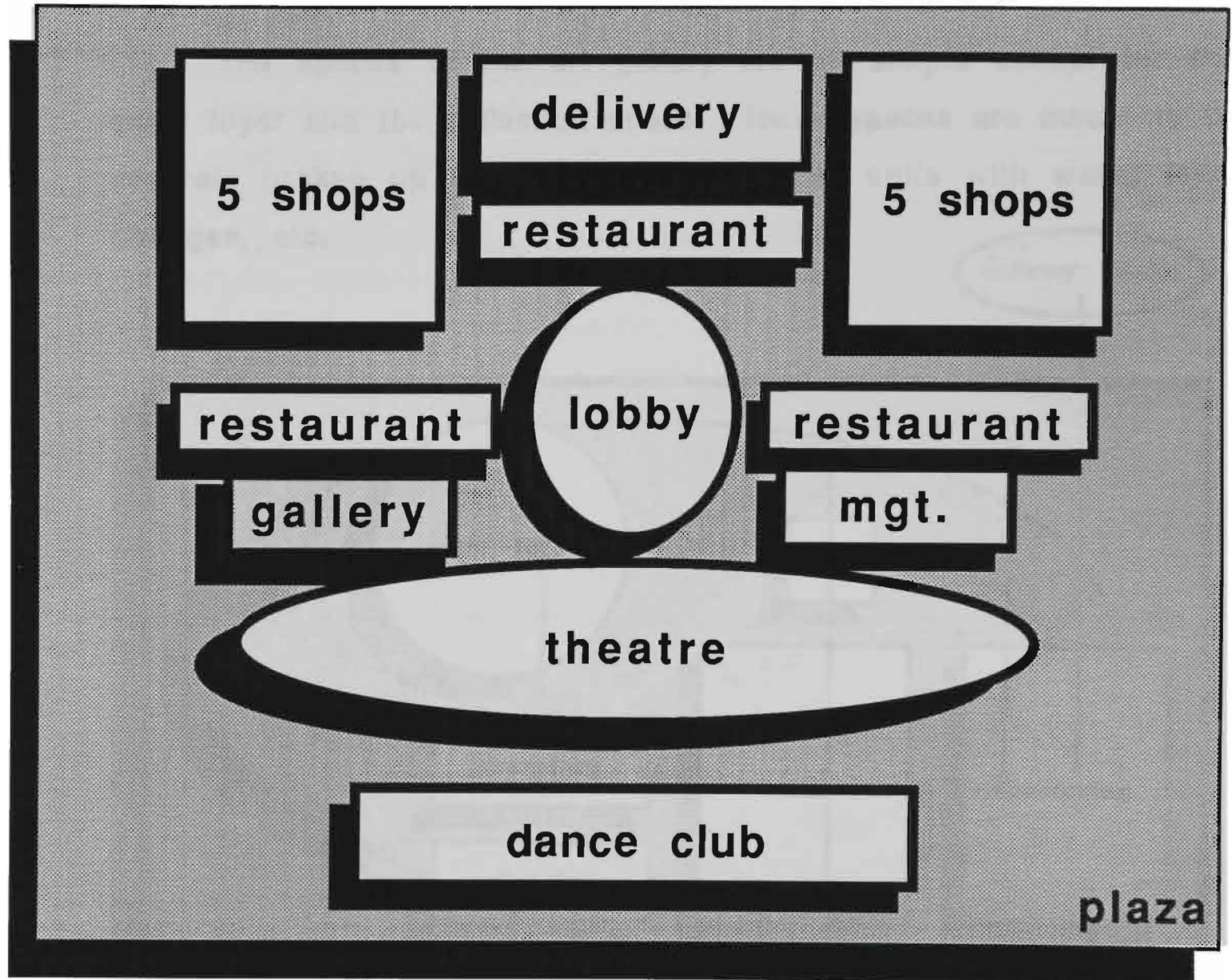
users, numbers, and frequency: **employees during business hours**

functional description: **to provide a place to clean pots, pans, dishes, and utensils**

environment: **(dishwash 260', pots and pans 65', trash 65') sinks, cleaning products, dish towels, and clean storage**

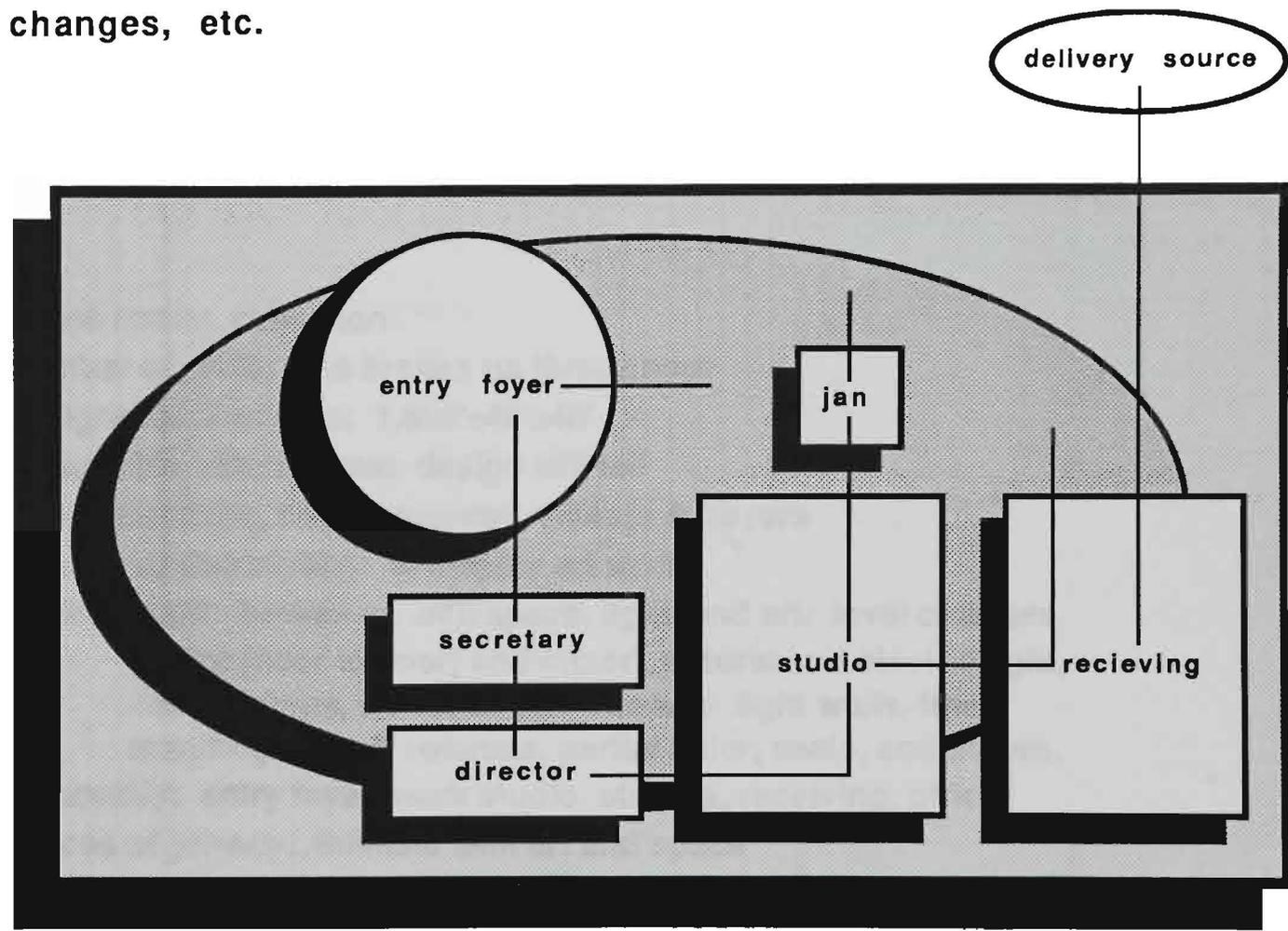
adjacency: **food storage, preparation and cooking**

degree of privacy: **private**



### art gallery

The spaces of the art gallery are all simple except for the entry foyer and the collection space. These spaces are meant to be severely broken up into a series of smaller units with walls, level changes, etc.





space name: **entry foyer**

number of units: **one**

assignable floor area: **300'=15'x20'**

assignable volume area: **3,000'=15'x20'x10'**

users, numbers, and frequency: **all visitors and employees**

functional description: **to perform a psychological change from  
an open public space (lobby) to a private & intimate gallery**

environment: **security guard on duty, plants, seating, sculpture**

adjacency: **lobby, gallery, and secretary**

degree of privacy: **inviting**

space name: **collection**

number of units: **one broken up throughout**

assignable floor area: **1,600'=40'x40'**

assignable volume area: **design will tell**

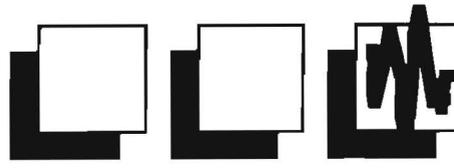
users, numbers, and frequency: **visitors & buyers**

functional description: **to display art work**

environment: **broken up with space, light, and art. level changes  
(major [floor to floor] and minor), natural and electric light,  
decks, lamps, views, bridge walkway, light walls, free  
standing walls & columns, partial color, seats, and atrium.**

adjacency: **entry foyer, work studio, storage, receiving, office**

degree of privacy: **intimate with art and space**





space name: **secretary**

number of units: **one**

assignable floor area: **100'=10'x10'**

assignable volume area: **800'=10'x10'x8'**

users, numbers, and frequency: **secretary, buyers, sellers, and manager during business hours**

functional description: **handle buying and selling, contracts, filing, typing, phone calls, information**

environment: **computer, worktable, typewriter, files, phone**

adjacency: **entry foyer, gallery, director's office**

degree of privacy: **open**

space name: **director's office**

number of units: **one**

assignable floor area: **180'=10'x18'**

assignable volume area: **1,800'=10'x18'x10'**

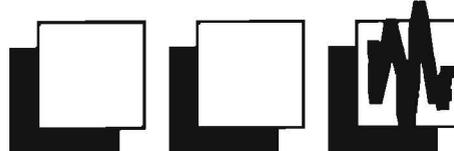
users, numbers, and frequency: **director, secretary, buyers, artists, and sellers during business hours**

functional description: **to lease wall and floor space for display and handle buying and selling**

environment: **desk, meeting table, chairs, filing, couch, modern, floor lamps and ceiling lights, phone**

adjacency: **secretary, storage/studio**

degree of privacy: **private**





space name: **work studio**

number of units: **one**

assignable floor area: **400'=20'x20'**

assignable volume area: **4,800=20'x20'x12'**

users, numbers, and frequency: **director/artist during  
business hours**

functional description: **to provide a space for creating  
sculptures, paintings, etc.**

environment: **open except for paint and tool storage, shelves,  
ceiling lights, sink, and lamps**

adjacency: **receiving/storage, director's office, collection**

degree of privacy: **private**

space name: **receiving/storage**

number of units: **one**

assignable floor area: **400'=20'x20'**

assignable volume area: **4,800'=20'x20'x12'**

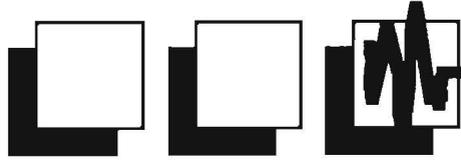
users, numbers, and frequency: **director/artist, delivery  
personnel**

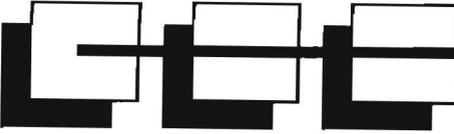
functional description: **to provide an area for delivery/storage**

environment: **open to freight elevator, shelves, closets,  
cabinets, carts and dollies**

adjacency: **delivery area, work studio, and director**

degree of privacy: **restricted**





space name: **janitor's closet**

number of units: **one**

assignable floor area: **75'=7.5'x10'**

assignable volume area: **750=7.5'x10'x10'**

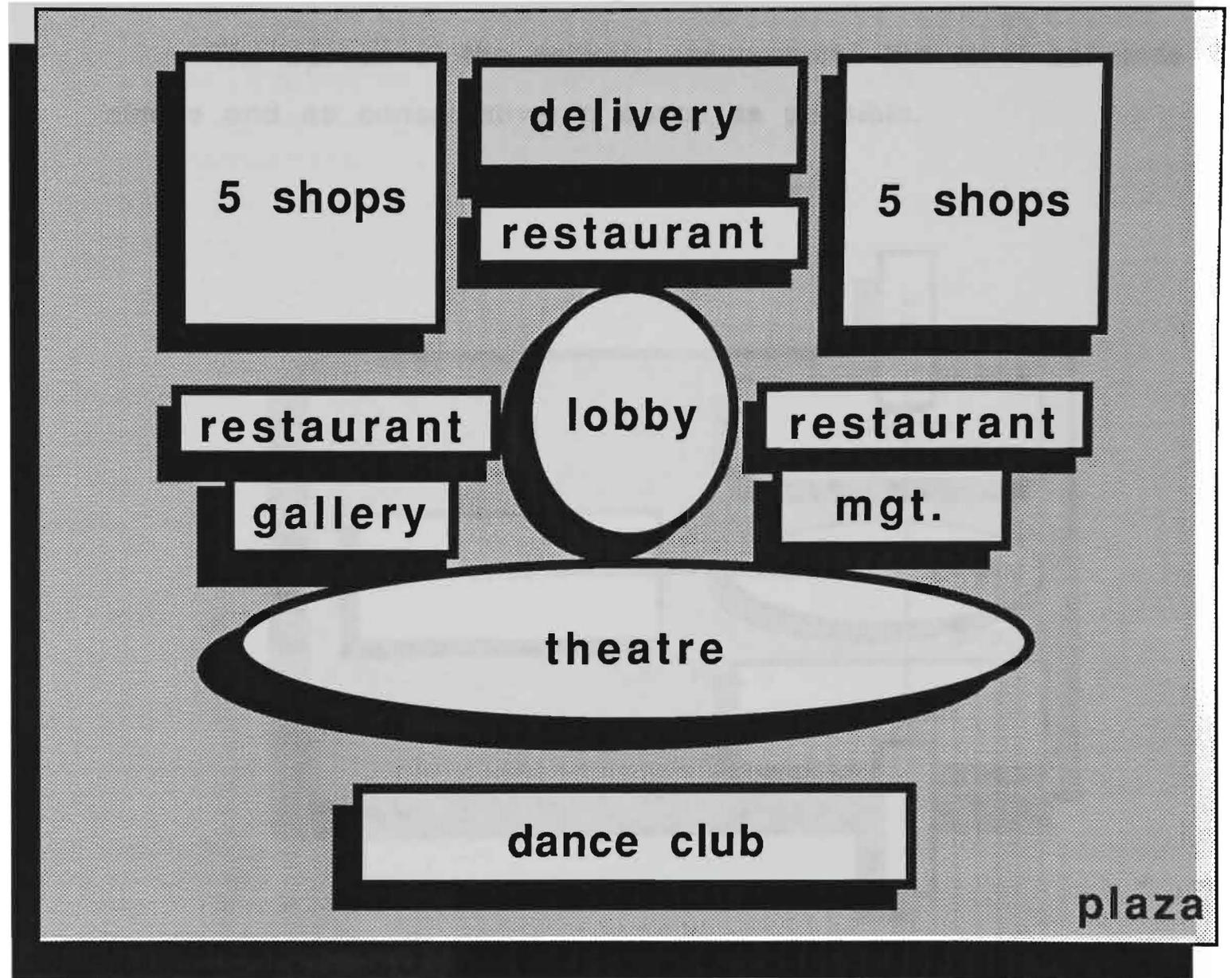
users, numbers, and frequency: **janitor after hours**

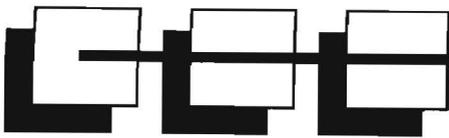
functional description: **to provide a space for cleaning utensils**

environment: **ceiling lights, shelves, racks, mops, vacuums,  
brooms, buffers, waxer, buckets, and sink**

adjacency: **collection and work studio**

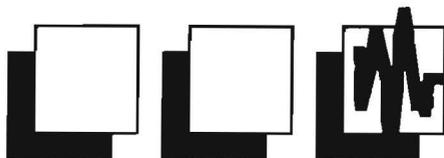
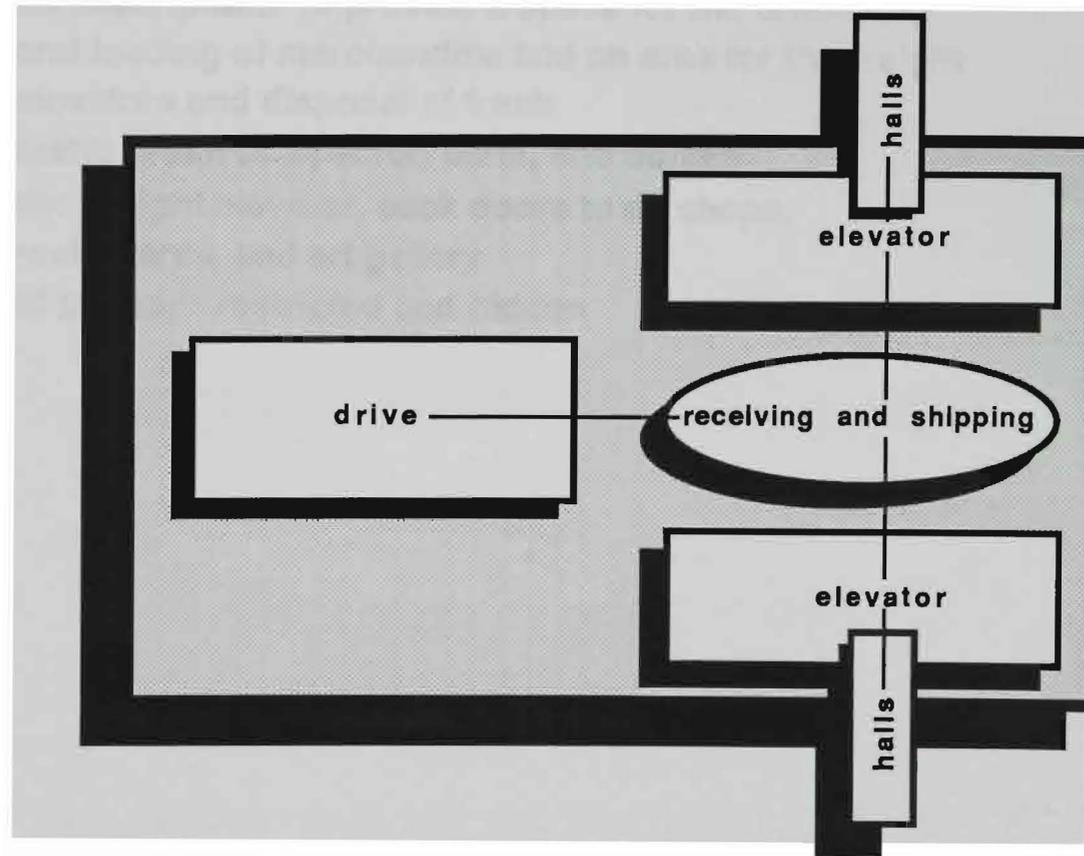
degree of privacy: **restricted**





## delivery

The spaces of the delivery are complex but must be made as simple and as conservative in space as possible.





space name: **receiving/shipping**

number of units: **one**

assignable floor area: **900'=30'x30' (attached slanted ramp  
approximately 20'x40')**

assignable volume area: **10,800'=30'x30'x12'**

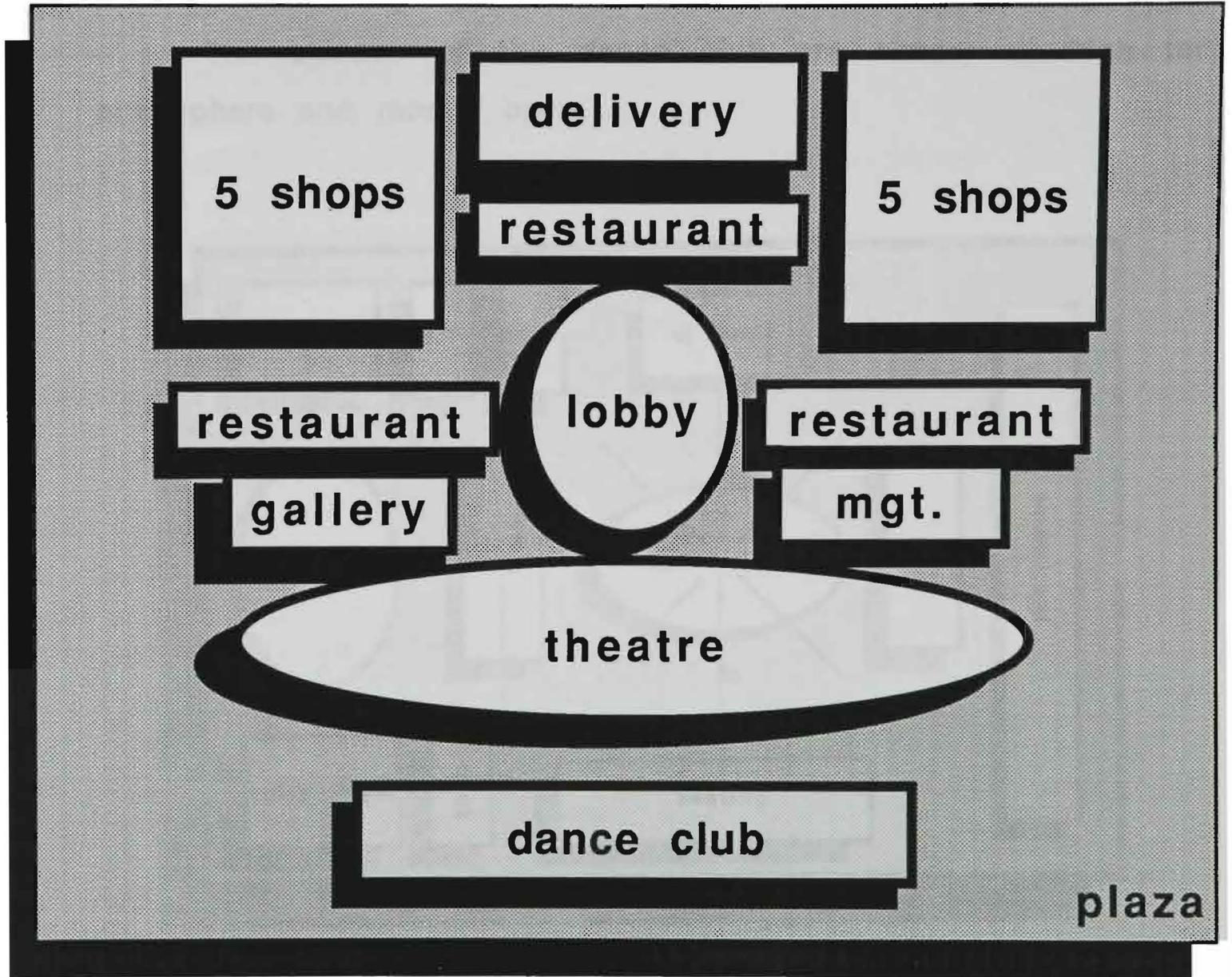
users, numbers, and frequency: **employees & delivery people**

functional description: **to provide a space for the unloading  
and loading of merchandise and an area for the freight  
elevators and disposal of trash**

environment: **trash compactor, carts, and dollies**

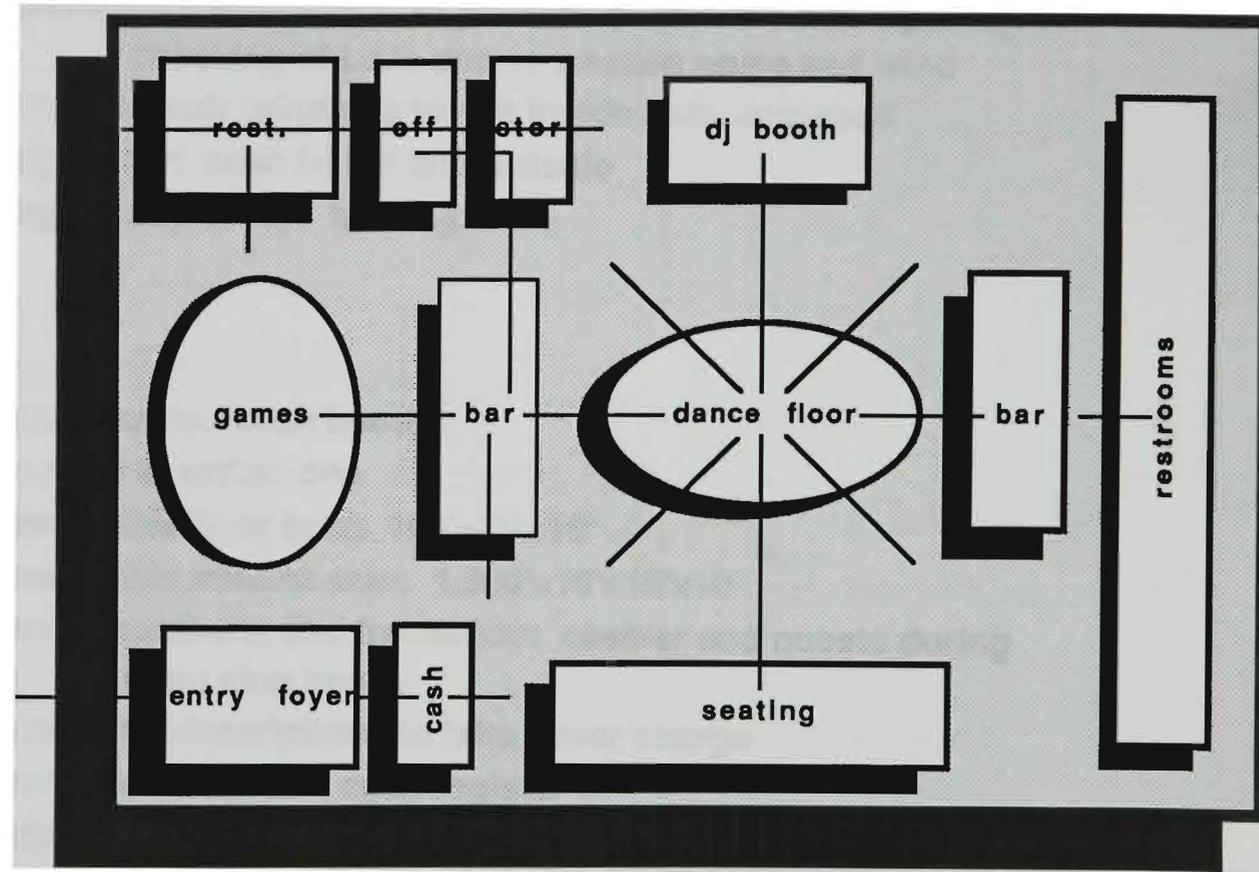
adjacency: **freight elevator, back doors to all shops,  
restaurants, and art gallery**

degree of privacy: **restricted and hidden**



## dance club

The spaces of the dance club are simply of high tech atmosphere and mostly open.





space name: **entry foyer**

number of units: **one**

assignable floor area: **80'=8'x10'**

assignable volume area: **800'=8'x10'x10'**

users, numbers, and frequency: **employees and guests during  
night club hours**

functional description: **to provide an area for waiting and  
checking of i.d.'s and to weaken noise and wind**

environment: **windows to see inside club, enclosed**

adjacency: **cash booth and outside**

degree of privacy: **inviting**

space name: **cash booth**

number of units: **one**

assignable floor area: **100'=10'x10'**

assignable volume area: **1,000'=10'x10'x10'**

users, numbers, and frequency: **cashier and guests during  
night club hours**

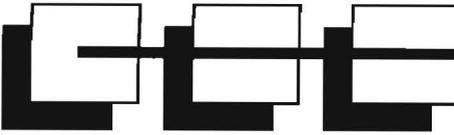
functional description: **to take cover charge**

environment: **desk, cash register**

adjacency: **entry foyer and interior of club**

degree of privacy: **open**





space name: **interior areas**

number of units: **one**

assignable floor area: **3200' (shape varies)**

assignable volume area: **48,000' (15' ceilings)**

users, numbers, and frequency: **employees and guests during  
night club hours**

environment: **loud, stereophonics, (20'x20') dance floor, talking,  
drinking, and looking, pool and outdoor areas.**

adjacency: **everything**

degree of privacy: **public**

space name: **restrooms**

number of units: **two**

assignable floor area: **2 at 136'=8'x17'**

assignable volume area: **2 at 1,088'=8'x17'x8'**

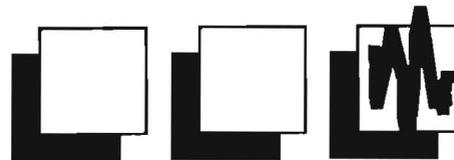
users, numbers, and frequency: **employees and customers  
during night club hours**

functional description: **to relieve**

environment: **cleanliness, tile, water closets, urinals, sinks,  
hand dryers, mirror, lighting, room temperature**

adjacency: **interior areas and bar**

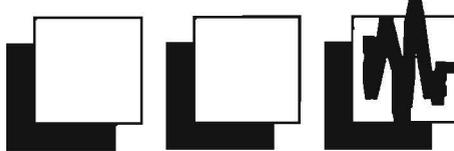
degree of privacy: **public but personal**





space name: **d.j. booth**  
number of units: **one**  
assignable floor area: **120'=10'x12'**  
assignable volume area: **1,200'=10'x12'x10'**  
users, numbers, and frequency: **d.j. during night club hours**  
functional description: **to provide a place to play music**  
environment: **table, turntables, counter, microphone, mixer, records, chair, special effects lighting controls**  
adjacency: **interior areas**  
degree of privacy: **restricted**

space name: **bar(s)**  
number of units: **one to two**  
assignable floor area: **112'=8'x14' each**  
assignable volume area: **1,120=8'x14'x10' each**  
users, numbers, and frequency: **employees and customers during night club hours**  
functional description: **a place to prepare alcoholic drinks**  
environment: **bar counter, glass racks, bottle racks, sink, dish towels, taps, cash register, condiments**  
adjacency: **interior areas and restrooms**  
degree of privacy: **private**





space name: **drink storage**

number of units: **one**

assignable floor area: **200'=10'x20'**

assignable volume area: **2,000'=10'x20'x10'**

users, numbers, and frequency: **employees during night club hours**

functional description: **to provide a place to store alcohol and carbon canisters**

environment: **shelves**

adjacency: **bar and office**

degree of privacy: **restricted**

space name: **office**

number of units: **one**

assignable floor area: **150'=10'x15'**

assignable volume area: **1,200'=10'x15'x8'**

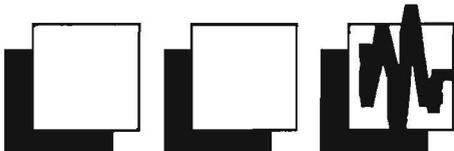
users, numbers, and frequency: **mangers and employees any time**

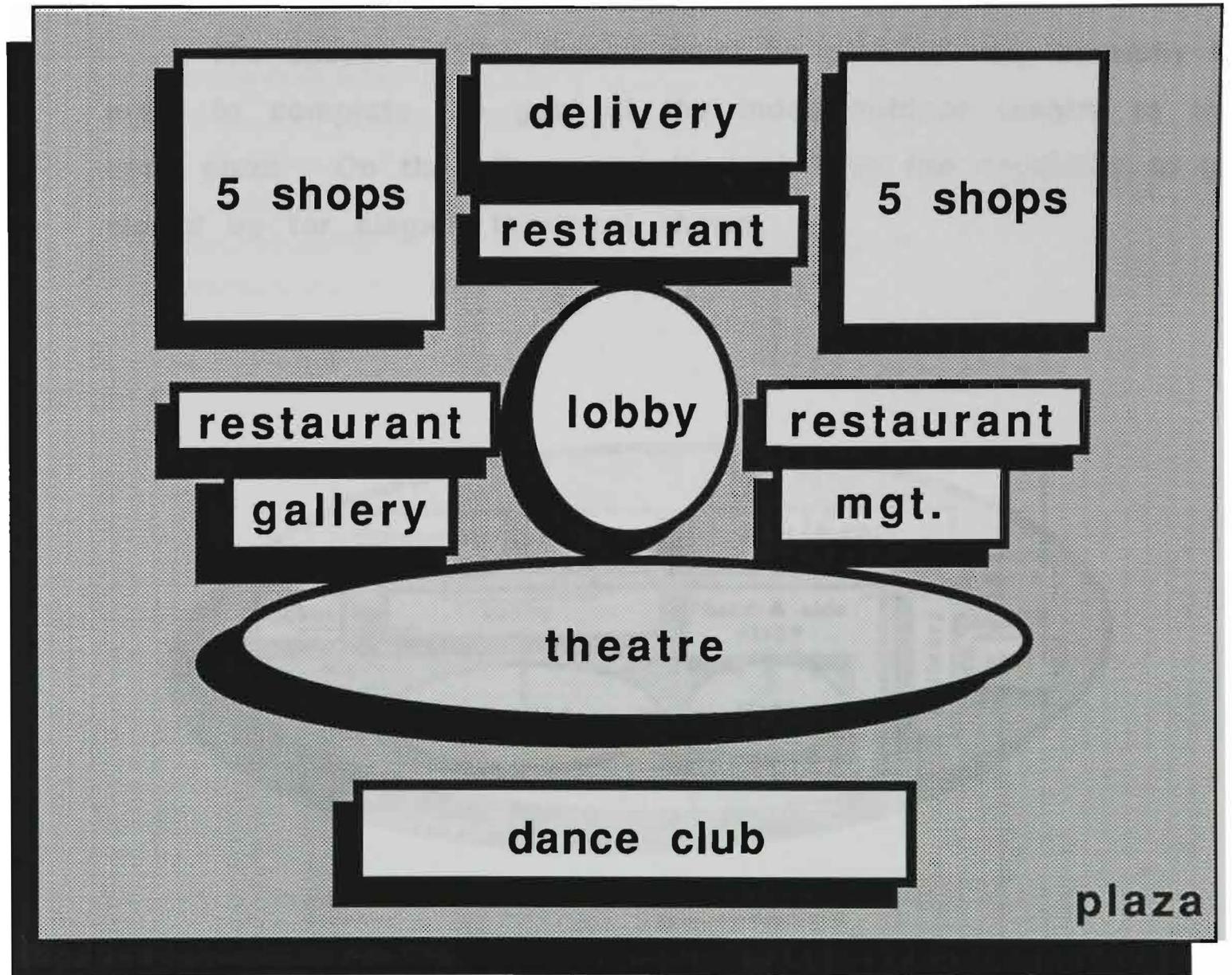
functional description: **to provide a place for meetings, paperwork, and ordering**

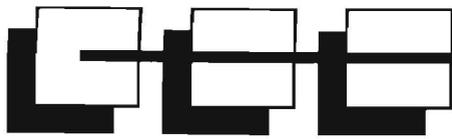
environment: **desk, chair, phone, computer, ceiling lighting, plants, and couch**

adjacency: **interior area and drink storage**

degree of privacy: **private**

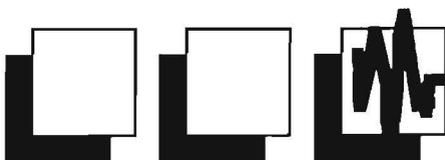
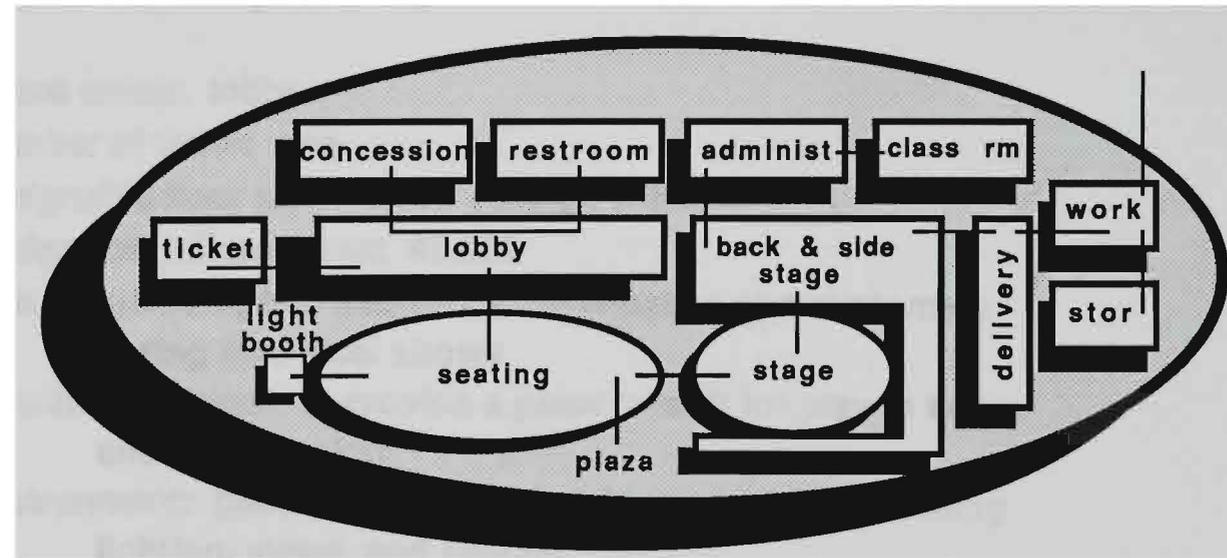






## theatre

The spaces of the theatre must be planned very carefully in order to complete the goal of the indoor/outdoor theatre to the open plaza. On the other hand it must have the capability to be closed up for elegant theatrical shows.





space name: **ticket booth**

number of units: **one**

assignable floor area: **80'=8'x10'**

assignable volume area: **800'=8'x10'x10'**

users, numbers, and frequency: **employees and customers  
during theatrical shows**

functional description: **to provide a place to collect money**

environment: **counter, cash register, ticket dispenser,  
microphone, lighting, windows, and signage**

adjacency: **lobby, concessions, and restrooms**

degree of privacy: **inviting**

space name: **lobby**

number of units: **one**

assignable floor area: **3,750' (design will tell)**

assignable volume area: **45,000**

users, numbers, and frequency: **employees and customers  
during theatrical shows**

functional design: **to provide a place to wait for play to begin  
and intermission**

environment: **plants, ticket stands, clean and moder, ceiling  
lighting, views, and seating**

adjacency: **ticketbooth, concession, restrooms, and seating**

degree of privacy: **relaxing**





space name: **administration**

number of units: **one**

assignable floor area: **200'=12'x16.7'**

assignable volume area: **2,000'=12'x16.7'x10'**

users, numbers, and frequency: **director and secretary plus  
visits from staff for production during business hours**

functional description: **to plan upcoming theatrical events**

environment: **desk, chairs, couch, clean, work areas and phone**

adjacency: **secretary's office, side and back stage, rehearsal  
room, and workshop**

degree of privacy: **private**

space name: **secretary**

number of units: **one**

assignable floor area: **100'=10'x10'**

assignable volume area: **1,000'=10'x10'x10'**

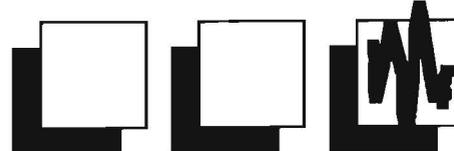
users, numbers, and frequency: **secretary, director, staff, and  
visitors**

functional description: **to provide a place to handle  
appointments, phone, typing and planning events**

environment: **desk, chairs, computer, typewriter, worktable,  
ceiling lighting, and telephone**

adjacency: **director, side and back stage, and rehearsal room**

degree of privacy: **private**





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space name: **concession**

number of units: **one to two**

assignable floor area: **300'=20'x15'**

assignable volume area: **3,000'=20'x15'x10'**

users, numbers, and frequency: **employees and customers  
during theatrical and normal business hours**

functional description: **to provide snacks for theatrical plays  
and for plaza visitors**

environment: **counter, cash register, shelves for food, coke  
fountain, popcorn popper, cookers and ceiling lighting**

adjacency: **lobby, restrooms, and plaza**

degree of privacy: **public**

space name: **restrooms**

number of units: **two**

assignable floor area: **2 at 180'=9'x20'**

assignable volume area: **2 at 1,440'=9'x20'x8'**

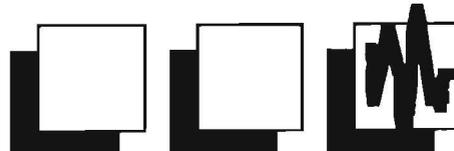
users, numbers, and frequency: **persons in lobby and plaza  
during business hours**

functional description: **to relieve**

environment: **cleanliness, tile, water closets, urinals, sinks,  
hand dryers, mirror, lighting, room temperature**

adjacency: **lobby, concessions, and plaza**

degree of privacy: **public but personal**



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space name: **janitor's closet**

number of units: **one**

assignable floor area: **100'=10'x10'**

assignable volume area: **1,000'=10'x10'x10'**

users, numbers, and frequency: **janitor after hours**

functional description: **storage and preparation for cleaning  
tools and products**

environment: **sink, storage racks, and cleaning equipment**

adjacency: **lobby, restrooms, concessions, and seating**

degree of privacy: **restricted**

space name: **light and sound booth**

number of units: **one**

assignable floor area: **300'=15'x20'**

assignable volume area: **3600'=15'x20'x12'**

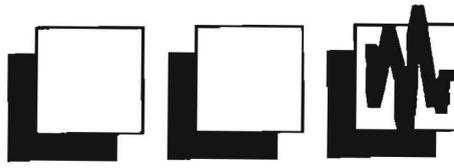
users, numbers, and frequency: **director, producer, lighting  
and sound technicians**

functional description: **to provide an area to handle lighting  
and sound equipment**

environment: **table, chairs, counter, sound equipment, lighting  
equipment, and communication system**

adjacency: **seating**

degree of privacy: **restricted**





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space name: **seat storage**

number of units: **one**

assignable floor area: **100'x10'x10'**

assignable volume area: **1000'=10'x10'x10'**

users, numbers, and frequency: **janitors and employees**

functional description: **to provide a storage for chairs**

environment: **empty except for chairs**

adjacency: **seating**

degree of privacy: **restricted**

space name: **side and back stage**

number of units: **one**

assignable floor area: **800'=60'x13.3'**

assignable volume area: **12,000'=60'x13.3'x15'**

users, numbers, and frequency: **director, actors, and  
production personnel during plays**

functional description: **to provide a place for waiting and  
moving of props**

environment: **curtains, props, and scenery**

adjacency: **stage, storage, workshop, and receiving**

degree of privacy: **private**

space name: **rehearsal/class room**

number of units: **one**

assignable floor area: **600'=20'x30'**

assignable volume area: **7,200'=20'x30'x12'**

users, numbers, and frequency: **directors, producers, actors, costumes, etc. during play production and practice**

functional description: **to provide a place to practice**

environment: **empty except for chairs and mirrors**

adjacency: **side and back stage, director's office, restrooms backstage, storage and receiving**

degree of privacy: **restricted**

space name: **dressings rooms**

number of units: **ten**

assignable floor area: **10 at 80'=8'x10'**

assignable volume area: **10 at 640'=9'x10'x8'**

users, numbers, and frequency: **actors, directors, make up, costume, and producers during play production**

functional description: **to provide a place to prepare**

environment: **mirror, chair, make up table, couch, clothes rack, and flowers**

adjacency: **stage, side and back stage, rehearsal classroom, and restrooms**

degree of privacy: **private**



space name: **restrooms backstage**

number of units: **two**

assignable floor area: **2 at 312'=26'x12'**

assignable volume area: **2 at 3,120'=26'x12'x10'**

users, numbers, and frequency: **actors, directors, and  
production personnel**

functional description: **to relieve and bathe**

environment: **cleanliness, tile, water closets, urinals, showers,  
sinks, hand dryers, mirror, lighting, room temperature, etc.**

adjacency: **dressing rooms, side and back stage, stage, rehearsal  
classroom, and workroom**

degree of privacy: **public but personal**

space name: **storage**

number of units: **one**

assignable floor area: **144'=12'x12'**

assignable volume area: **2,160'=12'x12'x15'**

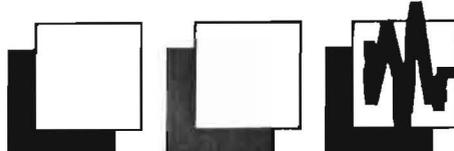
users, numbers, and frequency: **employees**

functional description: **to provide a place of storage**

environment: **empty except for props, back drops, scenery, and  
other items**

adjacency: **stage, side and back stage, and workshop**

degree of privacy: **private**



space name: **workshop**

number of units: **one**

assignable floor area: **500'=20'x25'**

assignable volume area: **6,000'=20'x25'x12'**

users, numbers, and frequency: **carpenters and employees  
during play production for building props, etc.**

functional description: **to provide a place to build stage  
equipment, props, and scenery**

environment: **machinery and tools, tables, and chairs**

adjacency: **receiving, storage, stage, and side and back stage**

degree of privacy: **restricted**

space name: **receiving**

number of units: **one**

assignable floor area: **225'=15'x15'**

assignable volume area: **3,375'=15'x15'x15'**

users, numbers, and frequency: **production personnel during  
delivery times**

functional description: **to receive equipment and materials**

environment: **empty except for dollies, and carts**

adjacency: **storage, workshop, side and back stage, and stage**

degree of privacy: **restricted**



space name: **stage**

number of units: **one**

assignable floor area: **800'x20'x40'**

assignable volume area: **16,000'=20'x40'x20'**

users, numbers, and frequency: **actors, directors, and  
production personnel during play and rehearsals**

functional description: **to provide a place to perform**

environment: **mostly open except for curtains and props, spot  
lights and track lighting**

adjacency: **seating, side and back stage, and dressing rooms, etc.**

degree of privacy: **open**

space name: **seating**

number of units: **one**

assignable floor area: **10,000' (1,250x8 sq. ft.)**

assignable volume area: **design will tell**

users, numbers, and frequency: **audience during productions**

functional description: **to provide a comfortable environment  
during plays and shows**

environment: **design will tell**

adjacency: **stage, lobby, and seat storage**

degree of privacy: **public**



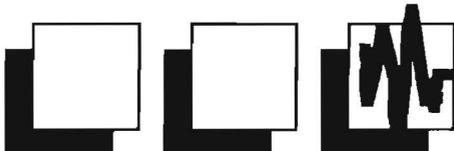


plaza

space name: **plaza**  
number of units: **many**  
assignable floor area: **remaining outdoor areas**  
assignable volume area: **full range of heights and spaces**  
users, numbers, and frequency: **anyone in the downtown area  
at any time who wants to visit**  
functional description: **to provide a relaxing outdoor area**  
environment: **plants, water, level changes, open areas, secluded  
areas, pathways, fountains, seating, bridges, trees,  
sculpture, and sunlight**  
adjacency: **to all building structures**  
degree of privacy: **public**

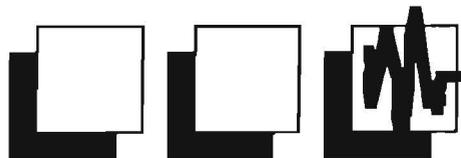
parking

space name: **underground parking garage**  
number of units: **one**  
assignable floor area: **as large as possible**  
functional description: **to provide space for the renting of  
parking spaces and access to building**  
environment: **asphalt, cars, ramps, and building entry**  
adjacency: **subgrade to everything**  
degree of privacy: **secure**





Therefore all of this information is crucial to the design phase of this project and should be referred to throughout the design process for detailed space planning.





The following information contained in this section is dedicated to the economics of the project. It is meant to provide a general basis of information on the cost of the total project. The information is covered through a breakdown examination of the major individual activity spaces and then brought together into one cost estimate.



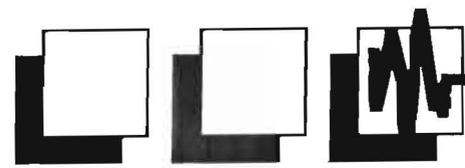
title - retail shops

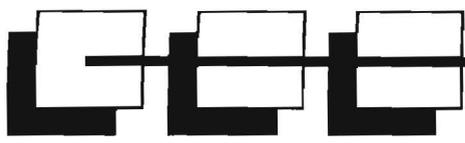
back door approach

rent per space unit	<u>\$12.00/sf</u>
× proposed number of space units	<u>19,800</u>
= potential gross income	<u>\$237,000</u>
× gross income multiplier	<u>7.0</u>
= total project value	<u>\$1,663,200</u>
÷ project / building ratio	<u>1.5</u>
= building budget	<u>\$1,108,800</u>
÷ proposed number of space units	<u>22,000</u>
= building cost per space unit	<u>\$50.40/sf</u>

front door approach

building cost per space unit	<u>\$50.00/sf</u>
× proposed number of space units	<u>22,000</u>
= building budget	<u>\$1,100,000</u>
× project / building ratio	<u>1.5</u>
= total project value	<u>\$1,650,000</u>
÷ gross income multiplier	<u>7.1</u>
= potential gross income	<u>\$235,714</u>
÷ proposed number of rental units	<u>19,800</u>
= rent per space unit	<u>\$11.91/sf</u>





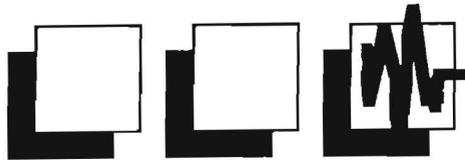
title \_ restaurant

back door approach

rent per space unit	<u>\$18.00/sf</u>
× proposed number of space units	<u>15,857</u>
= potential gross income	<u>\$285,426</u>
× gross income multiplier	<u>7.0</u>
= total project value	<u>\$1,997,982</u>
÷ project / building ratio	<u>1.5</u>
= building budget	<u>\$1,331,988</u>
÷ proposed number of space units	<u>17,619</u>
= building cost per space unit	<u>\$75.60/sf</u>

front door approach

building cost per space unit	<u>\$75.00/sf</u>
× proposed number of space units	<u>17,619</u>
= building budget	<u>\$1,321,425</u>
× project / building ratio	<u>1.5</u>
= total project value	<u>\$1,982,138</u>
÷ gross income multiplier	<u>7.0</u>
= potential gross income	<u>\$283,162</u>
÷ proposed number of rental units	<u>15,857</u>
= rent per space unit	<u>\$17.85/sf</u>





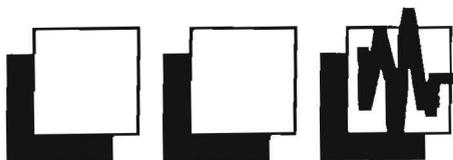
title \_ art gallery

back door approach

rent per space unit	<u>\$13.00/sf</u>
× proposed number of space units	<u>3,500</u>
= potential gross income	<u>\$45,500</u>
× gross income multiplier	<u>7.0</u>
= total project value	<u>\$318,500</u>
÷ project / building ratio	<u>1.5</u>
= building budget	<u>\$212,334</u>
÷ proposed number of space units	<u>3,500</u>
= building cost per space unit	<u>\$60.67/sf</u>

front door approach

building cost per space unit	<u>\$60.00/sf</u>
× proposed number of space units	<u>3,500</u>
= building budget	<u>\$210,000</u>
× project / building ratio	<u>1.5</u>
= total project value	<u>\$315,000</u>
÷ gross income multiplier	<u>7.0</u>
= potential gross income	<u>\$45,000</u>
÷ proposed number of rental units	<u>3,500</u>
= rent per space unit	<u>\$12.86/sf</u>





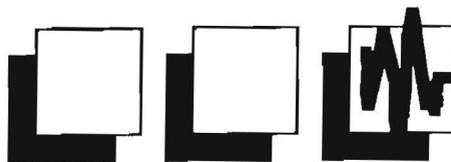
title \_ dance club

back door approach

front door approach

rent per space unit	<u>\$16.00/sf</u>
× proposed number of space units	<u>3,912</u>
= potential gross income	<u>\$62,592</u>
× gross income multiplier	<u>7.0</u>
= total project value	<u>\$438,144</u>
÷ project / building ratio	<u>1.5</u>
= building budget	<u>\$292,096</u>
÷ proposed number of space units	<u>4,346</u>
= building cost per space unit	<u>\$67.21/sf</u>

building cost per space unit	<u>\$60.00/sf</u>
× proposed number of space units	<u>4,346</u>
= building budget	<u>\$260,760</u>
× project / building ratio	<u>1.5</u>
= total project value	<u>\$391,140</u>
÷ gross income multiplier	<u>7.0</u>
= potential gross income	<u>\$55,877</u>
÷ proposed number of rental units	<u>3,912</u>
= rent per space unit	<u>\$14.28/sf</u>





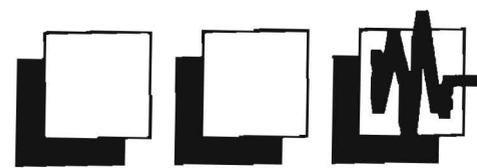
title \_ theatre

back door approach

front door approach

rent per space unit	<u>n/a</u>
× proposed number of space units	<u>n/a</u>
= potential gross income	<u>\$625,000</u>
× gross income multiplier	<u>7.0</u>
= total project value	<u>\$4,375,000</u>
÷ project / building ratio	<u>1.5</u>
= building budget	<u>\$2,916,667</u>
÷ proposed number of space units	<u>19,783</u>
= building cost per space unit	<u>\$147.43/sf</u>

building cost per space unit	<u>\$80.00/sf</u>
× proposed number of space units	<u>19,783</u>
= building budget	<u>\$1,582,640</u>
× project / building ratio	<u>1.5</u>
= total project value	<u>\$2,373,960</u>
÷ gross income multiplier	<u>7.0</u>
= potential gross income	<u>\$339,137</u>
÷ proposed number of rental units	<u>19,783</u>
= rent per space unit	<u>\$17.14/sf</u>



title \_ parking

back door approach

rent per space unit	<u>\$1,500</u>
× proposed number of space units	<u>200</u>
= potential gross income	<u>\$300,000</u>
× gross income multiplier	<u>12.0</u>
= total project value	<u>\$3,600,000</u>
÷ project / building ratio	<u>1.5</u>
= building budget	<u>\$2,400,000</u>
÷ proposed number of space units	<u>79,200</u>
= building cost per space unit	<u>\$30.30/sf</u>

front door approach

building cost per space unit	<u>\$30.00/sf</u>
× proposed number of space units	<u>79,200</u>
= building budget	<u>\$2,376,000</u>
× project / building ratio	<u>1.5</u>
= total project value	<u>\$3,564,000</u>
÷ gross income multiplier	<u>12.0</u>
= potential gross income	<u>\$297,000</u>
÷ proposed number of rental units	<u>200</u>
= rent per space unit	<u>\$1,485</u>

title \_ lobby (atrium)

back door approach

front door approach

rent per space unit	<u>n/a</u>
× proposed number of space units	<u>n/a</u>
= potential gross income	<u>n/a</u>
× gross income multiplier	<u>n/a</u>
= total project value	<u>n/a</u>
÷ project / building ratio	<u>n/a</u>
= building budget	<u>n/a</u>
÷ proposed number of space units	<u>n/a</u>
= building cost per space unit	<u>n/a</u>

building cost per space unit	<u>\$75.00/sf</u>
× proposed number of space units	<u>2,150</u>
= building budget	<u>\$161,250</u>
× project / building ratio	<u>1.5</u>
= total project value	<u>\$241,875</u>
÷ gross income multiplier	<u>n/a</u>
= potential gross income	<u>n/a</u>
÷ proposed number of rental units	<u>n/a</u>
= rent per space unit	<u>n/a</u>

title \_ management

back door approach

front door approach

rent per space unit	<u>n/a</u>
× proposed number of space units	<u>n/a</u>
= potential gross income	<u>n/a</u>
× gross income multiplier	<u>n/a</u>
= total project value	<u>n/a</u>
÷ project / building ratio	<u>n/a</u>
= building budget	<u>n/a</u>
÷ proposed number of space units	<u>n/a</u>
= building cost per space unit	<u>n/a</u>

building cost per space unit	<u>\$50.00/sf</u>
× proposed number of space units	<u>1,400</u>
= building budget	<u>\$70,000</u>
× project / building ratio	<u>1.5</u>
= total project value	<u>\$105,000</u>
÷ gross income multiplier	<u>n/a</u>
= potential gross income	<u>n/a</u>
÷ proposed number of rental units	<u>n/a</u>
= rent per space unit	<u>n/a</u>

title \_ miscellaneous

back door approach

front door approach

rent per space unit	<u>n/a</u>
× proposed number of space units	<u>n/a</u>
= potential gross income	<u>n/a</u>
× gross income multiplier	<u>n/a</u>
= total project value	<u>n/a</u>
÷ project / building ratio	<u>n/a</u>
= building budget	<u>n/a</u>
÷ proposed number of space units	<u>n/a</u>
= building cost per space unit	<u>n/a</u>

building cost per space unit	<u>\$40.00/sf</u>
× proposed number of space units	<u>10,000</u>
= building budget	<u>\$400,000</u>
× project / building ratio	<u>1.5</u>
= total project value	<u>\$600,000</u>
÷ gross income multiplier	<u>n/a</u>
= potential gross income	<u>n/a</u>
÷ proposed number of rental units	<u>n/a</u>
= rent per space unit	<u>n/a</u>

title \_ accumulated total

## back door approach

rent per space unit	<u>\$9.73/sf</u>
× proposed number of space units	<u>159,998</u>
= potential gross income	<u>\$1,555,518</u>
× gross income multiplier	<u>7.0</u>
= total project value	<u>\$10,888,626</u>
÷ project / building ratio	<u>1.5</u>
= building budget	<u>\$7,259,084</u>
÷ proposed number of space units	<u>159,998</u>
= building cost per space unit	<u>\$45.37/sf</u>

## front door approach

building cost per space unit	<u>\$46.60/sf</u>
× proposed number of space units	<u>159,998</u>
= building budget	<u>\$1,455,375</u>
× project / building ratio	<u>1.5</u>
= total project value	<u>\$11,183,063</u>
÷ gross income multiplier	<u>7.0</u>
= potential gross income	<u>\$1,597,580</u>
÷ proposed number of rental units	<u>159,998</u>
= rent per space unit	<u>\$9.98/sf</u>

<b>totals</b>	<b>potential gross income</b>	<b>square footage</b>	<b>building budget</b>
<b>retail stores</b>	<b>237,000</b>	<b>22,000</b>	<b>1,100,000</b>
<b>restaurants</b>	<b>285,426</b>	<b>17,619</b>	<b>1,321,425</b>
<b>art gallery</b>	<b>45,550</b>	<b>3,500</b>	<b>183,300</b>
<b>dance club</b>	<b>62,592</b>	<b>4,346</b>	<b>260,760</b>
<b>theatre</b>	<b>625,000</b>	<b>19,783</b>	<b>1,582,640</b>
<b>parking</b>	<b>300,000</b>	<b>79,200</b>	<b>2,376,000</b>
<b>sub total</b>		<b>146,448</b>	<b>6,824,125</b>
<b>lobby (atrium)</b>		<b>2,150</b>	<b>161,250</b>
<b>management</b>		<b>1,440</b>	<b>70,000</b>
<b>miscellaneous</b>		<b>10,000</b>	<b>400,000</b>
<b>total</b>	<b>1,555,518</b>	<b>159,998</b>	<b>7,455,374</b>

## economic summary

total building cost (including all soft costs)	\$11,000,000
land cost	\$2,500,000
total project cost	\$13,500,000
down payment	\$1,500,000
amount to be financed	\$12,000,000
To be financed by the issuing of bonds by the city.	
\$12,000,000 financed @ 10% interest for 30yrs.	
dept service (pay anually)	\$1,273,000
estimated net operating income (anually)	\$1,500,000
cash flow (anually)	\$227,000
return on equity ratio (cash flow/ equity)	15.13%